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Final Report

Impact evaluation of the interventions under Operational Programme Regional Development 2007-2013 and their contribution to the implementation of horizontal policies of the EU



Sofia, June 2015



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List of abbreviations

RIA	Road Infrastructure Agency
GDP	Gross Domestic Product
BNB	Bulgarian National Bank
Grant	Grant
RES	Renewable energy sources
HEI	Higher Education Institution
PRDDG	Programming of Regional Development Directorate General
CNH	Children nursing home
TFEU	Treaty on the Functioning of the European Union
EC	European Commission
EA	Environmental Assessment
EU	European Union
ESEE	Ecorys South East Europe
ERDF	European Regional Development Fund
BA	Biodiversity Act
ADL	Anti-discrimination Law
EPA	Environmental Protection Act
PPA	Public Procurement Act
EA ECNIS	Executive Agency Electronic Communication Networks and Information Systems
EEA	Executive Environment Agency

ICT	Information and Communication Technologies
IME	Institute for Market Economics
UMIS	Unified Information Management System
KE	Key Expert
MC	Monitoring Committee
CF	Cohesion Fund
GHAT	General Hospital for Active Treatment
MEW	Ministry of Environment and Waters
MRDPW	Ministry of Regional Development and Public Works
CM	Council of Ministers
SME	Small and Medium-sized Enterprises
NHAR	National historical-archeological reserve
NKE	Non-key expert
NGO	Non-governmental Organizations
NDP	National Development Programme
NSI	National Statistical Institute
NSRF	National Strategic Reference Framework
EIA	Environmental Impact Assessment
OP	Operational Programme
OPRD	Operational Programme Regional Development
OPHRD	Operational Programme Human Resources Development
OPT	Operational Programme Transport
FTR	Final Technical Report
DCM	Decree of the Council of Ministers
PA	Priority Axis
RAPPA	Regulation on the Application of the Public Procurement Act
TL	Team leader
ORUC	Output/ Result Unit Costs
RHI	Regional Health Inspectorate
RIEW	Regional Inspectorate for the Environment and Waters
CMD	Council of Ministers Decision
NWR	North-western Region

NER	North-eastern Region
WEF	World Economic Forum
JRC	Joint Research Center
SCF	EU Structural and Cohesion Fund
CAW	Construction and Assembly Works
MFIP	Mid-term Framework Investment Programme
QMS	Quality Management System
NCR	North Central Region
TIC	Tourist information centres
TP	Technical Proposal
TS	Technical Specification
MA	Managing Authority
CCU	Central coordination unit
SWR	South-western Region
SER	South-eastern Region
NPO	Non-profit Organizations
SCR	South Central Region

Glossary of key terms

Beneficiary	A public or private institution which is responsible for the launch and implementation of projects and which receives public support
Impact	Measurement of the effect of a particular intervention on the social and economic development and (non-)target groups
Effectiveness	Analysis of the relation between the objectives and the products, results and impact achieved
Efficiency	Analysis of the relation between the output and the input
Indicator	An indicator used to report the progress of the relevant project/ priority axis/ programme
Intervention	A set of activities having a common objective whereby a certain priority of the operational programme is achieved
Monitoring	The process of systemic and continuous collection, analysis and use of information for the purposes of management and decision-making on specific objectives or interventions
Utility	Analysis of the relation between the needs identified and the results achieved
Compliance	In the context of the evaluation the term “compliance” refers to the appropriateness of the OPRD interventions with respect to the social-economic problems they aim to address
Managing Authority	A national, regional or local public institution or a public or a private organization designated by the Member State to manage the operational programme
Sustainability	Evaluation of the extent of the long-lasting effects of the intervention results

About the Consultant

ECORYS South East Europe Ltd. (Ecorys SEE) is a legal person registered in Bulgaria in August 2006. The company is part of the European group of research and consulting organizations – ECORYS Group having offices in a number of countries in Europe and representative offices in Ukraine, Macedonia and Serbia. The mission of Ecorys SEE is to provide the full range of services provided by ECORYS Group in this region. ECORYS is established as one of the most robust companies having innovative, flexible and integrated multi-faceted solutions and approach which is completely tailored to the needs of the customers and the peculiarities of the market.

With the provision of consultancy services on the Bulgarian market, Ecorys SEE has gained significant experience in the implementation of projects in the fields of monitoring and evaluation, regional development, transport, environment, human resources, etc.

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Summary

The impact evaluation of the interventions under 2007-2013 Operational Programme Regional Development and their contribution to the implementation of the EU horizontal policies was carried out in accordance with contract PД-02-37-11/12.03.2014 between the Ministry of Regional Development and Public Works and Ecorys South East Europe Ltd. This report presents the activities and the results of the evaluation carried out in the period March 2014 – May 2015. The main findings of the evaluation are structured in accordance with the applied criteria – impact, effectiveness, efficiency, utility and sustainability, as well as the additional evaluations carried out (impact evaluation on the administrative capacity, evaluation of the territorial impact, environmental impact assessment, evaluation of the impact on the implementation of the horizontal principles, and impact evaluation of the measures under the Communication Plan). It should be considered that over 300 contracts under 2007-2013 OPRD (out of a total of 1187) have not been finalized yet, viz. the data used for this evaluation may not be considered as conclusive in terms of the programme achievements.

Impact evaluation of the programme

In accordance with the results of the SIBILA **macroeconomic model**, the implementation of the OPRD policies has positive impact on the economic development of the country in the programming period. The evaluation of the net impact of OPRD shows that the accumulated effect of the programme on the actual GDP of the country, as of the end of 2014, amounts to 1.1% and by the end of 2015 it is expected to reach up to 1.2% (the actual GDP as of the end of 2014 was lower by 1.1% with the absence of funds spent under OPRD over the entire programming period). OPRD has also positive impact on the private investments, the government investments, the private consumption, the government consumption, the export, the import, the number of the employed and the average salary.

The analysis of the impact of the crisis shows that although the effect is not quite uniform in Member States and sub-regions of the EU, the economic crisis that occurred after 2008 as a whole has led to delay and in some cases, to reversing the trend of convergence between EU regions. At the same time, however, with very limited public and private investment, the funds available under the SCF, and specifically under OPRD, become a key priority for overcoming the negative effects of the crisis, both in the shortterm by creating demand in the economy and in the longterm, through the accumulation of production factors such as public infrastructure, human capital and other.

The application of the “difference in the differences” approach produced valuable results for the analysis of the territorial impact. The main finding of the analysis is that the municipalities, which have received more funds under OPRD per capita, have a lower unemployment rate than the municipalities, which have received none or little funds per capita. In terms of the other selected impact indicator, the net migration, its effect is also positive but not statistically significant.

Evaluation of the effectiveness of the programme

The general conclusion that can be made regarding the effectiveness of OPRD 2007-2013 is that despite the delay in achieving the interim target values, the programme is characterized by high effectiveness. This relates to the greatest extent to the interventions for sustainable tourism development (PA3) and for local development and cooperation (PA4). However, when interpreting the results of the evaluation of effectiveness, the problems identified in indicators, including the ones in setting the target values, should be taken into consideration.

Difficulties with the indicators under OPRD 2007-2013, setting of target values and reporting

The evaluation identified three main difficulties in terms of the indicators under OPRD 2007-2013: issues in programming (of the operational programme and/ or the schemes); difficulties associated with the lack of guidelines/ manual of indicators; difficulties associated with the lack of clear instructions regarding the indicators in the guidelines/ requirements for applicants.

The difficulties associated with the setting of target values relate to the following: low target values for some indicators (e.g. “Students benefiting from improved educational infrastructure”); high target values for the indicator “Projects improving the physical environment, the attractiveness of the cities”; untimely updating of the target value of indicator “Energy savings from refurbished buildings”; and using different methodologies for calculating the target values and for reporting the achieved values – e.g. the indicator “Value of time savings in EUR/year as a result of the reconstruction of passenger and freight transport roads”.

Evaluation of the efficiency of the programme

In terms of the funds agreed, there is good financial progress under OPRD because the contracted funds are almost 3% higher than commitments under the programme. The financial performance of OPRD 2007-2013 is similar to the average implementation progress under SCF in Bulgaria as of the end of December 2014, viz. 76.48%. With respect to this indicator, the implementation varies much less with the individual operational programmes. The average percentage of funds paid to contracted amounts under OPRD (as of the end of 2014) is 77%, which is an argument in favour of the overcontracting under the programme.

One of the conclusions of the analysis of the output/ result unit costs (ORUC) is that the costs for the improvement of a single site of the healthcare and cultural infrastructure are higher, compared to the ones related to the educational and social activities, because of the more specific requirements to the healthcare infrastructure and the activities needed for the restoration of cultural sites. The relatively low effectiveness and efficiency of the interventions in healthcare and cultural infrastructure should be taken into consideration for designing the interventions in the next programming period, especially for the setting of target values and planning the budgets of the procedures.

Evaluation of the utility of the programme

It may be concluded that the investments in the educational infrastructure, energy efficiency, de-institutionalization, cultural infrastructure, road infrastructure and tourist infrastructure have a high level of utility and help address the identified needs.

There is not such high utility in terms of identified needs of developing the electricity production

from renewable energy sources. In practice, a very small number of beneficiaries report the indicator “Electricity production from alternative and renewable energy sources (% of the total energy consumption)”. In view of the serious needs and the objective, the utility of the activities completed for the project on the gas interconnector cannot be highly rated before the implementation of the construction itself. The utility of the activities completed under OPRD is lower because of the fact that the target value of the indicator “Patients benefiting from improved health infrastructure” is not achieved yet.

Evaluation of the sustainability of the programme

The sustainability analysis shows that the design of the OPRD interventions guarantees the institutional sustainability, as the beneficiaries themselves (for example central and municipal authorities) are characterized by high sustainability. Based on the site visits carried out, a general conclusion can be made that the beneficiaries have taken the necessary measures to ensure sustainability of the intervention results.

Evaluation of the territorial impact

The territorial distribution of the interventions in terms of the types of municipalities grouped according to the strategy of the programme (agglomeration areas, non-agglomeration areas) clearly shows that the major resources of the programme are concentrated in the municipalities which are part of the agglomeration areas. The data on the distribution of the agreed funds show that the investments under OPRD outside the agglomerate areas are practically limited to the educational infrastructure (including energy efficiency), healthcare infrastructure, risk prevention and tourist infrastructure. As may be expected, with every type of investments the amount of grants under OPRD is considerably higher to the municipalities in the agglomerate areas than to the municipalities outside them. The investments in the integrated urban transport made in the capital and the 6 largest cities are the most focused ones. The investments in the cultural infrastructure are mostly in the capital agglomerate area (44%) which is not surprising, considering the fact that it is natural for the capital to be a leading centre in the cultural life. Given the nature of the road infrastructure, in line with the expectations, the largest share of transport investments is distributed in projects covering several municipalities.

OPRD 2007-2013 does not fully comply with the logic of the National Concept for Spatial Development (2013-2025), but this is no surprise in view of the different periods to which these strategic documents refer. A number of smaller towns have already received assistance and realized underlying capital investments during the period 2007-2013. In this sense, during the programming period 2014-2020 the attention should be further focused on the cities at levels 1-4 according to the National Concept for Spatial Development.

The analysis of the territorial distribution in terms of efficiency confirms, expectedly, that more efficient are those interventions the results of which are accessible for a greater number of people. This is confirmed by the relatively higher efficiency of investments in educational infrastructure and urban environment in the bigger cities.

Impact evaluation on the administrative capacity

The evaluation carried out shows that the interventions under the priority axis “Technical assistance” have positive impact on building and enhancing the administrative capacity both of the MA and the beneficiaries of the OPRD. The provision of financial incentives to employees and the modern material and technical base have the greatest impact on the administrative capacity of MA staff and on the beneficiaries.

Interventions under priority axis "Technical Assistance" are aimed at ensuring an effective structure of the MA to guarantee full and proper programme management. Also, a sufficient number of experts is ensured to achieve effectiveness in the performance of official duties, and to comply with national and European legislation related to the separation of functions, the four eyes principle, and the preliminary and subsequent control. However, the interviews and the results of the online questionnaire indicate that additional human resources are needed in order to reduce the current workload of employees. In the current organization of work, the structure of Programming of Regional Development Directorate General (PRDDG) is adequate to the tasks and responsibilities of the MA.

Approximately 8% of the contracted funds under priority axis "Technical assistance" are to finance interventions related to qualification of MA staff and programme beneficiaries. In most cases, the trainings have satisfied the needs of knowledge and skills. The main recommendations in terms of trainings for programming period 2014-2020 are: to enable all employees to attend trainings planned in the annual plans; to provide more targeted trainings and exchange of experience; to provide trainings in "soft skills" (e.g. teamwork trainings).

In the implementation of OPRD 2007-2013, the MA has endeavored to reduce the administrative burden for beneficiaries, but according to the latter, more efforts should be made in this direction. The main recommendations in this regard relate to the following: avoiding frequent change of rules and guidelines in the process of implementation of projects, as well as computerization of the submission and reporting of projects.

Environmental impact assessment

The impact of the interventions on the environment is generally positive. The analysis did not find any new or negative impact different from the one in the environmental assessment of 2007-2013 or the one evaluated in the First Three-year Report. As to the measures to prevent, reduce and possibly completely eliminate the unfavourable environmental impact, the analysis shows that the up-to-date measures are implemented and this ensures that there is no negative effect.

Most of the indicators for monitoring and control are included in the grant schemes and thus, to a certain extent, accounting and reporting from beneficiaries is ensured, but some of the indicators were not incorporated in the schemes and therefore, are not reported by beneficiaries (e.g. production of energy from alternative sources).

Evaluation of the impact of the interventions under OPRD 2007-2013 on the implementation of the EU horizontal policies

The 2007-2013 OPRD provides for the relevant horizontal policies at national and European level. It may be concluded that they are up-to-date in terms of the main documents defining the horizontal principles of the EU. The horizontal policies specified in the 2007-2013 OPRD are duly described, however, it is recommended that they should be defined more specifically and they should be uniform in the different documents – Handbook on the management and implementation of OPRD, the guidelines on the application under the schemes, the samples of the beneficiaries' technical reports and the annual reports on the implementation of OPRD.

As to the reporting on the horizontal principles on the part of the beneficiaries, it may be concluded that there is no consistency and comprehensiveness. The final reports of some schemes do not contain any reported compliance (or there is none) with the horizontal policies of the EU, while in others compliance is duly reported on every policy – equal opportunities, protection of and impact on the environment, sustainable development and innovations and policy-making.

Impact evaluation of the measures applied under the Communication Plan on information and publicity of 2007-2013 OPRD

The results of the survey carried out as a part of the evaluation show that there is a very big relative share of people who have heard of OPRD – they are 77,8% and this means that the projected values of this indicator, 40%, has not only been achieved but it is almost two times higher. People in the big cities recognize most often OPRD but this is also the case with the villages, especially when there are specific projects on public works or the reconstruction of local places of interest there. The results of the survey also suggest that OPRD is recognized most often by people who have higher educational degrees as well as by the people of active working age.

High transparency and openness in the implementation of the programme is achieved at both the beneficiaries' and the general public level. The MA of OPRD has fulfilled all requirements not only under Art. 5 of Regulation (EC) № 1828/2006 of the Commission of 8 December 2006 on modalities of implementation of Regulation (EC) № 1083/2006 of the Council laying down general provisions on the European Regional Development Fund, European Social Fund and Cohesion Fund, but has developed additional elements facilitating applicants and beneficiaries of the programme.

Also, the MA has taken all necessary measures to inform the beneficiaries of the programme of their obligations to promote the support received from OPRD under Art. 8 of Regulation 1828/2006. Publicity requirements are included as an annex to the Guidelines for Applicants for each grant scheme and are also entailed in the general conditions of contracts for grant funding. Beneficiaries are very well acquainted with the responsibilities they have on publicity for the projects implemented by them.

The results of the survey show that according to public opinion, additional efforts are required to improve the implementation of two key indicators, which are linked to transparency in the implementation of OPRD: (1) comprehensive access to information on OPRD and (2) communication style used for providing the information. In this regard, it could be considered to present information about the programme in even more clear and understandable for common people language.

I. Introduction

The Impact evaluation of the interventions under the 2007-2013 Operational Programme Regional Development and their contribution to the implementation of the EU horizontal policies was carried out in accordance with Contract PД-02-37-11/12.03.2014 between the Ministry of Regional Development and Ecorys South East Europe Ltd. This report presents the activities and the findings of the evaluation carried out during the period March 2014 – May 2015.

The objectives of this evaluation specified in the Terms of Reference are as follows:

General Objective	Impact evaluation of the interventions under the 2007-2013 Operational Programme Regional Development (OPRD) and their contribution to the implementation of the horizontal policies of the European Union (EU).
Specific Objectives	<ul style="list-style-type: none"> • Preparing an independent external results-oriented evaluation aimed at supporting the Managing Authority (MA) of the OPRD in the preparation of the annual reports on the programme implementation in 2013 and 2014, in reporting and commenting on the findings of the European Commission (EC) concerning the output and the results of the programme implementation; • Conducting research on the collection of data and information which is not available in the beneficiaries' final technical reports and respectively the Unified Monitoring Information System (UMIS) and which concerns the progress in terms of the result and impact indicators and the environmental indicators of the OPRD; • Evaluating the impact (socio-economic, territorial, on the administrative capacity and the environment) of the OPRD interventions based on the data and information collected, concerning the progress in terms of the indicators, including the preparation of the second triennial report on monitoring and control of the programme implementation and the measures on preventing, reducing or eliminating the environmental damage resulting from programme implementation in accordance with the Opinion on the Environmental Assessment (EO) № 4-3/2007 of the Ministry of Environment and Waters (MEW); • Supporting the preparation of the final report on the OPRD implementation as well as the EC in the follow-up evaluation of the OPRD; • Analysing the contribution of the OPRD interventions for the implementation of the EU horizontal policies; • Conducting impact evaluation on the implementation of the measures under the 2007-2013 Communication Plan on the Provision of Information and Public Awareness.

II. Methodological approach and team members

1. Evaluation questions and methodology

For the sake of clarity, the evaluation questions, the main sources of information and the evaluation methods are presented in the table below.

Table 1: Evaluation questions, sources and methods

Evaluation question / activity	Sources of information and data	Methods of preparing the evaluation
Activity 1: Surveys for gathering information on the progress in terms of the result and impact indicators of OPRD		
Subactivity 1: Collection of data and information on the achieved values of the following indicators with respect to which the Annual Reports on the implementation of the OPRD explicitly state that further research is required to measure and report them	<ul style="list-style-type: none"> • Polls <ul style="list-style-type: none"> • Information from the Regional Inspectorate for the Environment and Waters (RIEW)/ the municipalities; • Information from municipalities • Information from the Road Infrastructure Agency (RIA); • Bulgarian National Bank (BNB) • National Statistical Institute (NSI) • Eurostat • FTR 	<ul style="list-style-type: none"> • Desk study • Preparing and sending requests for information • Polls of visitor satisfaction – prepared and submitted report • Polls of public awareness level – prepared and submitted report • Receipt of information from the beneficiaries of the project concerning the tourist infrastructure • Meeting with RIA for the discussion of the methodologies for calculating the values of the indicators “Value of saved time in EUR/year as a result of the reconstruction of passengers and freight transport roads” and “Increase in the traffic of passengers and freight on the rehabilitated roads”
Subactivity 2: Collection of data and information which may not be received from UMIS concerning the following updated environmental monitoring and control indicators from table 10 in section 7.4 of the first three-year report on the monitoring and control of the application of the programme, including the measures to prevent, reduce or eliminate the environmental damage resulting from the application of the programme	<ul style="list-style-type: none"> • Information from the beneficiaries; • FTR • RIEW; • Regional Health Inspections (RHI) 	<ul style="list-style-type: none"> • Desk study • Sending requests for access to public information pursuant to art. 17 of the Environmental Protection Act in relation to art. 26, para. 1 of the Environmental Protection Act in relation to art.24 of the Access to Public Information Act • Analysis of the available data by the environmental indicators
Activity 2: Impact evaluation of the interventions under 2007-2013 OPRD		

Subactivity 1: Analysis of the traditional and new impact evaluation methods recommended by the EC and proposals on the most objective impact measurement methods	<ul style="list-style-type: none"> • Regulations for the 2007-2013 period • Regulations for the 2014-2020 period • EVALSED 2008 / 2013 • Working documents of the EC (2, 5, 7) • Working document on the evaluation for the next programming period “Monitoring and evaluation of the EC’s Cohesion Policy – ERDF and CF. Concepts and Ideas” • Guidelines on impact evaluation and development of NoNIE 	<ul style="list-style-type: none"> • Desk study
Subactivity 2: Impact of the social-economic impact, Evaluation of the territorial impact, Evaluation of the impact on the administrative capacity		
<p>Evaluation of the social-economic impact</p> <ul style="list-style-type: none"> • What is the difference between the expected (target) and achieved specific (actual) results and the impact of the OPRD interventions? • What is the effectiveness (the relation between the target and achieved results) of the OPRD interventions? • What is the efficiency (the relation between the input resources and the achieved results) of the OPRD interventions? • What needs to change and what needs to be kept in place in the next programming period in order to achieve greater effectiveness and efficiency when planning the 	<ul style="list-style-type: none"> • FTR • Annual reports on the implementation of the programme • Information on the financial performance • Social-economic analysis of OPRD • Guidelines on application • Mid-term evaluation • UMIS 	<ul style="list-style-type: none"> • Desk study • Tables illustrating the efficiency of the programme in terms of the achievement of the projected target values of the indicators for results and impact • Evaluation of unit costs • Site visits and check list on the site visits • Interviews with the beneficiaries and Standardized questionnaire • Interviews with experts of the MA • The SIBILA macroeconomic model • Data envelopment analysis

<p>interventions?</p> <ul style="list-style-type: none"> • What is the utility and the sustainability (the relation between the identified needs and the achieved results) of the OPRD interventions? Do the interventions really contribute to achieving the objectives and the identified needs in the programme? To what extent are the results and impact of the interventions sustainable? • What are the main lessons in terms of the interventions' design? • What are the examples of good practices and successful projects with the OPRD interventions? • Which are the identified non-planned effects (positive and negative) of the OPRD interventions, including indirect and induced effects, unexpected effects, etc.? • Which are the other identified external factors which could have (positive or negative) impact on the achieved results and the impact of the OPRD interventions? • What is the influence of these other external factors on the results and the impact of the OPRD interventions? • What is the impact of the global financial crisis on the results and the impact of the OPRD interventions? • To what extent have the recommendation been implemented in terms of the impact of the OPRD from the mid-term evaluation? 		
<p>Evaluation of the territorial impact</p> <ul style="list-style-type: none"> • What is the territorial division of the OPRD interventions and is there territorial concentration of the interventions? • What is the efficiency of the OPRD interventions at territorial level? • What is the impact of the interventions on the reduction of the regional differences in Bulgaria and compared to the average values for the EU? • Is there a difference between the groups of territories and 	<ul style="list-style-type: none"> • UMIS • Data on the financial performance provided by the MA • Existing studies of competitiveness at state level, NUTS2, regional level 	<ul style="list-style-type: none"> • Desk study • Descriptive statistics – territorial divisions, maps, tables and diagrammes • Analysis “difference in differences” • Interviews with experts of the MA

<p>population which receive support and the ones which do not receive support (counter-factual analysis)?</p> <ul style="list-style-type: none"> • What is the impact and the contribution of the OPRD's interventions compared to the regional competitiveness and sustainable development? • What is the achieved integrated effect of the implementation of 2007-2013 OPRD? 		
<p>Evaluation of the impact on the administrative capacity</p> <ul style="list-style-type: none"> • What is the impact of the interventions under "Technical assistance" on the administrative capacity of the beneficiaries and the MA? • What is the impact of the trainings on the administrative capacity of the beneficiaries? • What is the impact of the trainings on the administrative capacity of the MA's employees? • What steps have been undertaken to reduce the administrative burden for the beneficiaries and the MA? 	<ul style="list-style-type: none"> • FTR • Annual reports on the implementation of the programme • Information on organized trainings 	<ul style="list-style-type: none"> • Desk study • Interviews with experts of the MA and with the beneficiaries • Online questionnaire to the MA and the beneficiaries
Subactivity 3: Environmental impact assessment		
<ul style="list-style-type: none"> • What is the adequateness of the measures, updated in the first three-year report, to prevent, reduce or possibly completely eliminate the alleged unfavourable environmental impact of the implementation of the OPRD and the indicators for monitoring and control when applying the OPRD? • Are the measures to prevent, reduce or possibly completely eliminate the alleged unfavourable environmental impact assessment of the implementation of the OPRD and the Guidelines/ requirements for application, published in the period 01.01.2011 – 31.12.2013, which have been updated in the first three-year report, implemented and to what extent are they reported? • Are the measures implemented when approving project 	<ul style="list-style-type: none"> • First three-year report on measures to prevent, reduce or possibly eliminate completely of alleged unfavourable environmental impact of the implementation of the OPRD and indicators for monitoring and control when applying the OPRD • Information from the beneficiaries; • RIEW; • Regional Health Inspections (RHI) • FTR 	<ul style="list-style-type: none"> • Desk study • Site visits • Meeting at the MEW • Sending requests for access to public information pursuant to art.17 of the Environmental Protection Act in relation to art.26, para.1 of the Environmental Protection Act and in relation to art. 24 of the Access to Public Information Act

<p>proposals? Are project approved, with respect to which an EIA/EA is required only after a positive decision/ opinion?</p> <ul style="list-style-type: none"> • Is the protection of biodiversity taken into account? • Are the boundaries of the cultural monuments and the areas adjacent to them taken into account in accordance with the existing laws for their protection? • Are there adopted measures to reduce the emissions of dust, noise and vibration when carrying out the construction and assembly activities under the projects? • To what extent in the final technical reports on the completed projects are measures implemented and are reported the updated environmental indicators? • What is the environmental impact of the projects completed in the period 01.01.2011 – 31.12.2013 and the respective interventions of the OPRD? • Do the amendments to the OPRD in the period 01.01.2011 – 31.12.2013 have advantages in terms of the environmental impact compared to the activities which were eliminated? • To what extent were the recommendations of the first three-year report implemented? 		
Activity 3: Evaluation of the contribution of the interventions under 2007-2013 OPRD for the implementation of the EU horizontal policies		
<p>Subactivity 1: Analysis of the up-to-date status of the horizontal issues considered in the OPRD with the European and national documents defining the horizontal policies of the EU in the area of equal opportunities, equal access, non-discrimination, sustainable development, partnership, etc. by making a review of the horizontal principles, issues and policies of the EU, defining the ones which are relevant to apply to the OPRD and by proposing the monitoring and reporting of additional horizontal issues in the annual reports on the implementation of the OPRD in the light of the Europe 2020 Strategy</p>		
<ul style="list-style-type: none"> • What is the difference between horizontal principles, issues and policies? • Which are the defined horizontal policies of the EU? • Which are the horizontal policies of the EU relevant to the 2007-2013 OPRD? • Are the horizontal issues under consideration in the 2007- 	<ul style="list-style-type: none"> • Contract, Directives and Regulations of the EC • OPRD • Annual report of the MA • Mid-term evaluation 	<ul style="list-style-type: none"> • Desk study • Interviews with experts of the MA/ beneficiaries • Online questionnaire

<ul style="list-style-type: none"> 2013 OPRD up-to-date? What are the Contractor's proposals for additional horizontal issues for monitoring and reporting in the annual reports on the implementation of the OPRD? How does the development of the horizontal policies at national and European level have impact on OPRD 		
Subactivity 2: Updating and upgrading the analysis in the mid-term evaluation of the OPRD on the application of the EU horizontal policies when evaluating project proposals		
<ul style="list-style-type: none"> To what extent are the horizontal principles, issues and policies reflected in the guidelines/ requirements for application under the schemes opened after 01.01.2011? To what extent are the horizontal principles, issues and policies reflected in the eligibility criteria, eligible activities, and selection criteria? To what extent are the horizontal principles, issues and policies reflected in the methodology on the evaluation of projects? 	<ul style="list-style-type: none"> Guidelines/ requirements for application Criteria for the selection of operations, eligibility criteria, eligible activities, selection criteria Methodology on the evaluation of projects 	<ul style="list-style-type: none"> Desk study Interviews with experts of the MA/ beneficiaries
Subactivity 3: Updating and upgrading the analysis of the mid-term evaluation on the reporting of horizontal issues and the reporting of horizontal indicators		

<ul style="list-style-type: none"> What is the quality and exhaustiveness of reporting the implementation of the horizontal principles, issues and policies of the EU in the annual reports on the implementation of OPRD? Are the recommendations of the mid-term evaluation up-to-date and to what extent in terms of reporting the horizontal issues and reporting the horizontal indicators? To what extent the system of OPRD indicators measures and covers the contribution of the programme to the implementation of the horizontal principles, issues and policies? Are the quantity target values of the indicators projected in the programme and related to the horizontal policies of the EU are realistic, considering the support provided by the ERDF? How exhaustive and realistic are the reported values of the indicators related to the horizontal policies of the EU in the annual reports on the implementation of OPRD? 	<ul style="list-style-type: none"> Annual reports on the implementation of the OPRD Mid-term evaluation OPRD 	<ul style="list-style-type: none"> Desk study Interviews with experts of the MA/ beneficiaries
Subactivity 4: Application of the horizontal principles in the management and implementation of the OPRD		
<ul style="list-style-type: none"> How are the horizontal principles, issues and policies reflected in the handbook on management and implementation and other documents of OPRD? What mechanisms are used to ensure compliance with the horizontal principles in the management of OPRD? To what extent are the horizontal principles, issues and policies taken into account when implementing the projects? How do the beneficiaries ensure the implementation of the horizontal principles, issues and policies? 	<ul style="list-style-type: none"> Handbook of the MA FTR 	<ul style="list-style-type: none"> Desk study Interviews with experts of the MA/ beneficiaries
Activity 4. Impact evaluation of the applied measures from the 2007-2013 Communication Plan on information and publicity		

Subactivity 1: Evaluation of the implementation of the objectives in the Communication Plan		
<ul style="list-style-type: none"> Has public awareness been raised as to the scope, objectives and results of OPRD and the contribution of the Community? Has transparency and openness been ensured in the implementation of OPRD? To what extent are the potential beneficiaries informed of the funding opportunities provided by the ERDF and of the eligibility criteria under the programme? To what extent are the beneficiaries under the programme familiar with their responsibilities in the implementation of projects under OPRD, incl. their obligation of information and publicity related to the implementation of these projects? 	<ul style="list-style-type: none"> Communication Plan Annual reports on the implementation of OPRD FTR www.bgregio.eu 	<ul style="list-style-type: none"> Polls on the level of public awareness – a prepared and submitted report Online questionnaire Interviews with employees of the MA
Subactivity 2: Impact evaluation of the communication methods and channels envisaged in the Communication Plan		
<ul style="list-style-type: none"> To what extent have activities related to the communication methods and channels and envisaged in the Communication Plan been implemented? What is the effectiveness, efficiency, utility, impact of the activities performed under the communication methods and channels? 	<ul style="list-style-type: none"> Communication Plan Annual reports on the implementation of OPRD FTR www.bgregio.eu 	<ul style="list-style-type: none"> Polls on the level of public awareness – a prepared and submitted report Online questionnaire Interviews with employees of the MA
Subactivity 3: Impact evaluation of the results and product indicators specified in the Communication Plan		
<ul style="list-style-type: none"> Are the projected values of the indicators adequate? What is the difference between the target and achieved values of the indicators? 	<ul style="list-style-type: none"> Indicators of the Communication Plan Information on the implementation of the indicators 	<ul style="list-style-type: none"> Desk study

2. Members and distribution of the team

In order to implement the order, the following team of **key experts** was provided:

- Team leader – Daniel Nigohhosian
- Key expert No. 1 – Impact evaluation – Iglia Vasileva
- Key expert No. 2 – Impact evaluation – Ralitsa Simeonova-Ganeva
- Key expert No.3 “Ecologist – Plamen Stanev
- Key expert No.4 “Information and Publicity” – Emilia Chengelova

Given the diversity of activities and their scope, the implementation of the order also required the involvement of a considerable number of non-key experts who are to assist the technical and analytical work of all evaluations as well as the process of data collection and processing. The distribution and roles of the experts by activities is presented in the table below:

Table 2: Distribution of experts by activities

Activities	TL	KE1	KE2	KE3	KE4	NKE
Stage 1 – Stage of Inception						
Analysis of evaluability	✓✓	✓	✓	✓	✓	
Updating the general methodology and the working plan	✓✓	✓	✓	✓	✓	
Preparation of the inception report	✓✓	✓	✓	✓	✓	
Stage 2 and 3 – Collection of information and evaluations						
Activity 1 – Polls for gathering information on the progress of the indicators						
1.1 Data on the indicators of OPRD	✓	✓	✓✓		✓	✓
2.2 Data on the ecological indicators	✓			✓✓		✓
Activity 2 – Impact Evaluation of the interventions under 2007-2013 OPRD						
2.1 Analysis of the traditional and new methods of impact evaluation	✓	✓✓	✓			✓
2.2 Social, economic, territorial impact and the administrative capacity impact	✓	✓✓	✓			✓
2.3 Environmental impact assessment	✓			✓✓		✓
Activity 3 – Evaluation of the contribution of the OPRD interventions to the horizontal policies						
3.1 Analysis of the updatedness of the OPRD horizontal issues	✓✓					✓
3.2 Horizontal policies in the evaluation of project proposals	✓✓					✓
3.3 Reporting the horizontal issues and reporting the horizontal indicators	✓✓					✓
3.4 Application of the horizontal principles in the management and implementation of OPRD	✓✓					✓
Activity 4 Impact evaluation of the applied measures of the Communication Plan						
4.1 Evaluation of the implementation of the objectives in the Communication Plan	✓				✓✓	✓

Activities	TL	KE1	KE2	KE3	KE4	NKE
4.2 Impact evaluation of the communication methods and channels	✓				✓✓	✓
4.3 Evaluation of the implementation of the indicators	✓				✓✓	✓
Stage 4 – Preparation and submission of the final version of the evaluation	✓✓	✓	✓	✓	✓	

PE – Team Leader, KE1 – Impact Evaluation, KE2 – Impact Evaluation, KE 3 – Ecologist, KE4 – Information and Publicity, HKE – Non-key experts

✓✓ - leading role, ✓ - involvement

3. Schedule of implementation of the activities

The schedule of implementation of the activities is in line with the Contracting Authority's requirements for the stages and deadlines for the implementation and corresponds to the Consultant's approach for the implementation of the order, as well as the previous experience in the performance of similar orders.

In accordance with the requirements of the terms of reference, the implementation of the activities is envisaged to take place in 4 stages:

Stage 1: Stage of Inception

Stage 2: Gathering information on the indicators and the environmental impact assessment

Stage 3: Evaluation of the social-economic impact, the territorial impact and the impact on the administrative capacity as well as the evaluation of the Communication Plan and the horizontal principles.

Stage 4: Preparation and submission of the final version of the evaluation.

The Working Plan presented below sets out the overall implementation of the activities and the subactivities.

Table 3: Working Plan

Activities			Mar-14		Apr-14			May-14			Jun-14			Jul-14			Aug-14			Sep-14			Oct-14			Nov-14			Dec-14			Jan-15			Feb-15			Mar-15			Apr-15			May-15			Jun-15																				
	Calander weeks		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Stage 1: Inception			Stage 1																																																																
Inception meeting																																																																			
Meetings of key experts																																																																			
Analysis of the evaluability																																																																			
Updating the general methodology and the working plan																																																																			
Specifying the indicators and the sources of information																																																																			
Preparation of the Inception Report																																																																			
Stage 2 and 3: Collection of information and evaluations																										Етап 2 и 3: Събиране на информация и оценки																																									
Activity 1: Polls for gathering information on the progress of the indicators																										Activity 1																																									
1.1. Data on the RDOP indicators																																																																			
1.2. Data on the ecological indicators																																																																			
Activity 2: Imact Evaluation of the interventions under 2007-2013 RDOP interventions																										Activity 2																																									
2.1. Analysis of the traditional and new methods of impact evaluation																																																																			
2.2. Evaluation of the social economic impact, the territorial impact and the impact on the administrative capacity																																																																			
2.2.1 Social-economic impact																																																																			
2.2.2 Territorial impact (incl. counterfactual analysis and analysis of the effectiveness)																																																																			
2.2.3 Impact on the administrative capacity - TP																																																																			
2.3. Evaluation of the impact on the environment																																																																			
Activity 3: Evaluation of the contribution of the RDOP interventions to the horizontal policies																										Activity 3																																									
3.1. Analysis of the updatedness of the RDOP horizontal issues																																																																			
3.2. Application of the horizontal policies in the evaluation of the project proposals																																																																			
3.3. Reporting the horizontal issues and reporting the horizontal indicators																																																																			
3.4. Application of the horizontal principles in the management and implementation of the RDOP																																																																			
Activity 4: Impact evaluation of the applied measures in the Communication Plan																										Activity 4																																									
4.1. Evaluation of the implementation of the objectives in the Communication Plan																																																																			
4.2. Impact evaluation of the communication methods and channels																																																																			
4.3. Evaluation of the implementatio of the indicators in the Communcation Plan																																																																			
Stage 4: Preparation and submission of the final version of the evaluation																										Етап 4																																									
Reports			Mar-14		Apr-14			May-14			Jun-14			Jul-14			Aug-14			Sep-14			Oct-14			Nov-14			Dec-14			Jan-15			Feb-15			Mar-15			Apr-15			May-15			Jun-15																				
	Calander weeks		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Inception Report																										11.04.2014.																																									
2. First interim report																										12.9.2014.																																									
3. Second interim report																										12.03.2015.																																									
4. Final report																										07.05.2015.																																									

III. Collection of information, impact evaluation of the interventions under 2007-2013 OPRD, impact evaluation of the measures under the Communication Plan and environmental impact assessment

1. Activity 1: Collection of information on the progress in terms of the indicators of the result and impact of OPRD

1.1. Collection of data and information on the achieved values of the result and impact indicators which require further research to be measured and reported

The indicators which require further research to be measured and reported are indicated in the Annual Report on the implementation of OPRD and in the Terms of Reference and in the Technical Proposal. They are listed in the table below together with the sources and the information collection methods used at the Second Stage of implementation of the evaluation.

Table 4: Indicators and relevant measures

Indicator	Sources of information	Information collection method
Reduction of greenhouse gas emissions	Reports on completed projects Information from beneficiaries RIEW/ municipalities	Review of the implemented activities and achieved results at project level under PA1, PA2 and PA4 Letters containing questionnaires to the beneficiaries.
Energy savings from refurbished buildings	See above	See above
Use of public transport (including disabled people)	The indicator refers to the operation "Sustainable public transport systems" under PA1, with respect to which projects are yet to be completed and respectively there are no values reported for the indicator.	
Value of time saved in EUR/ year as a result of the reconstruction of passenger and freight transport roads	Reports on completed projects and on projects in implementation; Information from the RIA and the municipalities	Review of the implemented activities and achieved results at project level Letters containing questionnaires to the beneficiaries.
Increase of traffic in terms of passenger and freight on the rehabilitated roads (baseline 2006)	See above	See above
Net annual revenues from international tourism	BNB; (Reports on completed projects and on projects in implementation)	The main source of calculation of the net annual revenues from international tourism is the net

		revenues from travels (the net amount of the item "travels"), which are a component of the current account of the payment balance, according to information provided by the BNB.
Bed occupancy rate	NSI (Reports on completed projects and on projects in implementation)	The information is gathered from the NSI and it is also available in the Eurostat databases
Additional annual number of visitors of attractions supported	Reports on completed projects and on projects in implementation Information from the beneficiaries on the annual number of visitors to the particular attractions before and after the implementation of the projects	A review of the activities carried out and the results achieved at project level. Letters containing questionnaires to the beneficiaries.
Satisfaction of visitors with the attractions and the information services	Findings of a survey; (Reports on completed projects and projects in implementation)	Review of the findings of the survey on the satisfaction of visitors with the attractions and the information services
Public awareness level of the OPRD	Findings of a survey	Review of the findings of the survey on the level of public awareness of the OPRD

With a view to having an idea of the basis for the impact evaluation and the dynamics of the conditions under which it was carried out, in view of the great number of projects completed in the period subject to the evaluation, the table below contains data on the contracts concluded as of 31.12.2013, and on the projects completed as of 31.12.2013 and 31.12.2014. The table shows that 167 projects have been finalized and over 300 are yet to be completed. In this regard, the data used for this evaluation may not be considered as final in terms of the achievements of the programme.

Table 5: Status of the contracts under 2007-2013 OPRD

Scheme	Contracts concluded	Projects completed (incl. terminated)		Terminated projects	Contracts whose implementation is not completed as of 31.12.2014 ¹
	As of 31.12.2014	As of 31.12.2013	As of 31.12.2014	As of 31.12.2014	
1.1.01	74	74	74	8	0

¹ Projects which fall in the category „In the process of implementation“, „Registered“ and „Temporarily suspended“.

1.1.02	8	3	4	2	4
1.1.03	20	0	4	4	16
1.1.04	12	9	9	1	3
1.1.05	20	15	16	2	4
1.1.07	15	14	15	0	0
1.1.08	17	0	0	0	17
1.1.09	47	27	40	2	7
1.1.10	45	37	42	7	3
1.1.11	62	18	50	1	12
1.1.12	21	0	10	0	11
1.2.01	1	0	0	0	1
1.2.02	3	0	0	0	3
1.2.03	1	0	0	0	1
1.4.01	1	0	0	0	1
1.4.02	18	18	18	0	0
1.4.03	17	17	17	3	0
1.4.04	11	11	11	0	0
1.4.05	23	21	23	0	0
1.4.06	43	40	41	0	2
1.4.07	36	30	36	0	0
1.4.08	1	0	0	0	1
1.4.09	36	0	0	0	36
1.5.01	1	0	0	0	1
1.5.02	1	0	0	0	1
1.5.03	5	0	0	0	5
2.1.01	57	39	46	2	11
2.1.02	31	30	30	1	1
2.2.01	1	0	0	0	1
2.3.01	1	1	1	0	0
3.1.01	10	8	8	0	2
3.1.02	15	11	11	1	4
3.1.03	46	10	26	0	20
3.1.04	1	0	0	0	1
3.2.01	6	6	6	6	0
3.2.02	28	0	15	1	13
3.2.03	12	0	1	1	11
3.3.01	14	8	8	0	6
4.1.01	62	62	62	2	0
4.1.02	14	14	14	1	0

4.1.03	70	49	69	2	1
4.1.04	67	37	60	5	7
4.1.05	15	2	6	0	9
4.2.01	61	61	61	19	0
5.3.01	71	39	43	12	28
5.3.02	35	0	0	0	35
5.3.03	31	0	1	1	30
Total	1187	711	878	84	309

Source: UMIS² and information from the MA

Following the analysis of the schemes under 2007-2013 OPRD and the identification of the projects related to the particular indicators, the team of evaluators went on to review the final technical reports of the projects finalized in December 2014.

For ease of the evaluation, the information from the reports is summarized in the table (see Appendix “Electronic tables”) indicating the values of the indicators which are available in the technical reports of the beneficiaries.

With respect to the findings of inaccuracies, the team of evaluators discussed with the Contracting Authority the option of sending questionnaires to the beneficiaries to complete the missing information. It was decided to send letters with questionnaires to all the programme beneficiaries whose final reports contain no information or incorrect information on their projects.

At the **second stage** of the evaluation letters were sent to 196 municipalities – a letter to each of them, containing a request for information on the values of the indicators. Letters requiring similar information were also sent to specific OPRD beneficiaries - 13 non-governmental organizations and 14 higher education institutions. Letters were also sent to the Road Infrastructure Agency, the Employment Agency and the Ministry of Culture – requiring information on the projects under which they are beneficiaries.

For the ease of the beneficiaries, there were prepared questionnaires to be attached to the letters and to be completed with the necessary information – reported value of the indicator, year of reporting, source of information and, if necessary, comments/ notes. Questionnaires were prepared and sent and are to be completed with the missing information, respectively concerning the following indicators:

- Reduction of greenhouse gas emissions (CO₂ and equivalent);
- Energy savings from refurbished buildings;
- Energy savings from the introduction of energy-efficient street lighting;
- Job creation;
- Value of time saved (in EUR/ year) as a result of the reconstruction of passenger and freight transport roads;
- Increase in the passenger and freight transport traffic on the rehabilitated roads (baseline 2006);
- Number of jobs created in the supported tourist attractions;

² According to data from UMIS, as of February 2015

- Increase in the number of visitors of attractions supported;
- Production of electricity from alternative and renewable energy sources (% of the total energy consumption);
- Restored and renovated historic and cultural monuments located in the towns and cities;
- Built-up areas;
- Forest areas affected;
- Natural habitats affected;
- Areas with newly planted plants;
- Trainings and workshops related to the environment.

Data was received by 156 beneficiaries, viz. 70% of the beneficiaries which were sent the requests for information.

At the **third stage** of the evaluation, after the submission of the First Interim Report, there was a review of the newly received final technical reports under the projects completed in the period March-December 2014. The review found that a request for further information needs to be made to only 5 beneficiaries under projects for tourist infrastructure (the Ministry of Culture, Nessebar Municipality, Panagyurishte Municipality, Pernik Municipality, Petrich Municipality) and the beneficiaries sent the requested information³.

The achieved values of the indicators based on the information collected at stages 2 and 3 of the evaluation are presented below. The adjusted total values are obtained after excluding the extreme values. Extreme values (outliers), accounted under the following schemes: 1.01.01, 1.1.05, 1.1.10, 4.1.02, 4.1.05, 1.2.02, 3.1.03, 1.4.01 and 4.1.03, are excluded from the calculations. These values are defined as extreme in most cases when they fall outside the range defined in the following way:

$$[E(X) - 3\sigma(X), E(X) + 3\sigma(X)]$$

where by $E(X)$ is denoted an average of all accounted values on a particular indicator, and with $\sigma(X)$ – their standard deviation. The choice of this range is dictated by the shape of the density function of the normal distribution. Assuming that the observations of the indicators are distributed with a normal distribution (most often used assumption), then 68% of the observations should lie within one standard deviation from the average value, 95% - within two standard deviations, and 99.7% - within three standard deviations, i.e. all of the variable values, for which we assumed there is a normal distribution, should lie within 3 standard deviations.

In addition to this purely technical statistical criterion, some projects were excluded from the analysis on the basis of some changes that have fundamentally altered the scope of the project, such as project BG161PO001/1.1-01/2007/006 "Creation of favorable conditions growth and development of children in Vidin" in which new sites were introduced in the process of construction works.

Some projects are excluded on the basis of expert judgement – when few (in number) values of a physical performance indicator and because of the high burden of any additional monitoring, the

³ Except Nessebar Municipality and Panagyurishte Municipality

reported value in a certain project⁴ does not formally fall outside the above defined range but in practice, it is very different from the rest of the data and therefore is excluded.

The tables containing the achieved and adjusted values are also included in Appendix No.1 "Electronic Tables."

Indicator: "Reduction of greenhouse gas emission" (kilotons)

Table 6: Indicator "Reduction of greenhouse gas emissions" (kt)

Scheme	Reported values ⁵	Adjusted values
1.1.01	15,048	8,908
1.1.07	4,158	4,158
1.1.09	25,021	25,021
PA1	44,227	38,087
4.1.01	1,940	1,940
4.1.03	8,181	2,590
Total	54,348	42,617

The information collected for the indicator is presented in table 6. The second column of the table shows the results of the review of the information in FTR and the information collected by the additional requests for information to the beneficiaries. The third column constitutes an adjustment to the collected information aimed at presenting more realistic data on the progress achieved (see Appendix No.1, Table 1).

The adjustments made are presented below:

- Project BG161PO001/1.1-01/2007/042 "A renewed and modernized social infrastructure in the municipality of Nova Zagora" - the value of 7,000 kt/ year is not included in the calculations because it falls outside the reference interval of the average value \pm standard deviation of 3 *
- Project BG161PO001/1.1-01/2007/006 "Ensuring efficient, publicly accessible and modern educational infrastructure for sustainable development of Gabrovo Municipality" - the value -860 kt/ year is not included in the calculations because it is about 10 times lower the next reported value under the scheme
- Project BG161PO001/4.1-03/2010/006 "Implementation of energy efficiency measures in municipal educational infrastructure: General School "Hristo Botev" in Elhovets, Kindergarten "Daga" in Elhovets and Kindergarten "Elitsa" in Tchepintsi" – the value 5591 kt/ year is not included in the calculations because it falls outside the reference interval of the average value \pm standard deviation of 3 *

The indicator corresponds to key indicator No.30 in SFC and in the OPRD the indicator is included at the level of priority axes 1 and 2. In the current evaluation, information on the indicator is collected under five schemes (specified in the table) and, instead of PA2, information is collected under PA4. There are several reasons for not reporting the indicator under PA2. Firstly, the indicator is not envisaged in the Guidelines/ the Requirements for Application and, respectively, it was not reported by the beneficiaries, although RIA is cited as a source for this indicator in OPRD.

In addition, there is no clear intervention logic which makes the investments under PA2 for the

⁴ For example, projects BG161PO001/1.4-02/2008/011 "A new vision for the downtown area and integrated urban development by improving the physical environment and revitalization of Pazardzhik" and BG161PO001/1.4.-02/2008/013 "Ensuring sustainable and ecological environment and increasing the attractiveness of Velingrad Municipality" in scheme 1.4.02

⁵ Under FTR and the questionnaire

road infrastructure conditional on the reduction of greenhouse gas emission. The lack of such logic, as well as the impossibility to report this indicator, were confirmed during a meeting with experts from RIA. The level of emissions is conditional on the result indicator – “Increase in the traffic of passengers and freights on the rehabilitated roads,” i.e. with the increase in the traffic, there is an increase in the emissions on a particular rehabilitated road. In practice, there is an inverse relation between these two indicators when it is not a matter of diverting the traffic from densely populated places where there is often congestion on particular roads.⁶ A correlation between the indicator and investments in road infrastructure is not considered in the Working Document of the European Commission №7, too.

Under operation 2.3, there is implementation of the scheme BG161PO001/2.3-01/2010, Preparation, survey and design of the construction of a gas interconnector Bulgaria-Serbia, which can have a link to the indicator reporting the reduction of emissions. As is evident by the name of the scheme and by the activities envisaged, the operation is aimed at preparing the project for the gas interconnector. In this regard, the operation constitutes only the first step of the implementation of the gas interconnector between Bulgaria and Serbia. Direct impact on the diversification of supplies of natural gas and a wider impact on the greenhouse gas emission may only be expected after the implementation of the project, itself, for the construction of a gas interconnector. This, together with the relatively limited budget of the operation, explains why no product and result indicators are envisaged for it.

In view of the foregoing, it may be recommended that the indicator “Reduction of greenhouse gas emission” is removed from PA2 and this can be done in case there is impending amendment of the programme in 2015. If there is no amendment of the programme, the indicator under PA2 will not be reported in the Final report for OPRD 2007-2013. As it was stated above, the reasons for removing the indicator are: lack of connection between indicator and activities under PA2, the non-inclusion of the indicator in the Application Guidelines and subsequently, disregard of the indicator in reports by beneficiaries.

Meanwhile, the indicator could be reported under PA4 because there are similar interventions to PA1 under the priority axis for small-scale investments. Although it is not included in the Guidelines for Applicants under PA4, the indicator is reported by beneficiaries, and also, there is information for it collected within this evaluation. The collected information can be supplemented with data from the final reports of beneficiaries after 2015. Thus, the results of the programme will be reported more comprehensively, compared to reporting the indicator only under PA1.

The indicator’s unit of measurement in OPRD is kilotons, but the Guidelines on the application provide for the more specific one – kilotons/ year. Accordingly, the beneficiaries reported the values in this unit of measurement. In the Guidelines on the key indicators⁷, it is also provided that kilotons/ year is meant. For the next programming period, the EC has provided that this indicator should be “**Annual** reduction of greenhouse gas emissions.” This also applies to the indicator “Energy savings from refurbished buildings” described below. It also reports the **annual** effect and in this case it is energy savings.

As to this indicator, another important factor to be taken into account is the methodological

⁶ DG REGIO. Guide to Cost-Benefit Analysis of investment projects. 2008. p.132

⁷ DG REGIO. Indicative Guidelines on Evaluation Methods: Reporting on Core Indicators for the European Regional Development Fund and the Cohesion Fund. Working Document No.7. July 2009

difficulty in transforming the consumed energy in quantity emitted CO₂ because the beneficiaries usually use the energy from different sources – fossil fuels, gas, nafta, heating, electricity, etc. There are more difficulties when there is a change of fuel and there is no information on the base.

Another challenge when the beneficiaries report the indicator is the fact that there is no clear methodology for calculating the reduction of greenhouse gas emissions which is familiar to all the beneficiaries. That is why the reported values vary from -860 to 7000 t/year. This made necessary the adjustment/ the exclusion of part of the values reported by the beneficiaries in order to achieve the value of 42,617 kt/year reduction of greenhouse gas emissions (kilotons).

The difficulties in reporting the indicator lead to a situation in which there is no information on the indicator in 73 out of a total of 247 proposed reports under the relevant schemes and another 64 reports state that the indicator is not applicable (see Appendix No.1 “Electronic Tables” – table 1). These data show that information on the greenhouse gas reduction cannot be collected for all projects although they concern this indicator, viz. in this case the reported value is decreased.

Apart from this, as shown in table 7 below, although some schemes report energy savings from refurbished buildings, this is not accompanied by reporting a reduction of greenhouse gas emission. In accordance with the Guidance of the EC containing the concepts and recommendations on the monitoring and evaluation for the programming period 2014-2020⁸ the reduction of greenhouse gas emissions is an indicator linked to the interventions in renewable energy sources and for the reduction of energy consumption. In this regard, for the next programming period the indicator should be reported under all the schemes which include such interventions.

Indicator: “Energy saving from refurbished buildings” (MWh/year)

Table 7: Indicator “Energy savings from refurbished buildings” (MWh/y)

Scheme	Reported values	Adjusted values
1.1.01	41 697	41 697
1.1.02	1891	1891
1.1.04	3 007	3 007
1.1.05	918 043	871
1.1.07	13 201	13 201
1.1.09	64 257	64 257
PA1	1 042 097	124 925
4.1.01	109 619	6 773
4.1.03	25 802	25 802
Total	1 177 518	157 500

As shown in the table, except for Priority Axis 1, in accordance with the provisions of the Terms of Reference, information is also collected on the achieved indicator values under Priority Axis 4. The indicator is not provided in PA4 but in view of the type of interventions under the axis, it has considerable contribution to achieving the results under the programme in terms of energy savings. In this regard, it may be recommended that this indicator should also be reported under PA4 in order to achieve wider scope of the results achieved under the programme.

The adjustment (see Appendix No.1, Table 1) made in the values reported and collected by the beneficiaries are due to the following factors:

⁸ DG REGIO. Guidance document on monitoring and evaluation. Concepts and recommendations. March 2014

- There are methodological difficulties in reporting the energy savings related to the specific circumstances – constructive decisions leading not to the reduction but to the real increase of energy consumption (larger area used, ensuring the temperature comfort provided by law, the change of fuel, the use of the premises for a longer period, etc.);
- In some reports the indicator “Energy savings from refurbished buildings” is called “Reduced monthly costs for energy resources”;
- There are reported unrealistically high values and the link between them and activities carried out under the projects is not always clear;
- “Energy savings from refurbished buildings” is reported in percentage terms or in BGN; with some indicators a different unit of measurement is used for the baseline and the reported value; data for part of the year are reported (not for the entire year), identical data are presented for the year N+1 and N+2.

For the purpose of clarity, the adjustments are presented below:

- Project BG161PO001/1.1-05/2008/001-3 “Major overhaul and reconstruction of the Bulgarian National Museum of Fine Arts” - value 917 172 (MWh) is not included in the calculations because it falls outside the reference interval of the average value ± 3 * standard deviation
- Project BG161PO001/4.1-01/2007/004 "Integrated impact on educational infrastructure Suvorovo" LOT1: Recovery of children's creative development centre - UPI - I, sq. 55 on plan. Suvorovo; Lot 2: Repair and restoration work in General School "Hr. Botev" - Chernovo – the value 53 205 (MWh) is not included in the calculations because it falls outside the reference interval of the average value \pm standard deviation of 3 *
- Project BG161PO001/4.1-01/2007/030 "Ensuring adequate educational infrastructure through renovation of the kindergarten "Slaveyche" and General School "Paisii Hilendarski" in Varbitsa – the value 33 396 (MWh) is not included in the calculations because it is near the border of the reference interval of the average value \pm standard deviation of 3 *
- Project BG161PO001/4.1.-01/2007/019 "Improving the material base of the educational infrastructure in Omurtag municipality for integrated and sustainable local development" - the value -42,315 (MWh) is not included in the calculations because it is near outside the reference range of the average value ± 3 * standard deviation
- Project BG161PO001/4.1-01/2007/035 "Sustainable local development through the establishment of appropriate and cost-effective educational infrastructure for students from the school "N. Vaptsarov" in Selanovtsi – the value 52 940 (MWh) is not included in the calculations because it falls outside the reference interval of the average value \pm standard deviation of 3 *
- Project BG161DÎ001/4.1-01/2007/020 "Tomorrow begins today: Creation of a network of modern schools in the municipality of Sredets" - the value 5885 (MWh), which is additionally sent by the beneficiary, is not included in the calculations because it is more than 5 times higher than the next highest value registered under the scheme, but the value which the beneficiary has indicated in the final report is included.

With respect to this indicator, there are no data for 57 out of a total of 277 reviewed relevant projects and for 18 ones it is specified as inapplicable. These data show a relatively higher extent

of reporting the indicator compared to the indicator “Reduction of greenhouse gas emissions”, nevertheless, this points to the difficulties in reporting energy savings. The difficulties identified in the framework of the evaluation often relate to the following:

- In accordance with art. 23. (1) of Ordinance No. 16-1594 of 13.11.2013 on the examination of energy efficiency, certification and evaluation of the energy savings of the buildings, the achieved energy savings are reported no earlier than one year after the introduction of the measures on the energy efficiency improvement with the end users of energy. In practice, this means that the beneficiaries may not declare the savings in the FTR because they do not have the necessary information. Therefore, the MA requires additional data during the site checks for sustainability of completed projects.
- Some reports do not contain the baseline for comparison or the data for the years after the introduction of the energy efficiency measures
- Not all the beneficiaries are familiar with the deadlines and the requirements in terms of energy examination and that is why they do not have the necessary data for the indicator
- Some beneficiaries reported the savings made on the basis of invoices which is not the proper way of establishing savings. As specified in the Guidance of the EC containing concepts and recommendations on the monitoring and evaluation for the programming period 2014-2020⁹, the reporting of the indicator should be based on Directive 2010/31/EC¹⁰, viz, by energy certificates issued before and after the reconstruction of the public buildings.

The indicator is also applicable under scheme 1.1.11 “Support for reconstruction/ renovation and equipment of public health institutions in urban agglomerations” but it is not included in the Requirements for Application and, accordingly, it has not been reported by the beneficiaries. At the same time, the Requirements under the scheme specify that “in the case of introduction of energy efficiency measures in the premises/ buildings, which are subject to the intervention, the design proposal should include energy saving measures provided for the examination of energy efficiency” and in such cases, the submission of energy efficiency examination is mandatory when submitting the project proposal. The same requirement is contained in the Requirements for Application under schemes 1.1.5., 1.1.7, 1.1.9, 1.1.12 and 4.1.3 but not under similar schemes which were announced prior to them. The requirement for energy efficiency examination is a good practice which is expected to reduce the methodological difficulties in reporting the indicator for energy savings and it is recommended to continue to apply it to all the relevant schemes in the period 2014-2020. In order to better report the indicator “Energy Savings”, it is recommended that the Guidelines/ Requirements for the next programming period should contain a requirement to the beneficiaries for further reporting the values of the indicator on the basis of the energy examination at least for a year after the completion of the respective activities under the project (in accordance with the requirements of the relevant legislation in force).

Table 8: Indicator “Energy savings from the introduction of energy saving street lighting” (MWh/year)

⁹ DG REGIO. Guidance document on monitoring and evaluation. Concepts and recommendations. March 2014

¹⁰ Directive 2010/31/EU of the European Parliament and of the Council, 19 May 2010.

Scheme	Reported values	Adjusted values
1.4.02	9 175,9	176
1.4.05	27 253,6	1 019
Total	36 429,5	1 195

There are similar problems with the indicator “**Energy savings from the introduction of energy saving street lighting (MWh)**”. This indicator is not provided in the programme and the collection of information on it is not included in the terms of reference. Nevertheless, the indicator gives further information on the achieved energy savings and that is why the team of consultants examined the information on it in the FTR and collected further

information from the beneficiaries – it is presented in table 8.

The values reported in the FTR and the surveys are significant but they need to be adjusted (see Appendix 1, Table 1) by eliminating the unrealistically high values (e.g. the range of the data under scheme 1.4.05 varies from 1,1 to 14 472 MWh). The adjustments made are presented below:

- Project BG161PO001/1.4-02/2008/011 "A new vision for the downtown part and integrated urban development by improving the physical environment and revitalization of Pazardzhik" and project BG161PO001/1.4.-02/2008/013 'Sustainable and environmental protection and increase the attractiveness of Velingrad Municipality' – the values on these two projects – 6000 (MWh) and 3000 (MWh) are not included in the calculations because they are significantly different from those reported by other projects and have a large impact on the calculated average values
- Project BG161PO001/1.4-05/2009/015 "Improvement of the environment in the busiest public spaces of the traditional center of Svishtov" – the value 14 472 (MWh) is not included in the calculations because it falls outside the reference interval of the average value \pm standard deviation of 3 *
- Project BG161PO001/1.4-05/2009/006 "Integrated project for the sustainable improvement of urban and recreational areas in the municipality of Yambol" – the value 11 763 (MWh) is not included in the calculations because it is very close to the reference interval of the average value \pm 3 standard deviation *

Indicator: Use of public transport (including disabled people) - Additional population benefiting from the improved urban transport

As stated above, the indicator refers to the operation "Sustainable Urban Transport Systems" under PA1, in which there are still no completed projects and, accordingly, no reported values of the indicator. However, the relevance of the indicator was analyzed. The review identified the following factors that should be considered during the collection and interpretation of data for the indicator:

- The TOR include indicator "Use of public transport (including the disabled people)" as it was used in the 2007 version of OPRD. Subsequently, the indicator was replaced with the indicator "Additional population benefiting from the improved public transport", which is the current indicator used in the programme.

- According to the definition of the working document of the European Commission №7¹¹, the key indicator measures the number of people who use improved public transport and have not used the public transport in question before the intervention. By the term “improved public transport” is meant the following: increasing the capacity or quality (improved comfort, improved safety, reduced travel time, reduced delays) of the services that are offered by the public transport network as a direct result of the projects.
- In the requirements for the three schemes for integrated urban transport (Operation 1.5 "Sustainable Urban Transport Systems") there is no uniform understanding of the indicators. In the requirements for scheme 1.5-01 ("Support for integrated urban transport in Burgas Municipality") it is not made clear, unlike the requirements of the other two schemes (1.5-02 "Support for integrated urban transport in Sofia Municipality" and 1.5-03 "Support for integrated urban transport in the five big cities"), that the indicator "Number of population benefiting from improved public transport" corresponds to the above understanding of the key indicator "Additional population benefiting from the improved public transport". In the Guidelines for all three schemes, there is an indicator "Degree of use of public transport (including the disabled) - % increase of the population," which is no longer included in the programme.

On the basis of the above can be made the following recommendations for reporting the indicator "Additional population which is served by improved public transport":

- For schemes 1.5-02 and 1.5-03 beneficiaries should take into account indicator "Number of population benefiting from improved public transport (additional population that has not used public transport before improvements)" because it is embedded in the application requirements. Accordingly, this indicator can be used directly in the calculation of the key indicator "Additional population benefiting from the improved public transport"
- For scheme 1.5-01 there is a risk for the beneficiary to report the entire population of the municipality as a value of the indicator "Number of population benefiting from improved public transport", and as for indicator "Degree of use of public transport", only a percentage of the overall increased use of public transport to be reported. In order to avoid this risk, before the beneficiary submits its final report, the MA should clarify that "Number of population benefiting from improved public transport" means the additional population that has not used public transport before the improvements.
- Actual data for the population which has used public transport after the improvements can be collected at the earliest one year after completion of the projects. Therefore, beneficiaries will be able to identify only forecast data in their final reports. For the purpose of reporting the indicator, beneficiaries should be able to identify its real value during spot checks on the sustainability of completed projects (at the earliest one year after completion of the project activities). Possible sources of information for this indicator are the following: municipalities; operators who provide transport services; developed transport models; and specific research. Alternatively, information for the indicator could be collected from the MA through specific research/ evaluation, which has to be conducted prior to submission of the Final report on the implementation of OPRD.

¹¹ Working Document No.7. Indicative Guidelines on Evaluation Methods: Reporting on Core Indicators for the European Regional Development Fund and the Cohesion Fund. July 2009.

Indicator: Value of time savings in EUR/year as a result of the reconstruction of passenger and freight transport roads

Table 9: Indicator “Value of time savings in EUR/year as a result of the reconstruction of passenger and freight transport roads” (EUR/year)

Scheme	Reported values	Adjusted values
2.1.01	48 045 326	48 045 326
2.1.02	11 083 562	2 083 562
Total	59 128 888	50 128 888

The indicator corresponds to Key Indicator No. 20 in SFC “Time savings in EUR/ year resulting from new and reconstructed passenger and freight transport roads.” The Guidelines on key indicators (Working Document No.7) specify that “the total time saved” should be measured as a “direct result of the project measured according to a national methodology.” The present evaluation did not find any available up-to-date national methodology and this was confirmed by RIA¹² and it was one of the findings of the Mid-term Evaluation. The absence of a national

methodology on the calculation of time savings has impact on the trustworthiness of the data collected because the beneficiaries (RIA and the municipalities) use a different methodology. In order to calculate the cost of the time savings, the Guidelines on the Indicators refer to the Guidelines on the Costs-Benefits Analysis which contain data on the HEATCO assessment¹³.

The adjusted data presented below do not take into account the declared value of 9 million EUR/ year of time savings under project BG161PO001/2.1-02/2007/007 “Improvement of the municipal road network in Lyaskovets Municipality” because it is not realistic (for the sake of comparison, the average value of this indicator under the other projects of the scheme is 93 673).

14 out of the 73 reviewed projects do not contain information or the indicator is specified as inapplicable. Apart from the fact that there is no clear methodology presented to the beneficiaries, another reason for the incomplete information is the need for measuring it at least for a year before reporting the value of time savings. In the final reporting of indicator for all road projects, including these implemented by the municipalities, it is recommended to use the methodology of RIA. With a view to uniform application of a uniform methodology for national and municipal roads, it is recommended that experts of RIA are engaged in the reporting of the indicator.

Indicator: Increase in the traffic of the passengers and freight on the rehabilitated roads

Table 10: Indicator “Increase in the traffic of passengers and freight on the rehabilitated roads” (%)

Scheme	Reported values
2.1.01	13,6%

¹² For the indicators „Value of time savings in EUR/year as a result of the reconstruction of passenger and freight transport roads“ and „Increase in the traffic of passenger and freight on the rehabilitated roads (baseline 2006)“ the Guidelines on the preparation of a costs-benefit analysis in the transport sector are being currently used and forecast data and information from the profile census (held every 5 years).

¹³ <http://heatco.ier.uni-stuttgart.de/>

2.1.02	28%	The major sources of data in terms of this indicator under scheme 2.1.01 are FTR and further information provided by RIA ¹⁴ . Under scheme 2.1.02 the calculations are based mainly on data provided additionally by the beneficiaries. It should be taken into account that in practice, for most projects, there is no specific research establishing the achieved increase. In order to report the indicator, the beneficiaries-municipalities rely on application forms, information of the municipalities or the source of information is not specified.
Average	21%	

16 out of 73 reviewed projects do not provide information or the indicator is specified as inapplicable. There is a similar case with the indicator “Value of time savings in EUR/year as a result of the reconstruction of passenger and freight transport roads” – apart from the absence of a clear methodology presented to the beneficiaries, another reason for the incomplete information is the need of amendment at least a year before reporting the value of the time saved.

Indicator: Jobs created (number of jobs created)

Table 11: Indicator “Jobs created” (number of jobs created)

Scheme	Reported values
1.1.01	2 065
1.1.02	47
1.1.04	14 587
1.1.05	360
1.1.07	159
1.1.09	1 977
1.1.11	73
1.1.12	814
1.4.02	683
1.4.03	180
1.4.04	284
1.4.05	1 665
1.4.06	789
2.1.02	624
3.1.01	64
3.1.02	221
3.1.03	991
4.1.01	419
4.1.02	202
4.1.03	1 183
4.1.04	1 042
4.1.05	151
Total	28 580

As shown in the table, the information on this indicator is reported under almost all the schemes of OPRD. The indicator itself is not included in the terms of reference of this evaluation but information on it was collected because it was selected as an impact indicator in OPRD at programme level. The level of the indicator includes both temporary and permanent jobs which are reported by the beneficiaries in the FTR and/ or in the information provided additionally by the beneficiaries.

The conclusion of the Mid-term Evaluation should be taken into consideration, viz. that the indicator does not reflect properly the essence of the programme which is not directly aimed at creating jobs. It is not reported under all the projects and, besides, the beneficiaries do not share the same understanding as to the manner and sources of reporting the indicator. This also becomes clear from the available data and very high values are declared for scheme 1.1.04 because the unemployed registered in the renovated employment offices are reported. In this case, the employment of the registered unemployed is not directly linked to the funding of the programme activities for the renovation of the employment offices.

¹⁴ By a letter 04-15-299 of 27.10.2014.

Indicator: Net annual revenues from international tourism

Table 12: Indicator “Net annual revenues from international tourism” (euro) - reported

Scheme	Reported values
3.1.02	139 500
3.1.03	541
3.2.02	23 125 789
3.3.01	7 656 293 283
Total	7 679 559 113

The data presented in table 12 show that the final technical reports do not provide trustworthy information on the indicator of net annual revenues from international tourism. Some beneficiaries report the net revenues on the basis of their own calculations while others provided information on the total revenues in the country. In general the beneficiaries could not provide trustworthy information on this indicator because it may only be reported by specific research. It may be

recommended that the value of the indicator should not be required in the reports of the beneficiaries and, instead, it should be reported by other sources.

In this regard, the text of the OPRD specifies as a source of data the Bulgarian National Bank. The BNB reports the indicator and the data are based on the information of the NSI on the number of foreigners who visited the country and the Bulgarian citizens who travelled abroad and evaluation of the BNB on the costs/ revenues during a single trip. The table below contains the respective calculations in terms of the indicator¹⁵:

**Table 13: Indicator “Net revenues from international tourism” (Euro) – BNB -
Fifth edition of the Manual on Balance of Payments and International Investment Position of IMF**

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Trips credit	1955,7	2063,8	2593,8	2873,8	2681,2	2747,1	2852,4	2916,6	3058,4
Trips debit (-)	1053,4	1174,4	1303,0	1566,6	1258,7	931,2	958,7	1015,7	1150,4
Total	902,3	889,4	1290,7	1307,2	1422,5	1815,9	1893,7	1900,8	1908,1

Source: BNB

In April 2015, the balance of payments statistics of the Bulgarian National Bank proceeded to read data according to the Sixth edition of the Balance of Payments Manual and international investment position of the IMF since 2008. This led to the interruption of time series of the net revenues from international tourism. The table below presents the revised values of the indicator according to the Sixth edition of the Balance of Payments Manual of the IMF.

¹⁵ Item „Trips“ includes the transactions between the residents and non-residents in terms of services used and goods bought while travelling abroad. According to the methodology of BNB, this also includes all the goods and services bought during the trip abroad for own consumption or as gifts (accommodation, food, drinks, entertainment, souvenirs, presents) as well as the goods and services paid before or after the trip but acquired/ used during the trip, incl. the packages of such goods and services (tourist packages). Source: Methodology on the evaluation of items „Trips“, „Road Transport“ and „Compensation of the rented - credit“ in the balance of payment of Bulgaria, BNB, March 2010.

**Table 14: Indicator “Net revenues from international tourism” (Euro) – BNB -
Sixth edition of the Manual on Balance of Payments and International Investment Position of IMF**

	2009	2010	2011	2012	2013
Travels – credit	2 626	2 721	2 787	2 925	2 980
Travels – debit (-)	626	647	721	840	903
Total	2 000	2 073	2 066	2 085	2 077

Source: BNB

According to the data above, the value of the net revenues in million EUR for 2013 is 2 077.

Indicator: Bed occupancy (%)

**Table 15: Indicator “Bed occupancy” (%) -
reported**

Scheme	Reported values
3.1.01	32,71%
3.1.02	47,00%
3.1.03	29,58%
3.2.02	22,38%
3.3.01	27,60%
Average	31,86%

The beneficiaries provide information on bed occupancy in their FTRs. To this end, they used data from the NSI, own data of the municipalities, information centres, information on the tourists and in some cases the indicator was not reported. In some cases the indicator was reported in the unit of measurement BGN instead of percentage rate. Given the different sources, the lack of information and/ or incorrect information, for this programming period, the beneficiaries did not provide information which could be used at the priority axis level. The text of

the programme itself states that the source of information on this indicator will be the NSI. In this regard, as to the indicator, it may be recommended that the beneficiaries should not be required to provide data because it would be difficult for them to provide them.

The values, according to the NSI¹⁶, are presented below and they are calculated by using the following formula: Bed Occupancy = Nights sold/ bed-night.

Table 16: Indicator “Bed occupancy”(%) – NSI

	2008	2009	2010	2011	2012	2013	2014
Bed occupancy	30%	25%	26%	32%	36%	37%	35%

Source: NSI, Sector statistics

For the period 2009-2013 the bed occupancy increases but in 2014 it fell again to 35%.

Indicator: Additional number of visitor of the supported attractions

¹⁶ Source:

<http://www.nsi.bg/bg/content/1978/%D0%B3%D0%BE%D0%B4%D0%B8%D1%88%D0%BD%D0%B8-%D0%B4%D0%B0%D0%BD%D0%BD%D0%B8>

Table 17: Indicator “Additional number of visitors of the supported attractions” (number/year)

Scheme	Reported values	Adjusted values
1.1.10 ¹⁷	4 039 750	939 750
3.1.01	103494	103494
3.1.02	282 918	282 918
3.1.03	1 747 775	507 059
Total	6 173 937	1 833 221
PA3	2 134 187	893 471

Apart from the FTR, data was also collected by the beneficiaries as to the indicator “Additional annual number of visitors of the supported attractions.” There are diverse sources of the beneficiaries: data from the attractions themselves, from the municipalities, from the regional offices of statistics, the tourist organizations, the NSI, data on the visits to festivals and in some cases the sources are not specified. There are several adjustments specified in Appendix No.1, Table 1 and for greater clarity, these are also presented below:

- Project BG161PO001/1.1-10/2010/040 "Regional Festival of Arts - Pazardzhik" – the value 3 100 000 (people) is not included because, instead of number of visitors of innovative cultural events, the beneficiary reported communicated viewing audience on TV, which leads to an unrealistically high value.
- Project BG161PO001/3.1-03/2010/035 "Complex project for the development of sustainable tourism in Plevan region" – the value 1 240 716 (people) is not included in the calculations because it falls outside the reference interval of the average value ± 3 standard deviation *

It should also be taken into account that 12 out of 44 reviewed projects do not contain data or specify that the indicator is inapplicable (5 projects) because a year has not yet passed since the completion of the project activities. There are no data provided mostly for the projects completed in 2014. Accordingly, in order to report the achieved values under these projects too, it is recommended that information should be required from the beneficiaries again at the end of 2015.

The Terms of Reference do not contain the collection of information on the indicator “Number of visitor of innovative cultural events” (relevant scheme 1.1.10) and the indicator is not specified in the operational programme itself. Nevertheless, the team gathered data on it so that it can possibly add the gathered information to the results under PA3. The sources of data are the beneficiaries’ FTRs which, in turn, used different methods to calculate the achieved results, such as: the audience of the TV channels or the number of likes on Facebook. In consideration of these problems and the fact that this indicator is not included in the programme, at this stage, it is not recommended to aggregate the data under PA1 and PA3 for the indicator of visits. In case it is used for the next programming period (e.g. at the level of a scheme), particular guidelines should be prepared and presented to the beneficiaries for the indicator.

Indicator: Satisfaction of visitors with the attractions and the information services (%)

Table 18: Indicator “Satisfaction of visitors with the attractions and the information services” (%)

¹⁷ For indicator „Number of visitors of innovative cultural events“

Scheme	Reported values	Survey
3.1.01	20%	
3.1.02	89%	
3.1.03	71%	
3.2.02	65%	
3.3.01	60%	
Average	61%	97,4%

According to the 2007-2013 OPRD satisfaction of visitors with the attractions and the information services should mean the results of the survey which show that 80% of the respondents declare very high or very low satisfaction.

The satisfaction of visitors with the attractions and the information services is an indicator with respect to which the beneficiaries provided data in the FTRs. They were required to provide

additional data because, as part of this evaluation, there was a survey which will show the value achieved for the indicator on the basis of a single methodology¹⁸. It is recommended to take into account the results reported in this evaluation when reporting the indicator.

The survey on satisfaction of visitors covers all the projects completed under the following 3 schemes:

- Scheme BG161PO001/3.1-01/2008 “Support for cultural monuments of national and international importance contributing to the sustainable development of tourism”
- Scheme BG161PO001/3.1-02/2009 “Support for the development of tourist attractions”
- Scheme BG161PO001/3.1-03/2010 “Support for the development of natural, cultural and historic attractions”

The survey was launched in July 2014 and the collection of information continued throughout the month of August. The initial information was collected by using the **method of a standard interview**. The method was preferred to other alternative methods (such as a questionnaire) because 1) of the pronounced highly cognitive potential of the method and the real opportunities for gathering the whole range of information needed to evaluate the effect of the intervention on the tourist sites; 2) the opportunity to exercise full control of the process of collection of empirical data.

The survey was conducted with a **representative sample of the type of stratified two-step nest sample** and at the first step the sites to monitor (tourist sites) are selected while at the second step a certain number of people are interviewed at the each site.

Thus, a sample of **40¹⁹ sites** is formed. Given the functional purpose of the tourist sites and the estimated tourist turnover there, a **sample of n=2030 people** was set for all the sites under consideration. Depending on the location of the site, its type (monument of culture, tourist attraction, natural, cultural or historic attraction) and the assumed interest in this site, each site was attributed a particular number of potential respondents. Their number varies between 10 and 80 units.

The results of the survey show that 66, 9% of the visitors have entirely positive impression of the visited site; the impressions of nearly one-third of the visitors (30, 5%) are positive rather than

¹⁸ An analytical report containing the results of poll is submitted to the Contracting Authority.

¹⁹ The sample provided in the Inception Report contains 41 sites but, eventually, it has been found that there construction works in, at least one of them, the St. George Church at the village of Arbanasy, and, therefore, no opinion poll can be conducted. This leads to a slight decrease in the sample from 2100 to 2020 people which has no impact on the representativeness of the poll.

negative. This means that **97, 4% visitors are satisfied with the attractions and the information services**. Of course, the opinion of the respondents varies in terms of the individual sites and these variations are presented in a separate analytical report submitted to the Contracting Authority.

It should also be born in mind that the indicator used in practice has two different components: satisfaction of visitors with the attractions and satisfaction of visitors with the information services. The second component – the information services was also part of the survey and was further divided into the following categories:

- Quality of the information materials - 78,9% approval (48,2% entirely positive and 30,7 positive rather than negative)
- Information received at the site – 84,5% approval (60,2% entirely positive and 24,3% positive rather than negative)
- Guide services – 94,7% approval (72,7% entirely positive and 22% positive rather than negative)

The average evaluation of the satisfaction with the information services is 86,03%. It is also very high but it is lower than the satisfaction with the attractions themselves, viz. there is room for improvement mostly in terms of the information materials.

Indicator: Level of public awareness in terms of the OPRD (%)

Table 19: Indicator “Level of public awareness in terms of the OPRD” (%)

Indicator	Survey
Very well aware	3,8%
Relatively well aware	23,6%
Not well aware	50,4%
Aware in total	77,8%
Well aware in total	27,4%

Information on the indicator “Level of public awareness of the OPRD” was collected in general by means of the *Survey* which was an element of the evaluation of the Communication Plan of 2007-2013 OPRD. A survey²⁰ is conducted in the period July-August 2014 and the following instrumental and awareness tasks were solved:

- Preliminary and trustworthy empirical information was collected from the adult population of Bulgaria (aged 18+) and on this basis scientifically founded general findings can be made on the level of awareness of the Bulgarian public of the OPRD;
- The relative weight and role of the main information channels was established in terms of the information to the Bulgarian public on the OPRD;
- Opinions on the ease of recognition of the OPRD’s site were collected;
- The awareness of the Bulgarian society of the OPRD was measured;

²⁰ Analytical report containing the results of the poll is submitted to the Contracting Authority.

- Assessments on the access of the public to the information on the OPRD as well as on the adequateness of the communication style used to inform the public of the objectives, tasks, missions and the main interventions under the OPRD;
- Specific assessments on completed OPRD projects were collected and, thus, the real awareness of the Bulgarian society is assessed as to the interventions made in terms of the regions and towns and cities. The practical benefits of the particular OPRD project were identified at local level.

The methodology of the survey's sample is developed in line with the objectives, tasks and the scope of the poll. For the selection of the units of measurement, out of the competed sample models, the model of the three-step stratified nest sample with a volume of $n=1500$ units was selected. The sample is representative for the population of over 18 years of age in the country:

- At the first step, by random choice (a random start and step), 51 towns and cities were selected from the list of towns and cities in the country (excluding the towns and cities of less than 100 inhabitants);
- At the second step, 135 nests were selected and the number of the nests is proportionate to the population aged over 18 years in the respective town or city. The nests are streets or blocks of residential complexes (for certain block entrances are also identified);
- In each nest, by Leslie Kish's model, 11 or 12 respondents were selected in its four variations – depending on the instructions given and this is the third step of the sample.

According to the formula for the nest sample the standard error²¹ of the evaluation is $\pm 1,0 \%$. This is among the lowest possible error margins and considerably increases the forecast capacity of the empirical data gathered in the poll.

The same number of interviewees in the individual economic regions enables the direct comparison of the distributions by answers (percentages) for every two or more regions.

It should be taken into consideration that there is extremely high interest on the part of the Bulgarian public in the operational programmes and the absorption of European funds. This is also confirmed by the results of the survey conducted with the Bulgarian public which shows a very high relative share of people who are familiar with the OPRD – they are 77, 8%. When reporting this indicator it should be kept in mind that the programme does not contain a definition of awareness. If, similarly to the indicator of satisfaction, only the answers of the people who are well and very well aware are reported, then the percentage of people who are aware would fall to 27,4%.

1.2. Collection of information which cannot be obtained from the UMIS concerning the values of the updated environmental monitoring and control indicators

²¹ Since the representative polls are based on probability approach, it is a mandatory procedure for determining the volume of the sample to calculate the value of the standard error or sampling error. The value of the error is taken into account in interpreting the empirical data received from the poll.

In line with the Terms of Reference, as part of the project, data on the following indicators in table 10 were collected in section 7.4 of the First Three-year report on monitoring and control in the application of the programme, including the measures to prevent, reduce or eliminate the environmental damage as a result of the application of the programme.

Table 20: Indicators of environmental impact assessment

Priority axes	Indicators
Operation 1.4 Improving the physical environment and risk prevention	Excessive emission in the air (number of exceedances of the threshold value for 1 year)
	Exceedances of the limits of noise levels (number of cases)
Operation 1.5 Sustainable urban transport systems	Excessive emissions in the air (number of exceedances of the threshold value for 1 year)
	Emissions of greenhouse gases (t/year)
	Population subject to noise pressure in the range above the limit values (for the towns and villages with population of over 100 000 people (number of inhabitants)

The information on these indicators was provided by sending a request for access to public information pursuant to art.17 of the Environmental Protection Act in relation to art.26, para.1 of the Environmental Protection Act in relation to art. 24 of the Law on Access to Public Information. The data on the indicators were obtained by information provided by the REIW and RHI in terms of the regions of project implementation.

Indicator: Excessive emissions in the air (number of exceedances of the threshold value for 1 year)

Information on the indicator is provided by the RIEW. As to the part²² of the projects under Operation 1.4, this indicator is not relevant because the projects are not directly or indirectly linked to the improvement of air quality in the respective populated places which means that they need not be analysed in the following programme reports.

One of the difficulties with the collection of information on the indicator is that in quite a few of the populated places where projects under operation 1.4 are implemented there is monitoring of the air which makes it impossible to determine the impact of the implemented projects. Under operation 1.5 the analysis of the impact of the implemented projects on the air quality (the indicator “excessive emissions in the air”) in the respective populated places may be conducted once they are completed.

Indicator: Emissions of greenhouse gases (t/year)

²² Out of the 25 projects completed in the period 2011-2013 under Operation 1.4, for 4 of them the indicator is not relevant. The projects are specified in the Second Three-year report on the monitoring and control of the application of the 2007-2013 Operational Programme Regional Development, including the measures to prevent, reduce or eliminate the environmental damage as a result of the application of the programme for the period 2011-2013.

The indicator “Emission of greenhouse gases” is relevant to the ongoing projects under operation 1.5 “Sustainable urban transport systems”. The RIEWs at local level inform that they have no available data on the emission of greenhouse gases from transport for the respective populated places. On the other hand, the EAE informs that it has no available data on the emissions of greenhouse gases in terms of the individual regions of the country (regions, municipalities and/ or populated places) but only at national level. In practice this means that the effect of the project implementation under operation 1.5 may not be monitored on the basis of the actual data for the respective places where they are implemented. A possible impact evaluation on the basis of this indicator is possible on the basis of the data from pre-investment surveys and cost-benefit analyses of the project proposals, as well as the evaluation on the part of the beneficiaries as to the achievement level of these indicators. The data should be requested from the beneficiaries after the completion of the projects.

Indicator: Exceedance of the limit values of noise levels (number of cases)

For a great part of the projects under operation 1.4²³, this indicator is not relevant because the projects are not directly or indirectly linked to the improvement of the acoustic situation in the respective place which means that they need not be analysed in the following reports on the programme. In quite a few places where projects under operation 1.4 are implemented, there is monitoring of noise.

Indicator: Population subject to noise pressure in the range above the limit values (for places having a population of over 100 000 people (number of inhabitants))

The indicator “Number of people subject to noise pressure in the range over the limit values (number of inhabitants)” is relevant to the projects under Operation 1.5 which are in the process of implementation. Apart from this, monitoring the effect of the projects on the basis of this indicator is not feasible because the regional health inspections do not gather such information.

Apart from the above-mentioned indicators in accordance with Opinion under EA N. 4-3/2007 of the MEW and the recommendations of the First Three-year Report on the environmental impact assessment, questionnaires on the following 7 indicators were sent to the beneficiaries:

- Production of electricity from alternative and renewable sources (% of the total energy consumption);
- Renovated and renewed historic and cultural monuments located in the towns and cities;
- Built-up areas;
- Forest areas affected;
- Natural habitats affected;
- Areas with plants;
- Trainings and seminars related to the environment.

The questionnaires include the following elements – reported value of the indicator, the year of reporting, the source of information and if necessary – comment/ note. They are attached to the letters sent to 196 municipalities in total as well as to the letters to the specific beneficiaries under

²³ Out of the 25 projects completed in the period 2011-2013 under operation 1.4, for 10 of them, the indicators is not relevant. The projects are specified in the Second Three-year Report on the monitoring and control of the application of the 2007-2013 Operational Programme Regional Development, including the measures to prevent, reduce or eliminate the environmental damage as a result of the application of the programme for the period 2011-2013.

OPRD – 13 non-governmental organizations, 14 higher education institutions, Road Infrastructure Agency, Employment Agency and the Ministry of Culture.

As specified, during the reporting period, data were received from 156 beneficiaries whom were sent the respective requests for information. The data are described and used in the Second Three-year Report on the monitoring and control of the application of the programme, including the measures to prevent, reduce or eliminate the environmental damage as a result of the application of the programme. The report itself is approved by a letter of the minister of environment and waters of 12.01.2015²⁴.

A detailed analysis of the data received for all the above-mentioned indicators and their relation to the particular projects is provided in the Second Three-year Report on the monitoring and control of the application of 2007-2013 Operational Programme Regional Development, including the measures to prevent, reduce or eliminate the environmental damage as a result of the application of the programme for the period 2011-2013. The main findings and recommendations of the Second Three-year Report are provided in item 2.3 and chapter V of this report and they report the above-mentioned difficulties in gathering the information on the indicators.

1.3. Main output and results realized under Activity 1

Table 21. Main output and results realized under Activity 1

Output	Implementation
Analysis of the available data on the environmental indicators	✓
Survey on the satisfaction with the tourist attractions	✓
Survey on the public awareness of 2007-2013 OPRD	✓
Requests for data to the national, regional authorities/ organizations	✓
Output	Implementation
Collected and summarized information on the values of the updated environmental indicators of monitoring and control of table 10 in section 7.4 of the first three-year report on the monitoring and control of the implementation of the programme	✓
Collected and summarized information on the progress under the indicators of the result and impact of OPRD with respect to which the Annual Reports on the implementation of the OPRD explicitly state that further research is required to measure and report them	✓

2. Activity 2: Impact evaluation of the interventions under 2007-2013 OPRD

²⁴ The letter is to the Minister of Regional Development and Public Works – outgoing No.04-00-3730.

2.1. Analysis of the traditional and the new impact evaluation methods recommended by the EC and proposals on the most objective impact measurement methods

The main old (for the period 2007-2013) and new (for the period 2014-2020) documents containing requirements to the methods of the socio-economic development evaluation are specified in the table below, updated at the inception stage.

Table 22. Main sources of requirements to the evaluations

Main documents containing requirements to the evaluations for the period 2007-2013	Main documents containing requirements to the evaluations for the period 2014-2020
EVALSED 2008	EVALSED: The resource for the evaluation of Socio-Economic Development, September 2013
EVALSED Sourcebook: Methods and Techniques, 2008	EVALSED Sourcebook: Methods and Techniques, September 2013
Regulations for the period 2007-2013	Regulations for the period 2014-2020
Working documents of the EC (2, 5, 7)	Working document on the evaluation for the next programming period “Monitoring and Evaluation of the EC Cohesion Policy – ERDF and CF. Concepts and ideas”

The team of evaluators conducted a desk study of the above-mentioned documents, reviewed the methods and techniques of impact evaluation as well as the opportunities, advantages and disadvantages of using them for this order.

In view of the particular attention paid to the impact evaluations, as part of this activity, there was also a review of guidelines which had not been developed by the EC. The examples of such generally accepted guidelines are: “Impact Evaluations and Development NoNIE Guidance on Impact Evaluation, NONIE” (Organization of Economic Cooperation and Development)²⁵ and “Handbook on Impact Evaluation. Quantitative Methods and Practices” (the World Bank)²⁶.

The team of evaluators’ proposals were discussed with the Contracting Authority at a meeting at which the most suitable evaluation techniques applicable to this evaluation were selected.

The team of evaluators also considered a number of documents containing requirements, examples or good practices in terms of the methods of evaluation of the socio-economic development. In the work process and with a view of selecting the most suitable methods and techniques which have proven over time to be the most efficient ones, the following documents were added to the initial set of sources: *Evaluation methods for the European Union’s external assistance, DG External Relations* и *Broadening the range of designs and methods for impact evaluations. Report of a study commissioned by the Department for International Development, Department for International Development, London, 2012.*

²⁵ Frans Leeuw and Jos Vaessen (2009). Impact Evaluations and Development NoNIE Guidance on Impact Evaluation, NONIE. Washington.

²⁶ Shahidur R. Khandker et. al. (2010). Handbook on Impact Evaluation. Quantitative Methods and Practices. The World Bank. Washington

In the scientific literature, there are two approaches of impact evaluation: the so-called *theory-based impact evaluations* and *counterfactual impact evaluations*. The first one is aimed at answering the questions why and how a particular programme/ intervention achieves (or does not achieve) particular results. Such methods are aimed at finding the relationship of cause and effect between the output resources, the activities, the results and the impact of the investments. The main goal is to explain why a particular change happened and how a particular intervention caused this change to happen. These methods study mainly the fundamentals of the cause and effect relationships.

The second group of methods and techniques are aimed at answering questions such as - if particular interventions produce an effect and what it is. With this type of methods the results after the intervention are studied and compared to the ones that would have been produced if the intervention had not taken place. These methods are aimed at determining to what extent the change is caused by the effects of the intervention.

For the purposes of this evaluation we have studied, analysed and systematized a set of methods applied in the measurement of the impact focusing mainly on the ones which, we believe, would be most applicable to it. The methods and techniques (incl. their advantages, disadvantages and their applicability) used for this evaluation are systematized below.

The analysis of the impact should also take into account the evolution of the concept in the time between the two programming periods. As per the intervention logic for the period 2007-2013, specified below, “impact” is intended to mean a long-term result from the intervention of a particular programme.

Figure 1: Logic of the intervention of the EC for the period 2007-2013 and relation with the objectives of the programmes, EC, 2006

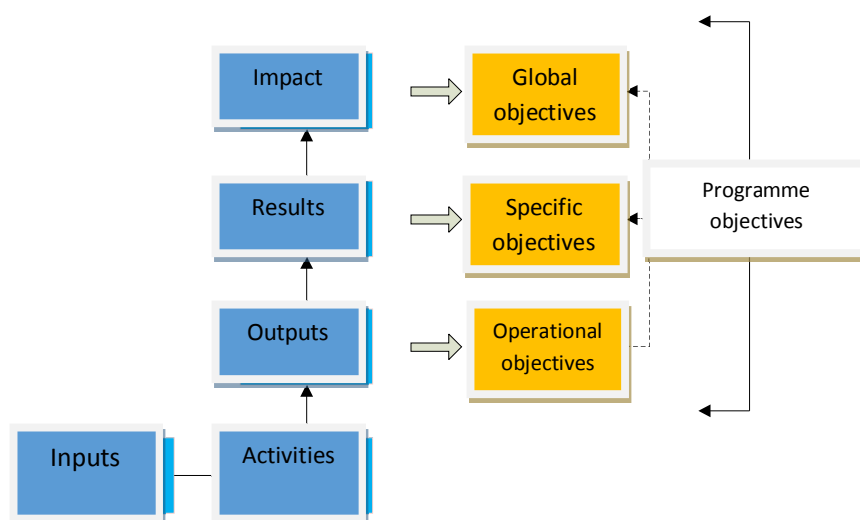


Diagramme: ECORYS; Source: EC, 2006b. Indicative Guidelines on Evaluation Methods: Monitoring and Evaluation Indicators. Working Document 2. DG REGIO, August 2006.

The intervention logic for the period 2007-2013 contains the standard elements of the logical models of input, activities, output and results. As shown on the diagramme, the impact follows the results and should be in line with the general objective of the programme. At the end of the programming period, the EC revised this model as the concept of “impact” was considered to be unclear and difficult to measure using indicators.²⁷

As a result of the criticisms to the intervention model for the period 2007-2013, the EC developed a new model shown in the diagramme below.

Figure 2: EC’s intervention logic for the period 2014-2020, adapted by the EC

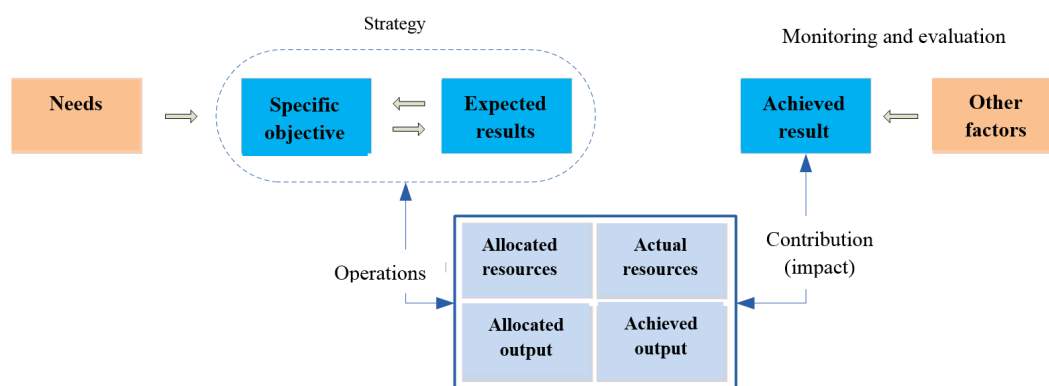


Diagramme: ECORYS; Source: EC, 2014. Guidance Document on Monitoring and Evaluation – ERDF and Cohesion fund. Concepts and recommendations. DG REGIO, January 2014.

It is no surprise that the major change to the model concerns the concept of impact. It is no longer considered as “global/ long-term result”, instead, the impact is intended to be the change that can be credibly attributed to the intervention of a particular programme.²⁸ “Effect of an intervention” or “contribution of an intervention” are alternative expressions for this idea.” The new logical model also takes into account, to a greater extent, the influence of other factors on the achievement of the results.

Theory-based evaluation

With this type of evaluation it is mostly the traditional research methods - both qualitative and quantitative - that are applied. Within the first group, the most frequently used ones include review of documents, interviews, focus groups, and others. Within the second group – descriptive statistics, samples of statistic research or other variations of the method which attribute value to costs and benefits.

Name	Collection and review of specialized literature and documents (desk study)
Advantages	The review of literature, documents and/ or analyses has a number of advantages over the other types of research (e.g. field research, interviews). They are an efficient method of collecting information, do not require serious resources in

²⁷ Gaffey, Veronica, 2012. A Fresh Look at the Intervention Logic of Structural Funds. Paper presented at the European Evaluation Society Conference in Helsinki, 4th October 2012

²⁸ EC, 2014. Guidance Document on Monitoring and Evaluation – ERDF and Cohesion fund. Concepts and recommendations. DG REGIO, January 2014.

	terms of staff and may be conducted in a short time. In this case there are no doubts as to the truthfulness of the information as the sources are evident.
Limitations	The major limitation of this technique is the fact that it is difficult to be used as the only technique to get in-depth and complete information. There are better results if it is applied in combination with other methods of information collection and analysis.
Applicability	The method was applied as an additional instrument to collect information for the evaluation of the socio-economic impact, the impact on the territory and on the administrative capacity. The collection of summarized information from official sources, documentation of the operations and schemes, application guidelines, protocols of evaluation committees, technical reports, etc. was also be used to find an answer to all the research questions related to the environmental impact assessment. Appendix 2 contains a list of the main documentary sources used.

Name	<i>Logical Models: Intervention logic analysis / Theory of change²⁹</i>
Advantages	The development of logical model widely used in the context of the World Bank and EU financed by development programmes is an evaluation-theory focused on programme input, output, results and impacts. As indicated in EVALSED, the theory of change is aimed at "opening the black box" and at understanding why the programme interventions (expected to) work. The logical models study the links between the individual elements of the theory of change ³⁰ , whose main result is the identification of the link between the activities and the achieved results.
Limitations	The major limitation of the method is the fact that this is a qualitative method which cannot and is not aimed at measuring the impact itself. Therefore, it is recommended for it to be used together with quantitative methods as the counter-factual techniques described below.
Applicability	The method will be applicable to presenting the overall logic of the programme and following its individual elements: inputs, activities, outputs, results and impact (in the sense of the intervention logic of the programming period 2007-2013).

Name	<i>Opinion polls (interviews and questionnaires) with the stakeholders</i>
Advantages	The in-depth interviews can be used to find all the aspects of the activities, the logic, the expected results and the impact of a particular programme. This type of research is suitable to find information on the views of the beneficiaries or the decision-makers. The method is used in social sciences as a tool for research of the reasons and arguments of the participants. The individual interview is also suitable as a tool for discussion of issues which would have been addressed different in group environment. Last but not least, the interviews with the key figures of a particular group could swiftly illustrate the needs or the issues of this target group. On the other hand, according to EVALSED, the questionnaires are the best technique to gather facts and opinions from the beneficiaries. They could

²⁹ Further information on the logical model is available in: McLaughlin, J. and Gretchen Jordan 1999. Logic Models: A Tool for Telling Your Program's Performance Story. Evaluation and Program Planning, Volume 22, Number 1, February 1999 и McCawley, Paul F. 2002. The Logic Model for Programming, Planning and Evaluation. University of Idaho Extension, 2002.

³⁰ Frans Leeuw and Jos Vaessen (2009). Impact Evaluations and Development NoNIE Guidance on Impact Evaluation, NONIE. Washington.

	<p>be most efficient when there is an updated list of (potential) beneficiaries with their contacts. All these techniques will be applied in this evaluation.</p> <p>This method has the advantages of being fast and easy to apply. They are also important tools to understand and analyse the stakeholders' perceptions of the programme.</p>
Limitations	<p>There are potential problems with the application of these methods and they concern the "representativeness" of the respondents – the sample used for the opinion polls and the interviewees – in the case of an interview.</p>
Applicability	<p>The consultant conducted interviews to find an answer to the research question related to the utility and sustainability of the programme interventions as well as to analyse the impact of the interventions under the PA "Technical Assistance" of the programme. When finding an answer to the questions related to the PA "Technical Assistance" and reducing the administrative burden to the beneficiaries, an online questionnaire was used.</p> <p>The platform we intend to use for the questionnaire is CheckMarket (www.checkmarket.com). Appendix 1 contains the answers to the online questionnaire.</p>

Name	<i>Focus Group</i>
Advantages	<p>The focus group reveals the decision-making processes and reasons which are relevant to a wide range of users who can be assumed to have the same attributes (criteria) as the ones of the participants in the research. In this sense, the focus group is a results-oriented, quick quality survey.</p> <p>This type of discussion group is a useful instrument to provide in-depth information on the opinions of the selected participants. As the opinions are further developed in the discussion process, this method is less influenced by the researcher (unlike the interview, for instance). Moreover, as the research topic is examined by participants having different reasons and interests, it is possible to study the object of the analysis from different perspectives, thus, making it possible to gather much more and well-grounded opinions in favour and against. In particular, with ex-post evaluations, the focus groups are valuable tools to interpret the results of the analysed programme and to formulate new guidelines and priorities.</p>
Limitations	<p>Along with the advantages, it should also be noted that some participants in the focus groups (e.g. the programme beneficiaries) sometimes tend to be partial in their evaluations because their position is conditional on the programmes or policies which are subject of the discussion. That is why the participants in the focus groups should be carefully selected.</p>
Applicability	<p>Although the method is applicable to responding to a wide range of research questions within this assessment, in order to achieve greater flexibility and comprehensiveness, in the final phase of the evaluation, a large number of interviews with the MA and representatives of beneficiaries were conducted.</p>

Name	<i>Case study</i>
Advantages	<p>This method is suitable to examine and study in detail processes or complex projects which would be difficult to study otherwise.</p>
Limitations	<p>This technique is not so suitable to analyse the cause-effect relationships and to evaluate the impact of projects of different nature, given the challenge of</p>

	generalizing the research results to refer to all the other projects. It would be time-consuming and resource-consuming to conduct more studies.
Applicability	In view of the diversity of projects under the programme, the consultant does not consider that analysing one or several case studies will be representative for the entire programme and that is why such studies were not undertaken as part of the evaluation.

Name	<i>Follow-up analysis Costs-Benefits</i>
Advantages	The method is suitable for ex-post evaluations as it enables to measure the economic importance of a particular intervention evaluating also its non-financial effects.
Limitations	Sometimes the costs or benefits may be easy to identify but difficult to monetize them.
Applicability	With the diversity of operations and schemes, varying from the marketing of tourism to the landslide reinforcement, it is difficult to include in the analysis of the programme all the indicators and to monetize all the costs and especially the benefits since a great part of them are not tangible and have different weight for the different beneficiaries and end users. The method can be useful when comparing the benefits from project in different operations or schemes under the programme and not when analysing the entire programme.

Name	<i>Techniques of descriptive statistics</i>
Advantages	The objective of these techniques is to make a more wide-ranging thorough and in-depth analysis. Easy to use and easy to interpret, the techniques of descriptive statistics are often applied a tool in field of humanities. They are suitable to illustrate the trends and diverse divisions. The techniques enable us to make simplified summaries of observations or the object of study. Such summaries may be demonstrated by quantitative representation or by visual ones (e.g. easy-to-understand diagrammes). The main instruments used are diagramme representation, histogram, cumulative representation, pie-chart, etc.
Limitations	The limitations with the use of the descriptive statistics as an analysis tool mainly concern the reliability and quality of the data which are the subject of the analysis.
Applicability	Such techniques, for the purposes of the OPRD evaluation, may be applied in the analysis of the efficiency and effectiveness of the programme as well as in the analysis of the territorial division and the territorial concentration of the interventions. In view of the availability of databases of all the projects with the locations of implementation of the investments, the Consultant proposes that the territorial division should be analysed by calculating the medium, the medians, the standard deviation and variation ratio against the average levels of the different levels of territorial units (district, region, and municipality). In addition, we propose that the analysis should be further strengthened by visualizing the territorial differences by means of cluster groups in the form of maps of the territorial division (by means of the application Google Fusion Tables). The initial application of this method in included in Appendix 1 to this report.

Name	<i>Method of cost calculation per unit output</i>
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Advantages	Following the definitions of the Guidelines on evaluation of the socio-economic development – EVALSED, the efficiency is evaluated by comparing the actual outputs and the inputs. ³¹ In other words, in the context of the 2007-2013 OPRD, the analysis of the efficiency constitutes an applicable method of comparing the effect of the interventions to the costs incurred for them ³² . When this method is applied, relatively simple statistical calculations are applied.
Limitations	Given the specifics of the interventions, there are serious limitations in terms of the possible comparison of their efficiency. It is often observed that there are difficulties in grouping the data in terms of interventions. The extreme values should be eliminated.
Applicability	The analysis is applicable mainly at the level of outputs and its qualitative application depends mostly on the updated data, the similarity of the projects, the sufficient observations and opportunities to group the data. The method is applied in this evaluation to evaluate the efficiency.

The scope of instruments for the theory-based evaluation may include the application of the Delfi method, a multi-criteria analysis as well as a set of other methods and techniques but, as they have limited possibilities of application in the ex-post evaluations, they will not be considered in this section.

The scientific literature also describes a number of theoretical approaches (e.g. Realistic Evaluation, Strategic Evaluation Approach, etc.) for the conduction itself of the impact evaluation which focus on one or another elements of the whole programme – the stakeholders, the context environment, the programming, the implementation, etc. and which use the above-mentioned methods and techniques in different forms and at different stages of the evaluation.

Counter-factual impact evaluation

This type of evaluation is aimed at understanding what part of the output obtained after the end of an intervention results from this intervention. To this end, there can be comparisons of the beneficiaries “before” and “after” receiving funding under the programme as well as of beneficiaries which have received support and the ones which have not. The most applicable ones include:

Name	<i>Difference-in-differences</i>
Advantages	The difference-in-differences method is a relatively easy-to-apply technique. There is a selection of a control group which should have characteristics similar to the ones of the group which received financial support (first difference). Then the data for the two groups are compared before and after the intervention (second difference). The “pure” effect of the intervention is calculated as the difference in the differences between the two groups. The method yields more plausible evaluation results than the ones calculated by means of comparisons between the groups alone or between two periods alone.
Limitations	Despite the possible wide application of the method, it is highly dependent on the availability of comparable data for the objects of the study and their quality. It is

³¹ EVALSED: The resource for the evaluation of Socio-Economic Development, September 2013

³² Palenberg, M., 2001, „Tools and Methods for Evaluating the Efficiency of Development Interventions“, *Evaluation Working Papers*, Bonn: Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, available at: http://www.bmz.de/en/what_we_do/approaches/evaluation/Evaluation/methods/index.html .

	also highly probable that the subjective factors in the selection of the two comparable groups could greatly influence the final results.
Applicability	The technique can be used in studying the existence of differences between the territorial units which have been given support under the programme and the ones which have not signed such contracts. The method is applicable if there are identical data for the beneficiaries which have been given support under the programme and the ones which have not, both in the beginning of the programme and after its end. The applied method is described in item 2.2.2 of this evaluation.

Name	<i>Propensity score matching</i>
Advantages	This method is also suitable to use if it is possible to observe two groups having similar characteristics – the beneficiaries and the non-beneficiaries (a control group). The effect of the intervention is calculated as the difference in the outcome of the comparison of the average values for the variable studied with the two groups observed. To select the participant having similar characteristics in both groups and to avoid significant differences between the groups, it is recommended to use scoring of the characteristics to be used for the selection.
Limitations	The method is highly dependent on the availability of comparable data for the objects of study and their quality. Subjective factors in the selection of the two comparable groups could greatly influence the final results. The method is mathematically much more complex than the “difference in differences” one.
Applicability	The method is applicable mostly with a very large number of similar units, such as small and medium-sized enterprises. The applicability to the beneficiaries, such as municipalities, is very limited.

Name	<i>Discontinuity design</i>
Advantages	The method is relatively easy to apply in the cases when there is a threshold for participation in a particular programme, viz. scores which the project proposal should be given. With this model there is comparison between a group of units just above the threshold with another group of units just below the threshold. In this sense, the selection process of the two groups is relatively objective. ³³ The impact of the programme may be determined by the differences in the results from the two groups under consideration.
Restrictions	The method is dependent on the availability of data for the development of the applicants for the grants which have not been approved under the particular schemes. The similarities between the ones with relatively equal scores are conditional.
Relevance	As part of this evaluation a working design for the application of this method was found mostly because of the large scope of the programme in terms of the territory, the types of interventions and the lack of applicable indicators to be used for this type of analysis.

Again, as with the theory-based evaluations, the proposed methods and techniques are not exhaustive – the ones selected are the ones that would potentially be more applicable and would

³³ Frans Leeuw and Jos Vaessen (2009). Impact Evaluations and Development NoNIE Guidance on Impact Evaluation, NONIE. Washington.

yield the most objective results in terms of interventions which are similar to the ones funded under 2007-2013 OPRD. Another method in this category is the Instrumental Variables method which is based on the idea that the participation and the result of the participation in a particular programme are determined by the existence of an external factor. However, this method has a limited applicability to this evaluation.

Other Methods

The category of quantitative impact evaluation techniques may also include various sector model, various econometric models, input-output models, randomized control studies and others. An example in this respect is the SIBILA model and results from the model were requested from the Ministry of Finance and they are analysed in item 2.2.2 of this evaluation. The model contains four basic sectors: actual, fictitious, financial and external. It also includes several basic blocks whose model features:

- Formation of human capital
- Basic infrastructure
- Technologies (particular aspects of public awareness and knowledge among the members of the public).

The model contains 170 equations part of which are evaluated econometrically (26), others are calibrated on the bases of existing economic knowledge or on the basis of stable historical proportions and still others are macroeconomically equated. It works with 202 variables and 170 of them are endogenic (the model provides solutions to them) and the remaining 32 are exogenic (they are externally set for the model and are not a product of its solution). Further information on the model is available in the final project report³⁴.

2.2. Socio-economic impact evaluation, territorial impact evaluation, administrative capacity impact evaluation

2.2.1. Socio-economic impact evaluation

? What is the difference between the expected (target) and achieved particular (actual) results and the impact of the OPRD impact? What is the **effectiveness** (relation between the objectives and the achieved results) of the OPRD interventions?

Systems of indicators are usually used to evaluate efficiency because they contain the information on the output and results (and on the impact in the 2007-2013 programming period). The analysis focuses on the output and impact indicators because, albeit with a certain analytical potential, the

³⁴ Final Report – “Development of an econometric model of the impact evaluation of the Structural and Cohesion Fund of the European Union.” It is prepared by the consortium “ECORYS –SPM-NEWT” for the Administration of the Council of Ministers under project No. 0018-ЦНО-3.2. “Development of a model for impact evaluation of the SCF” funded under Technical Assistance Operational Programme, September 2011.

output indicators do not enable the evaluation of the overall socio-economic impact of the programme. The indicators of the Priority Axis Technical Assistance are not subject to analysis because they cannot be used to establish the socio-economic impact either. The values of the indicators in the tables in this section are based on the results of the evaluation as well as on a review of the final technical reports (see Appendix 1, Table 4).

Priority Axis 1: Sustainable and integrated urban development

Priority Axis 1 is the biggest priority axis of the programme, respectively the largest number of indicators have been envisaged for measuring achievement of the priority axis objectives. The table below shows the achievement levels of the indicator values set under the axis:

Table 23: Progress under the indicators of PA1

Type	Indicator	Unit of measurement	Quantitative impact										
			Baseline value (2005/6)	2007	2008	2009	Interim value (2009)	2010	2011	2012	2013	2014	Target value (2015)
Impact	Reduction of greenhouse gas emissions (CO2 and equivalent)	kt	inapplicable				21					38,087 ³⁵	56
Result	Energy savings from refurbished buildings	MWh / year	inapplicable				44 400		17 789	38 103	98 305	124 925 ³⁶	245 000
	Students benefiting from improved educational infrastructure	No.	inapplicable				6 300	8 827	33 786	57 488	216 495	240 071 ³⁷	20 000
	Patients benefiting from improved health infrastructure	Number	inapplicable				200 000				32 884	85 913 ³⁸	600 000
	Population benefiting from renovated buildings (except for the educational and health institutions)	Number	inapplicable			18 165	100 000	18 165	565 346	2740355	4 818 418	4 818 418	230 000
	Children benefiting from the process of de-institutionalization	Number	inapplicable				inapplicable				36	962	800

³⁵ Source: this evaluation

³⁶ Source: this evaluation

³⁷ Source: FTRs considered as part of this evaluation. The amount is the sum of the values achieved until 2013 with the projects completed under scheme 1.1.02 (4205) and 1.1.09 (19371). This sum does not include the number of university students (6254) under scheme 1.1.07, as they are reported by another indicator, namely - "Persons benefiting from modernized university infrastructure." If this value is added to the above sum, the total value is 246 325.

³⁸ Source: FTRs considered as part of this evaluation. The amount is the sum of the values achieved until 2013 with the projects completed under scheme 1.1.11 (53 029).

	Use of public transport	Num ber	inapplic able				<i>inapplic able</i>					³⁹	90 000
Output	Projects improving the physical environment, the attractiveness of towns and cities	Num ber	0				40		1	20	40	41 ⁴⁰	130
	Risk prevention projects	Num ber	0				40	2	6	19	61	66 ⁴¹	70
	Renovated multi-family buildings and social homes	Num ber	0				NA					⁴²	20
	Improved health infrastructure	Num ber	0				0				1	10 ⁴³	32
	Improved infrastructure	Num ber	0				20	29	101	214	463	542 ⁴⁴	45
	Improved infrastructure in the area of culture	Num ber	0			2	35	2	20	66	69	70 ⁴⁵	90
	Improved infrastructure in the area of social services	Num ber	0				30		8	75	80	80	70

³⁹ The projects on systems of sustainable urban transport are underway

⁴⁰ Under 1.4.02, 18 projects on improving the urban environment are completed and under scheme 1.4.05 – 23 projects.

⁴¹ According to data from UMIS: 14 projects completed under scheme 1.4.03 “Support for the construction and enhancement of small-scale infrastructure to prevent landslides in urban agglomerations”, 11 projects completed under scheme 1.4.04 “Support for small-scale infrastructure to prevent landslide in urban agglomerations” and 41 projects completed under scheme 1.4.06 “Support for small-scale measures to prevent floods in urban agglomerations.”

⁴² Reporting envisaged at the end of the programme.

⁴³ In accordance with the processed FTR under the projects finalized in 2014 under the scheme „Support for the reconstruction/ renovation and equipment of municipal healthcare institutions in urban agglomerations“ the value of indicator 8 “Improved healthcare infrastructure” is achieved.

⁴⁴ In accordance with the processed FTR under the projects finalized in 2014 the value of the indicator is renewed as follows: 463 + 3 (scheme 1.1.02) + 76 (scheme 1.1.09). This sum does not include the number of buildings of projects under 1.1.07 scheme for universities (13 buildings). If this value is added to the above sum, the total value will be 555.

⁴⁵ In accordance with the approved FTR under the projects finalized in 2014 the value of the indicator is renewed as follows: 69 + 1 (scheme 1.1.05).

	Social homes/ centres constructed/ reconstructed as a result of the de-institutionalization of children	Number	0				0				5	108 ⁴⁶	10
	Prepared/ implemented urban development projects	Number	0				7				31	36 ⁴⁷	36

Source: Annual reports on the implementation of OPRD, information from the MA, own calculations

⁴⁶ Under the scheme “Support for the de-institutionalization of social institutions providing service to children at risk” under the projects finalized in 2014, the FTR contain information on 85 “Constructed, equipped and furnished family-like Accommodation Centers” and 18 built/ repaired/ reconstructed/ furnished/ equipped sheltered housing. The sum of these values is added to the value achieved by 2013 and the total value becomes 108.

⁴⁷ Source: UMIS

As shown in the table, as of the end of 2014, the target value of the indicator “**Reduction of greenhouse gas emission (CO₂ and equivalent)**” was not achieved. Nevertheless, in terms of efficiency, the difficulties in reporting the indicator should be taken into account – they are described as part of Activity 1. First and foremost, it should be taken into account that there is information on all the completed projects which leads to decreasing the reported value. An important factor is the fact that there are projects in implementation which will also contribute to the value of the indicator: projects under schemes 1.1.02, 1.1.03, 1.1.04, 1.1.05, 1.1.08, 1.1.09, 1.1.11, 1.1.12, 1.2.01, 1.2.02 and 1.5.03. If all the achieved values of the completed projects are reported once the projects in implementation are completed, it may be expected that the target value will be achieved.

There is a similar situation with the indicator “**Energy savings from refurbished buildings**” as well as with the reduction of greenhouse gas emissions because the indicators are linked under most schemes. Although the target value of the indicator has not been achieved, it may be achieved once all the projects are completed and reported. In order to report both indicators, the beneficiaries need to provide information after conducting energy audits as well as an in-depth review of the values of the indicators which will be reported in the forthcoming FTRs of the projects which are currently underway. If there is no information from the energy audits or in the FTRs, it is recommended to request such information from the beneficiaries once more, which can also be received during on-the-spot checks for sustainability.

The final target value of the indicator "Energy savings from refurbished buildings" is 119,000 MWh but in the version of the programme of October 2010, it is increased to 189 000 (MWh/year), despite the fact that by 2010 there are no reported values on the indicator. The target value was increased once again in the version of OPRD of March 2012, reaching 245 000 (MWh/year). Although changes were made in the indicator value, the target value of the related indicator “Reduction of greenhouse gas emission (CO₂ and equivalent)” remains unchanged. In view of the above, two recommendations can be made:

- Not to increase the target values of the indicators prior to reported values, because no real assessment of the achieved results can be made. Moreover, during the reporting of the first results of a scheme, methodological difficulties could be identified, which could affect a possible increase of the target value.
- If a change is made in the value of the indicator "Energy savings from refurbished buildings", changes should also be made in the value of the related indicator "Reduction of greenhouse gas emission (CO₂ and equivalent)".

The target value of the indicator “**Students benefiting from improved educational infrastructure**” has already been achieved tenfold. The main reason for the exceedance of the target value is the conservative target of 20 000 students. In practice it may be achieved by investments in less than 20 schools while much more schools were funded under the programme⁴⁸. It should be noted that in the originally approved version of OPRD of 2007, the target value is even more conservative – 10 000 students, and it was subsequently increased to 20 000 in the version of the programme as of March 2012. The change is not bound by already achieved results under OPRD, because as early as 2011, the achieved value is 33 786 students,

⁴⁸ For example, 49 projects are concluded under scheme 1.1.09 and they are aimed at improving the education infrastructure by energy efficiency measures.

i.e. the target value was already surpassed. In this case, there was not made a good connection between the monitoring data and the setting of the objectives.

In the academic year 2014/2015, the number of students in all kinds of general schools is 604,5 thousand and has decreased annually since 2000 (except for a small increase in the academic year 2013/2014)⁴⁹. On one hand, statistics show very a very low target of the programme (about 3% of all students in the country), but on the other hand, the wide range of interventions in school infrastructure, which have covered about 40%⁵⁰ of all pupils in general schools, is visible. Based on these data, it can be concluded that the main reason for the difference between the set and the achieved value of the indicator "Students benefiting from improved educational infrastructure" is due to unrealistic planning of the target value, both in the version of the programme of September 2007 and in the altered version of March 2012.

The target values of the indicator **"Patients benefiting from improved health infrastructure"** have been achieved. Having in mind that the value (85 913) achieved as of 2014 is not even close to the interim value (200 000), it can hardly be expected that the target value of 600 000 can be achieved. Nevertheless, under scheme "Support for the reconstruction/ renovation and equipment of municipal healthcare institutions in urban agglomerations", there are still 11 projects (out of a total of 21) in implementation so the achieved value is expected to increase by the end of 2015. Under scheme 1.1.08 "Support for the reconstruction, renovation and equipment of state healthcare and health institutions in urban agglomerations", there are no completed projects yet (out of a total of 17).

It should be noted that there are methodological difficulties in reporting this indicator too. Part of the beneficiaries reported the values of the indicator according to the formula for the application (viz. the capacity of the hospital or the number of patients of the previous year were reported), while other beneficiaries reported the number of patients after the interventions under OPRD and, respectively, entire calendar years were not covered. The measurement unit of the indicator is not suitable because it is not clear whether it marks the cumulative number of patients served throughout the programming period or the number of patients served annually. It should be noted that Regulation 1301/2013 includes the indicator "Number of people using improved health services." The use of such an indicator, however, is also problematic because it is not clear whether it covers the total number of people or the number of people annually. The translation of the indicator in Regulation 1301/2013 is not appropriate, too. In English the indicator is named "Population covered by improved health services" and in the guidelines for monitoring and evaluation of the European Commission it is stated that by this definition it is meant the following: "the population of a particular area, which is expected to benefit from the health services, supported by the project"⁵¹. In the translation of the indicator in Bulgarian, it is meant "population actually using health services", while the indicator essentially means "people who could potentially benefit from the improved health services".

Another methodological difficulty is the lack of a specific definition for the term "patient". It is therefore difficult to assess how realistic is the set target value.

⁴⁹ NSI – students classified by grades and by sex in the general schools.

⁵⁰ The percentage is calculated with the formula: $40\% = 240\,071 / 604\,481 * 100$

⁵¹ European Commission, 2014. Guidance Document on Monitoring and Evaluation – ERDF and Cohesion fund. Concepts and recommendations. DG REGIO, January 2014.

In conclusion, except described methodological difficulties in goal setting and reporting of indicators, among the reasons for non-achieving the value at the end of 2014 can also be added the relatively late announcement of procedures for health infrastructure (e.g. compared to the procedures for education infrastructure). Procedures for hospitals were announced in 2010 and 2011⁵², i.e. there was not even a theoretical possibility for achieving the intermediate value as of 2009. Accordingly, this leads to a still large number of unfinished projects for the improvement of health infrastructure, and a lack of time to respond to expected non-achievement of the target value of the relevant indicator.

The value of the indicator **“Population benefiting from the renovated buildings (except for the educational and healthcare institutions)”** is exceeded many times. Apart from the achievements of the interventions under OPRD, another reason for the high reported value is the broad interpretation which may be given to the definition of the indicator. It is unclear whether it means the entire population of a municipality which is a beneficiary, the population of a particular populated place or just the population, which is directly benefited from renovated buildings.

In the case of using a similar indicator for the next programming period, it should be clearly defined what is meant by benefiting population. In particular, the following issues should be clarified:

- Is it meant people who have used a service/ infrastructure, or people who are expected to benefit from it? If by the indicator are meant real direct users, it should be considered that immediately upon completion of the project, such information will not be available (for example because there will be less than a year after the renovation of the building).
- What is the scope of the area, which is expected to have benefited population (e.g. town, a certain area of the town, km)

As mentioned above, due to projects for sustainable urban transport that are still in implementation as of December 2014, there is no available data for the indicator **“Use of urban public transport”**.

The target value of the indicator **“Children benefiting from the process of de-institutionalization”** is already surpassed but it is close to the target value.

The target value of the output indicator **“Projects improving the physical environment, attractiveness of the towns and cities”** (130) has not been achieved yet. The target value in the OPRD version of September 2007 is even higher (200) but it decreased in the OPRD version of March 2012. Although 36 projects are being implemented under scheme 1.4.09, in view of the value of 41 achieved as of the end of 2014, the target value of the indicator is not expected to be achieved⁵³. It should be pointed out that during the implementation of the programme measures are taken so that the target value is reached, as indicated in the Annual Report for 2012, the Monitoring Committee approves the decommitted financial resources in current schemes in the

⁵² Procedure BG161PO001 / 1.1-08 "Support for reconstruction, renovation and equipment of state medical and health facilities in urban agglomerations" and BG161PO001 / 1.1-11 / 2011 "Support for reconstruction / renovation and equipment of municipal hospitals in urban agglomerations"

⁵³ According to information from the Contracting Authority, under scheme 1.4-09, additional approved sites may be financed in 2015 as part of the concluded grant contracts. About 25 municipalities have additional approved sites. If they are considered as new (separate) projects, it might be close to achieving the target value.

amount of € 17 316 443 to be redirected to the scheme BG161PO001/1.4-09/2012 "Green and accessible urban environment" within the scope of Operation 1.4 "Improving the physical environment and risk prevention". The number of contracts that relate to the indicator is 77 from a total of 539⁵⁴ contracts under PA1, i.e. 14% of the contracts in the priority axis and 20% of the total value of contracts under the axis⁵⁵. In light of these data, the target value of 130 projects, improving the physical environment, is too high because they would constitute about 24% of the contracts. Also, 130 projects would require about 34% of the financial resources under the axis, since the average value of a project for improving the urban environment is 4 679 722, 62 BGN⁵⁶. In this connection, it is recommended that further analysis is done by the MA, as well as further decrease of the target value of the indicator, in the event of a new programme change in 2015.

The programme has almost achieved the target value of the indicator "**Projects related to risk prevention.**" If successfully completed, the projects under scheme 1.4.01 "Support to limit and prevent the risks and damages in case of fires in urban agglomeration areas" and the two ongoing projects under scheme 1.4.06, then as of the end of 2015, the value of 69 project may be achieved and this is only one project less compared to the projected 70 projects.

The indicator "**Renovated multi-family buildings and social homes**" will be reported after the completion of the programme. The renovation of multi-family buildings is provided under projects BG161PO001/1.2-01/2011/001-4 "Energy renovation of Bulgarian homes" which includes the indicator "Renovated multi-family residential buildings/ block sections" but there are no official data on the number of renovated buildings. The projects under scheme 1.2.02 "Support to ensure modern social homes for vulnerable minority groups and socially disadvantaged people and other groups of disadvantaged people" as of December 2014 are still being implemented.

The target value of the indicator "**Improved healthcare infrastructure**" (32) has not been achieved yet. Nevertheless, given the projects in implementation (under the scheme "Support for the reconstruction, renovation and equipment of state hospital and healthcare institutions in urban agglomerations"- 17 projects and under scheme "Support for the reconstruction/ renovation and equipment of municipal health institutions in urban agglomerations"-11 projects), it may be said that the target value will be achieved⁵⁷. The target value decreased by 3 in the OPRD version of March 2012, compared to the version of September 2007 but in practice even the initial value of 35 is likely to be reached.

As may be expected from the review of the achieved values of the result indicator in terms of educational infrastructure, the related output indicator "**Improved educational infrastructure**" has been achieved and exceeded manifoldly the target value. The main reason for this is the low target value, with view to the numerous interventions in the educational infrastructure under PA1 of OPRD. Despite the above-described increase in the target value of the related result indicator ("Students benefiting from improved educational infrastructure") the target value of the output indicator has not increased.

⁵⁴ Source: UMIS and information from the MA, see Table: Status of the contracts of OPRD 2007-2013

⁵⁵ According to data from UMIS as of May 2015, the total value of concluded contracts for improving the urban environment is 360 338 642 BGN and the total amount of contracted funds under the axis is 1 788 322 321 BGN.

⁵⁶ According to data from UMIS as of May 2015: The average value equals 360 338 642 BGN / 77 projects. 130 projects would require 608 363 941, 04 BGN (4 679 722, 62*130), which is 34% of the total 1 788 322 321 BGN funds contracted under the axis.

⁵⁷ The forecast is based on the achieved value (10), to which the results of another 17+11 projects will be added, i.e. the lowest expected value is 38.

The target value of the indicator “**Improved infrastructure in the field of culture**” (90) has not been achieved as of the end of 2014. 4 projects under scheme 1.1.05 have not been completed yet; however, the target value can hardly be achieved, given the value of 70 projects achieved so far. The main reason for this is that there are fewer contracted funds than expected. Under scheme BG161PO001/1.1-05/2008 "Support for provision of adequate and effective state cultural infrastructure contributing to the development of sustainable urban areas" there was a budget of 50 million BGN and the contracted amount is close to the one expected – 46 million BGN. Under scheme BG161PO001/1.1-01/2007 "Support for provision of adequate and cost-effective educational, social and cultural infrastructure contributing to the development of sustainable urban areas", however, out of the expected amount of funds for cultural infrastructure (53 436 700 BGN), only 36 581 641 BGN⁵⁸ are contracted. For comparison, under the same scheme, less funds are planned for social infrastructure (43 845 498 BGN) but the contracted amount is bigger (41 175 162 BGN)⁵⁹. The reason for the lower than expected commitment of funds is the relatively low interest of the beneficiaries towards the scheme, which can be illustrated by the number of submitted proposals as of 31.12.2008 – 125 for educational infrastructure, 94 for social infrastructure and 56 for cultural infrastructure⁶⁰.

The target values of the indicators “**Improved infrastructure in the field of social care services**,” “**Social homes/ centres constructed/ reconstructed as a result of the de-institutionalization of children**” and “**Developed/ implemented integrated urban development plans**” have already been achieved and as to the indicators in the area of social services, the objectives are exceeded.

There is a more significant difference between the target and achieved value on the indicator "Social housing/ centers constructed/ reconstructed as a result of the process of deinstitutionalization of children", due to the low target value (10), while only the number of projects under the scheme "Support for deinstitutionalization of social institutions providing services to children at risk" is 62⁶¹.

In view of the foregoing, it may be concluded that, in general, PA1 has achieved efficiency in terms of the projected and achieved values of the indicators because the target values of most indicators have been achieved or are expected to be achieved by the end of 2015. This applies, to the greatest extent, to the indicators in the field of education whose target values are exceeded manifoldly. There is lower efficiency in the field of healthcare (the result indicator) and the cultural infrastructure and in terms of the output indicator “Projects improving the physical environment, the attractiveness of the towns and cities.”

Another general conclusion, which may be drawn in terms of the indicators of PA1 is the fact that there is delay in achieving the interim target value of all the indicators.

Priority Axis 2: Regional and local accessibility

The level of physical implementation of PA2 is shown in the table below. There are much less indicators under it than under PA1 which is the result of the more limited scope of the interventions.

⁵⁸ Information from MA, as of 20.04.2015

⁵⁹ Information from MA, as of 20.04.2015

⁶⁰ Source: Annual Report for the Implementation of OPRD 2007-2013 for 2008

⁶¹ See Table: Status of the contracts of OPRD 2007-2013



Table 24: Progress in terms of the indicators under PA2

Type	Indicator	Unit of measurement	Quantitative impact										Target value (2015)
			Baseline value (2005/6)	2007	2008	2009	Interim value (2009)	2010	2011	2012	2013	2014	
Impact	Reduction of greenhouse gas emissions (CO2 and equivalent)	kt	inapplicable				4						39
Result	Value of saved time in EUR/year as a result of the reconstruction of passenger and freight roads	Euro/year	inapplicable				46 000					50 128 888 ⁶²	208 000
	Additional population covered by broad-band access	Number	inapplicable				260 000					-	725 000
	Increased traffic of passenger and freight on the rehabilitated roads (baseline 2006)	%	inapplicable				10					21 ⁶³	27
Output	Constructed ICT network	km	inapplicable				150					-	500
	km reconstructed roads	km	inapplicable			12.2	500	128.2	161.2	501.4	713.8	1024 ⁶⁴	1316
	Number of projects (road, ICT)	Number	inapplicable			2	30	15	20	39	54	73 ⁶⁵	70

Source: Annual reports on the implementation of OPRD, information from the MA, own calculations

⁶² Source: this evaluation, based on the FTR under schemes 2.1.01 and 2.1.02.

⁶³ Source: this evaluation, based on the FTR under schemes 2.1.01 and 2.1.02.

⁶⁴ In accordance with the approved FTR under the projects finalized in 2014, the value of the indicator is renewed as follows: 713,8 + 310,6 (scheme 2.1.01).

⁶⁵ According to data from the UMIS, the total number of the projects completed under schemes 2.1.01 (44 projects), 2.1.02 (29 projects) and 2.2.01 (0 projects) is 73 projects.



As already mentioned when describing the results of Activity 1 of this evaluation, the indicator **“Reduction of greenhouse gas emission (CO₂ and equivalent)”** is not relevant for PA2 and it is recommended not to report it under this priority axis.

The methodological difficulties in reporting the indicator **“Value of saved time in EUR/year as a result of the reconstruction of passenger and freight roads”** were also specified in Activity 1. The value of the indicator achieved as of 2014 exceeds manifoldly the target objective. According to information from RIA, the main reason for this big difference between the two values is the different methodologies used to determine the target and the achieved values. In case the indicator is used in the next programming period, which is recommended by RIA, one and the same methodology should be used for calculating the target value and reporting it.

As to the indicator **“Increased traffic of passengers and freight on the rehabilitated roads”** there are also methodological difficulties which are described in Activity 1. The data received from FTR and RIA show a value which is below the target one. This is the result of the values reported under scheme 2.1.01 while the values under 2.1.02 exceed the target value by 1 percentage point. It results from the values reported under scheme 2.1.01 while the values under scheme 2.1.02 exceed the target value by 1 percentage point. As with the indicator **“Value of saved time in EUR/year as a result of the reconstruction of passenger and freight roads”**, the values achieved currently may not be considered to be entirely reliable. Apart from the lack of clear methodology for the beneficiaries, another reason for the incomplete information is the fact that the value of the saved time needs to be measured at least a year after reporting it. That is why, it is recommended that the indicators **“Value of saved time in EUR/year as a result of the reconstruction of passenger and freight roads”** and **“Increased traffic of passenger and freight on the rehabilitated roads”** should be further reviewed and the achieved values should be reported after the completion of the programme as specified in the text of the OPRD.

The indicator **“Additional population covered by broadband access”** cannot be reported yet because the project **“Development of broadband access in Bulgaria through the construction of critical, protective, safe and reliable public ICT infrastructure”** is still underway. In this regard, currently, the output indicator **“Constructed ICT network”** cannot be reported either. According to information from the EA ECNIS **“by this project it is expected to construct a next generation optical access infrastructure in 29 municipal centres and 24 small populated places with a total length of about 860 km”**, viz. the projected objective of 500 km should be exceeded.

As of the end of 2014 the target value of the indicator **“km reconstructed roads”** has not been achieved. Under schemes 2.1.01 and 2.1.02, there are 12 ongoing projects which are expected to increase the achieved value of the indicator but, given the current progress, it may be expected that it will be difficult to achieve the target value. To a certain extent, the reason for this is the ambitious objective of 1316 km⁶⁶ which is about 7% of the republican road network in Bulgaria (with the exception of the motorways)⁶⁷. Another reason is the beneficiaries' problems in reporting the results. As to three of the reviewed FTRs of the project⁶⁸, finalized in 2014, it has been found that the values declared for this indicator are 0 or inapplicable. Accordingly, it is recommended that the beneficiaries should be required to provide further information.

⁶⁶ The primary objective of OPRD (of September 2007) is 1300 km but it is increased by 16 km in the OPRD version of September 2013 because of the inclusion of the Northern high-speed ring road project.

⁶⁷ Source: NSI, Republican road network according to road class as of 31.12.2013 – total 19 073 km.

⁶⁸ Projects with numbers BG161PO001/2.1-01/2007/001/015, BG161PO001/2.1-01/2007/001/034 and BG161PO001/2.1-01/2007/001/031



The target value of the indicator “Number of projects (road, ICT)” has already been achieved. It will be further exceeded because there are 13 projects in total which are being implemented under PA2.

Based on the foregoing, there can be no conclusive findings on the efficiency of PA2 because the information on the results of the reconstruction of the road network is incomplete and the intervention in the ICT network is not completed. As with PA1, there is serious delay in achieving the interim values which are projected in the programme.

Priority Axis 3: Sustainable development of tourism

The values of the projected indicators achieved so far and the interim and target values under PA3 are shown in the table below.

Table 25: Progress in terms of the indicators under PA3

Type	Indicator	Unit of measurement	Quantitative impact									
			Baseline value (2005/6)	2008	2009	Interim value (2009)	2010	2011	2012	2013	2014	Target value (2015)
Impact	Net revenues from international tourism	million EUR	914	1307,2	1422,5	1050	1815,9	1893,7	1900,8	1908,1 ⁶⁹		1475
	Bed occupancy	%	35%	30%	25%	39%	26%	32%	36%	37%	35% ⁷⁰	45%
Result	Additional annual number of visitors of attractions supported	Number	0			20,000					893 471 ⁷¹	500,000
	Satisfaction of visitors with the attractions and the information services	%	0			70%					97,4% ⁷²	80%
	Annual number of participants (organizations, companies) in international, national and regional tourism fairs and exhibitions	Number	900			1000						1050
Output	Total number of projects on the development of tourism	Number	0			36			8	23	66 ⁷³	70
	Number of developed tourist attractions/ sites	Number	0			25			6	37	97 ⁷⁴	95
	Number of supported national marketing and advertising programmes and projects on the development of output and marketing of destinations	Number	0			11			2	2	16	30

⁶⁹ Source: This evaluation, based on data from the BNB

⁷⁰ Source: This evaluation, based on data from the NSI

⁷¹ Source: This evaluation, based on data from the FTR

⁷² Source: This evaluation, based on the opinion poll

⁷³ In accordance with UMIS, 66 projects are completed under PA3

⁷⁴ The value of the indicator is renewed as follows: 37 + 6 (scheme 3.1.02) + 54 (scheme 3.1.03).

National working network of tourist information centres

% 0

⁷⁵ 70 % TIC incl.
in a network

Source: UMIS, Annual reports on the implementation of OPRD, own calculations

⁷⁵ Project “Creation of a network of tourist information centers (TIC) functioning on the basis of unified standards” is still being implemented.

As shown in the table, the target value of the indicator **“Net annual revenues from international tourism”** was achieved as early as 2010. In terms of efficiency measured as the difference between the projected and the achieved values of the indicators, this is a very good result. However, it should be considered that until 2010 there are no completed projects under PA3 of the OPRD – i.e. the achievement of the intermediate value is not due to OPRD. The question is further discussed in this report in the response to the question “Which are the other identified external factors which could have (positive or negative) impact on the achieved results and the impact of the OPRD interventions? What is the influence of these other external factors on the results and the impact of the OPRD interventions?”.

The target value of the indicator **“Bed occupancy”** was not achieved as of December 2013. It should be considered that the crisis had impact on this indicator – making the baseline value too high. Item 2.2.1 below contains an analysis of the programme’s contribution to the first two indicators together with an analysis of the externalities which have impact on the programme.

Data on the indicator **“Additional annual number of visitors of attractions supported”** shows the exceedance of the target value. The achieved value is expected to be even higher as of the end of 2015 after the completion of all the 27 ongoing projects under schemes 3.1.01-3.1.04. The value would increase even more if the recommendation specified in Activity 1 of this evaluation is fulfilled – it concerns the request of further information on the indicator from the beneficiaries in the cases when it is not provided in the FTR.

As to the indicator **“Satisfaction of visitors with the attractions and the information services”**, this evaluation has found that this indicator has a very high achieved value which exceeds the target value.

Currently, no information is provided on the indicator **“Annual number of participants (organizations, companies) in international, national and regional tourism fairs and exhibitions”**⁷⁶ and respectively the efficiency on this indicator cannot be analysed.

The target value of the indicator **“Total number of projects on the development of tourism”** has not been achieved yet; however, having in mind that 58 projects under PA3 have not been completed yet, it is not expected that it would be difficult to achieve it. The initial target value of the indicator was 147 (OPRD version of September 2007) but it was reduced to 70 in the version of the programme from March 2012. In view of the progress of the programme as of December 2014, the initial value really would not have been reached.

The target value of the indicator **“Number of developed tourist attractions/ sites”** is already reached and surpassed with 2 attractions/ sites. With view to the projects that are still in implementation, the value will increase even more.

The case with indicator **“Number of supported national marketing and advertising programmes and projects on the development of output and marketing of destinations”** is identical. The target value is expected to be achieved after the completion of 31 projects under schemes 3.2-02, 3.2-03 and 3.3-01. The initial target value of the indicator is 52 (OPRD version of September 2007) but it was reduced to 34 in the version of the programme of March 2012, and then to 30 in the version of the programme of September 2013. Given the progress of the

⁷⁶ The target value is decreased from 1500 (OPRD version of 2007) to 1050 (OPRD version of March 2012)

programme as of December 2014, it can not be expected that the initial value would have been reached.

The indicator “**National working network of TIC**” cannot be reported yet because the project on the creation of a National Network of Tourist Information Centres (TIC)⁷⁷ is still being implemented.

In view of the achieved values of the indicators under PA3 it may be concluded that it is characterized by a high level of efficiency. Although the values of the output indicators have not been achieved yet, in view of the large number of projects in implementation, no problems are expected in order to achieve them. Except for the indicators of bed occupancy and the annual number of participants in tourism fairs and exhibition, the target values of the result and impact indicators are also achieved. As with the other priority axes, there is delay in achieving the interim values of the indicators

Priority Axis 4: Local development and cooperation

The table below shows the achievement level of the indicator values projected under PA4. However, it should be taken into account that two out of the four indicators (“Completed projects for small-scale investments” and “Inter-regional cooperation projects”), albeit classified as result indicators, measure essentially the immediate achievements of the interventions, viz. they are output indicators.

⁷⁷ Project “Creation of a network of tourist information centers (TIC) functioning on the basis of a unified standards”, project No. BG161PO001-3.3.01-0009-C0001

Table 26: Progress in terms of the indicators under PA4

Type	Indicator	Unit of measurement	Quantitative impact										
			Baseline value (2005/6)	2007	2008	2009	Interim value (2009)	2010	2011	2012	2013	2014	Target value (2015)
Output	Innovative practices, exchanged and applied on the basis of inter-regional cooperation	Number	0				30	57	122	152	158	158	80
	Population benefiting from the small-scale investments	Number	0			54277	75 000	402 812	502 205	685 585	1 334 438	1 647 767 ⁷⁸	216 000
	Completed projects for small-scale investments	Number	0			4	60	51	84	118	192	244	250
	Inter-regional cooperation projects	Number	8				15	17	61	76	79	79	40

Source: UMIS, Annual report on the implementation of OPRD, own calculations

⁷⁸ According to the processed FTR of the projects finalized in 2014, the value of the indicator was renewed as follows: 1 334 438 + 182 143 (scheme 4.1.03) + 131 186 (scheme 4.1.04)

The target value of the indicator “**Innovative practices exchanged and applied on the basis of inter-regional cooperation**” was achieved as early as 2011 which was indicative of the high efficiency. Certainly, in this case, it should be taken into account that the scope of the indicator is open to wide interpretation.

With the indicator “**Population benefiting from small-scale investments**” the target value of the indicator is exceeded many times, although the original target value of the indicator is 166 000 (OPRD version of September 2007) and is increased in the version of the programme of March 2012 to 216 000 people. In addition to the many interventions under PA4, which relevant to this indicator, the excess is due to the unclear scope of the indicator. For example, it is unclear whether it is meant the entire population of a municipality-beneficiary, the population of a particular town/ village or just the population that actually benefited from small-scale investments. In this regard, it is noteworthy that for similar investments beneficiaries have reported very different values of the indicator. For example, under scheme 4.1.05, as a result of investments in the Svilengrad Municipality Hospital the reported benefiting population is 600 people, while municipality Tutrakan reports a population of 129 986 people. With such reporting of the achieved values, the target value of 216 000 people is too low. In the case of using a similar indicator for the next programming period, it should be clearly defined what is meant by “benefiting population”. In particular, the following should be clarified:

- By this indicator, is it meant “people who have used a service/ infrastructure (e.g. patients) or people who are expected to benefit from it? If it is meant real direct users, it should be noted that immediately upon completion of the project, such information will not be available (for example, because there will be less than a year after the installation of new medical equipment).
- What is the scope of the area, which is expected to have benefited population (e.g. city/ town, area of the city, km)?
- What is meant by small-scale investments (e.g. investment in health and education infrastructure)?

The achieved value of the indicator “**Completed projects for small-scale investments**” is very close to the target value, and the target value of the indicator “**Inter-regional cooperation projects**” has been achieved.

With view to the achievement of the set indicators, it can be concluded that PA4 shows high efficiency, although there is a delay compared to the projected interim values.

? What is the **efficiency** (relation between the input resources and the output results) of the interventions under OPRD?

Following the definitions of the Guidelines on evaluation of the socio-economic development – EVALSED, the efficiency is evaluated by comparing the actual outputs and the inputs.⁷⁹ For the purposes of this evaluation, the analysis of the efficiency includes three activities: review of the input resources, calculation of the output/ result unit costs and data envelopment analysis.

⁷⁹ EVALSED: The resource for the evaluation of Socio-Economic Development, September 2013

The **financial progress** is measured by using the following parameters included in the table below: allocated budget, agreed funds and paid funds.

Table 27. General financial progress⁸⁰

Priority Axis	Projected funds			Agreed funds		Paid funds	
	Total	Financed by the EU	National financing	Total	% of implementation	Total	% of implementation
1. Sustainable and integrated urban development	1 837 979 979	1 562 282 982	275 696 997	1 808 989 611	98%	1 377 428 898	75%
2. Regional and local accessibility	702 022 129	596 718 810	105 303 319	858 982 602	122%	583 228 563	83%
3. Sustainable development of tourism	295 642 130	251 295 811	44 346 320	281 486 763	95%	200 472 121	69%
4. Local development and cooperation	190 379 501	161 822 576	28 556 925	186 177 699	98%	172 253 717	95%
5. Technical assistance	105 797 473	89 927 852	15 869 621	102 273 530	97%	60 329 890	56%
Total	3 131 821 212	2 662 048 030	469 773 182	3 237 910 205	103%	2 410 408 045	77%

Source: Data from the MA of OPRD

In terms of the agreed funds, the financial progress may be considered to be good because the agreed funds exceed by 3% the funds envisaged under the programme. The implementation of 2007-2013 OPRD is almost equal to the funds paid under SCF, in percentage terms, as of the end of December 2014 for Bulgaria - it is 76.48% - and in terms of this indicator there is little variation in the implementation among the individual programmes. There is more considerable delay only with OPT and more considerable progress with HOPRD.⁸¹ Based on this data it may be concluded that the financial progress is good in terms of the allocated funds and in comparative terms (compared to the other OP).

A more detailed breakdown of the funds under 2007-2013 OPRD shows that the most funds (agreed and actually paid) are invested in the schemes related to the rehabilitation and reconstruction of the second-class and third-class roads (2.1.01), in ensuring appropriate and profitable educational, social and cultural infrastructure contributing to the development of sustainable urban areas (1.1.01), integrated urban transport in the five large cities (1.5.03) and green and accessible urban environment (1.4.09). Almost 41% of the total budget of the OPRD projects has been agreed under these four schemes.

The average percentage of paid funds compared to the agreed funds under OPRD (as of the end of 2014) is 77% which is an argument in support of the negotiation under the programme. As shown in the table above, at programme level the agreed funds are 3% above the allocated budget. Interestingly, the level of paid funds is relatively low compared to the agreed funds under PA5 Technical assistance (56 %) which is the result, to a large extent, of the savings from the organization of public procurement for services.

⁸⁰ The funds are in BGN and the source of the information is UMIS, end of 2014.

⁸¹ Information from UMIS, information on the implementation of the projects as of 31 December 2014

The ratio of paid funds to agreed funds may not always be used as a measure of efficiency because of factors related to the quality of the preliminary budgeting, requirements in the procedure for public procurement providing for big importance attributed to the price offer, etc. That is why, for the purposes of the evaluation of the efficiency, secondly, an analysis of the costs per unit output has been prepared.

Analysis of the efficiency based on the output/ result unit costs (ORUC)

There is an analysis of the efficiency of the projects under 2007-2013 OPRD based on the **output/ result unit costs (ORUC)** using the data on the implementation of the OPRD projects and the actual payments under them and based on the publicly available part of the information in UMIS as well as on the data from the MA of the OPRD. To this end, the ORUC were calculated on the basis of the actual payments for the projects completed under OPRD⁸². These data were adjusted by eliminating the projects for which extreme values of ORUC were reported. Finally, for the sake of comparison with the ORUC used to calculate the target values of the indicator under 2014-2020 OPRG, the calculated ORUC were deflated by the MUV index of the World Bank⁸³ in order to take into account the future increase in the cost of the interventions planned under 2014-2020 OPRG.

The results by individual indicators are shown below; they are calculated after the elimination of the extreme values. The electronic tables containing the calculations are included in Appendix 1.

⁸² For the purposes of the evaluation of the effectiveness, use is made only of the information on the projects completed under 2007-2013 OPRD and, for them, the actual payments coincide with the current value of the projects' budget.

⁸³ Manufactures Unit Value Index (MUV) of the World Bank is a composite price index of the export of industrial goods of the 15 developed and developing economies measured in US dollars. These prices are calculated on the basis of the manufacturer's price index in the respective economies or, when no such prices are published, of the unit prices of the respective industrial goods for export. This index is selected as an approximation in terms of the evolution of the costs of OPRD interventions for two reasons: 1. The index is based on the manufacturer's prices in the industry and 2. Forecasts on the index until 2025, incl. that year, are published. For further information or data: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:20587651~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

Table 28. Costs per unit output/ result in terms of the indicators and schemes

	Unit of measurement	Scheme ORUC	Scheme ORUC	Scheme ORUC	Scheme ORUC	Scheme ORUC	Total
Educational infrastructure							
Energy savings from refurbished buildings	MWh/year	4.1.01 1 710					1 710
Students benefiting from the improved educational infrastructure	number	1.1.01 1 676	1.1.02 366	1.1.05 1 660	1.1.07 331	4.1.01 1 508	998
Improved educational infrastructure	number	1.1.01 567 985	1.1.02 513 542	1.1.05 689 925	1.1.07 688 198	4.1.01 341 904	510 099
Energy efficiency in the educational infrastructure							
Energy savings from refurbished buildings	MWh/year	4.1.03 673					673
Students benefiting from the improved educational infrastructure	Number	1.1.09 828	4.1.03 1 197				924
Improved educational infrastructure	Number	1.1.09 273 938	4.1.03 230 475				257 786
Social care infrastructure							
Improved infrastructure in the field of social services	Number	1.1.01 607 036					607 036
Population benefiting from refurbished buildings (except for the educational and healthcare institutions)	Number	1.1.01 142					142
Deinstitutionalization							
Energy savings from refurbished buildings	MWh/year	1.1.11 9 426					9 426
Children benefiting from the process of de-institutionalization	Number	1.1.11 40 609					40 609
Built/reconstructed homes/centres as a result of the de-institutionalization of children	Number	1.1.11 574 473					574 473
Cultural infrastructure							
Population benefiting from the renovated buildings (except for the educational and health institutions)	Number	1.1.01 34	1.1.05 2				4

Improved infrastructure in the area of culture	Number	1.1.01	513 432	1.1.05	1 156 259				636 325
Health infrastructure									
Patients benefiting from the improved health infrastructure	Number	1.1.12	471	4.1.05	1 100				607
Improved healthcare infrastructure	Number	1.1.12	2 244 999	4.1.05	4 016 422				2 486 557
Total number of people benefiting from the renovated buildings of healthcare institutions	Number	1.1.12	16	4.1.05	66				21
Road infrastructure									
Km reconstructed roads	km	2.1.01	462 109	2.1.02	355 090				431 877
Tourist infrastructure									
Net annual revenues from international tourism	BGN	3.1.02	19						0
Number of developed tourist attractions/ sites	Number	3.1.01	1 177 718	3.1.02	551 572	3.1.03	1 150 653		939 919
Bed occupancy	Percentage	3.1.01	3 196 195	3.1.02	2 964 620	3.1.03	97 986		147 185
Additional annual number of visitors of attractions supported	Number	3.1.01	80	3.1.03	25				27
Satisfaction of visitors with the attractions and the information services (%)	Percentage	3.1.02	2 440 670	3.1.03	44 851				55 895
Urban environment									
Population benefiting from improved urban environment	Number	1.4.02	54	1.4.05	52				53
Parks, green areas, children's playgrounds (sq.m.)	Sq.m.	1.4.02	61	1.4.05	49				55
Pedestrian lanes, bicycle lanes, pavements (sq.m.)	Sq.m.	1.4.02	224	1.4.05	193				208
Parking spaces	Number	1.4.02	35 603	1.4.05	29 590				32 628
Risk prevention									
Population benefiting from the measures to prevent the landslide	Number	1.4.03	15	1.4.04	93	4.1.02	113		30
Area of the landslide	Sq.m.	1.4.03	105	1.4.04	11	4.1.02	9		17



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Impact evaluation of the interventions under Operational Programme Regional Development 2007-2013 and their contribution to the implementation of the EU horizontal policies



Source: Data of the MA of 2007-2013 OPRD, own calculations

On the whole, the results give a realistic picture of the expected output/ result unit costs in terms of the individual indicators. The costs for the improvement of a single site of the healthcare and cultural infrastructure are higher compared to the ones related to the educational and social activities because of the more specific requirements to the healthcare infrastructure and the activities need for the restoration of cultural sites. These evaluated average costs per unit output/ result are compared to the analogical indicators used for determining the target values for the period 2014-2020 in the next section.

However, within the individual indicators, there is great variation in terms of the schemes because the scope of the interventions under the different schemes is not the same. This applies to a large extent to the energy savings from refurbished buildings, the improved infrastructure in the field of culture, the bed occupancy, the population benefiting from them and the area of the re-enforced landslides.

Data envelopment analysis⁸⁴

Evaluating the efficiency by calculating the output/ result unit costs allows to compare the inputs to a product or result of the implementation of projects. Since in most of the projects under the OPRD 2007-2013 more than one physical performance indicators are reported, ORUC give only a range of partial efficiency evaluations, which refer only to the efficiency in terms of the used product/ result. Thus, in theory, it could happen that one project is effective to varying degree, depending on which performance indicator is used.

In order to overcome this limitation in evaluating the efficiency OPRD the 2007-2013, we also applied the method of data envelopment analysis. This approach evaluates the relative efficiency of activities that generally have more than one type of costs, as well as numerous and often incompatible results. The data envelopment analysis maximizes the relationship between the weighted results and the weighted costs of each project, provided that: (1) the same weights apply to all other projects; (2) the ratios are not bigger than 1. The most effective projects are assessed with one and all other projects are compared against them.

Thus, for each project is evaluated a generalized efficiency, which in general is based on information for more than one input and more than one product or result. In this case, we have used only one input, the payments for the relevant projects and several indicators of performance. Data envelopment analysis is made only in the following areas of intervention, as we believe that the projects in these areas are relatively homogeneous and allow to be compared.

Table 29. Scope of the data envelopment analysis

Type of intervention	Selected indicators	Number of completed projects included in the analysis
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⁸⁴ For more information on the data envelopment analysis, see e.g. Charnes, A., W. Cooper, & E., Rhodes (1978) "Measuring the efficiency of decision-making units," *European Journal of Operational Research* vol. 2, pp. 429–444 or Seiford, L.M., & R.M. Thrall (1990) "Recent Developments in DEA: The Mathematical Programming Approach to Frontier Analysis," *Journal of Econometrics* vol. 46: pp. 7–38.

Education infrastructure (procedure 4.1.01)	<ul style="list-style-type: none"> ▫ Energy savings from refurbished buildings ▫ Students benefiting from improved educational infrastructure ▫ Improved educational infrastructure 	38
De-institutionalization (procedure 1.1.11)	<ul style="list-style-type: none"> ▫ Children benefiting from the process of de-institutionalization ▫ Built/reconstructed homes/centres as a result of the de-institutionalization of children 	20
Road infrastructure (процедури 2.1.01 и 2.1.02)	<ul style="list-style-type: none"> ▫ Km reconstructed roads 	72
Urban environment (procedure 1.4.05)	<ul style="list-style-type: none"> ▫ Population benefiting from the renovated urban environment ▫ Parks, green areas, children's playgrounds (sq.m.) ▫ Pedestrian lanes, bicycle lanes, pavements (sq.m) ▫ Parking spaces 	22
Energy efficiency in education infrastructure (procedure 4.1.03)	<ul style="list-style-type: none"> ▫ Energy savings from refurbished buildings ▫ Students benefiting from improved educational infrastructure ▫ Improved educational infrastructure 	39

Source: Data from the MA of OPRD 2007-2013, UMIS and own calculations

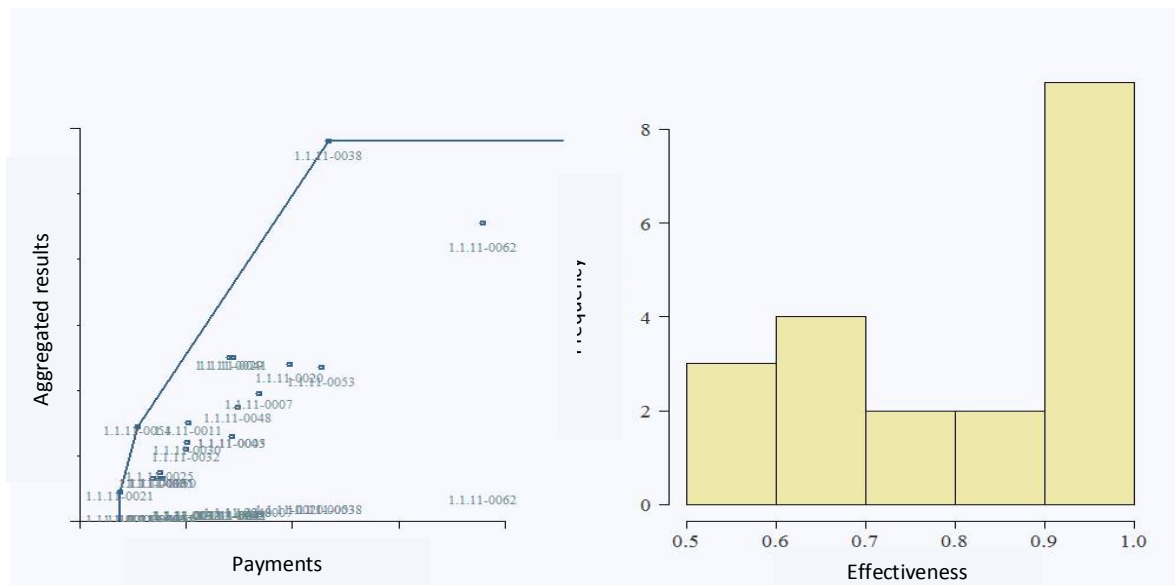
All projects, by types of interventions, for which a data envelopment analysis has been made, are presented in a table in Appendix 1 - Results from the data envelopment analysis. The following is only a brief summary of the efficiency by types of interventions.

In terms of **educational infrastructure**, there is a relatively high average efficiency (0.79), and the number of projects that have been assessed with maximum efficiency is 11 (out of 38). Between projects, there were no major differences – the coefficient of variation of efficiency is 0.23. There was no significant correlation between the budget and duration of projects.

Figure 3: Efficiency by projects and histogram of the efficiency of interventions for educational infrastructure

In the OPRD interventions for **de-institutionalization**, there is the highest average (0.81) and constant (with a coefficient of variation 0.22) efficiency.

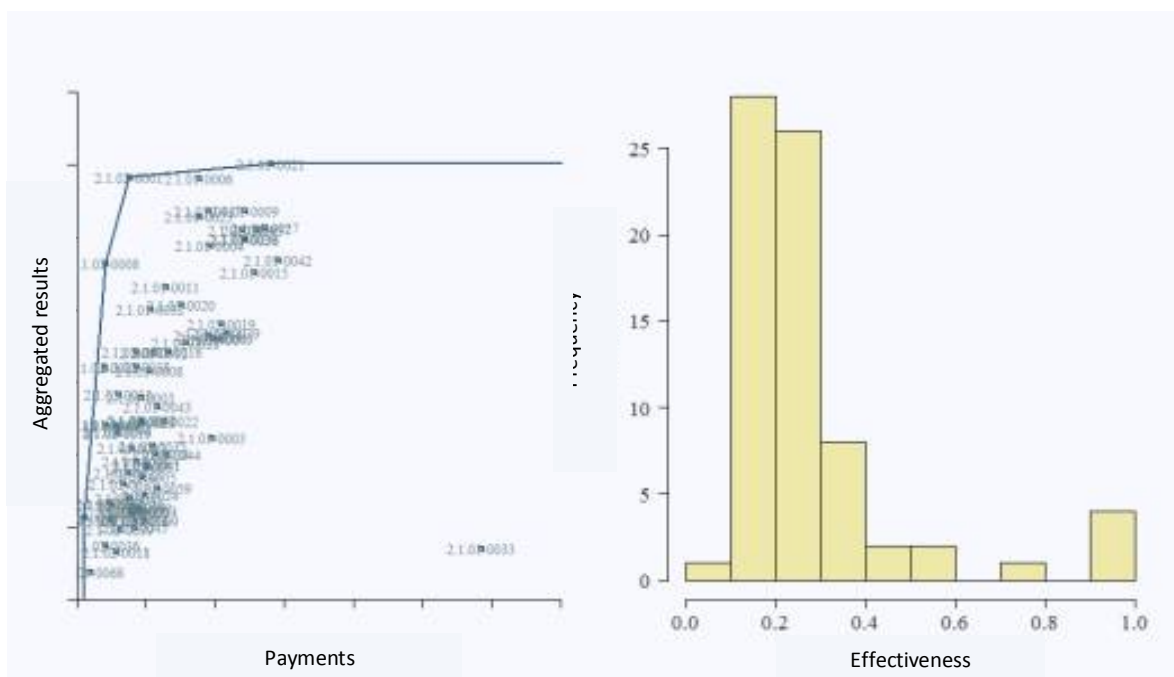
Figure 5: Efficiency by projects and histogram of the efficiency of interventions for de-institutionalization



Source: Data from the MA of OPRD 2007-2013, UMIS and own calculations

Another group of projects under the OPRD 2007-2013, which are comparable with each other, are those related to **road infrastructure**. However, it seems that in these type of interventions, there are big differences between reported results and resources used in different projects. At the same time, out of the 72 projects, only 4 are assessed as using optimal resources. For these reasons, the average effectiveness of road infrastructure projects is only 0.28 and the coefficient of variation is high (0.75).

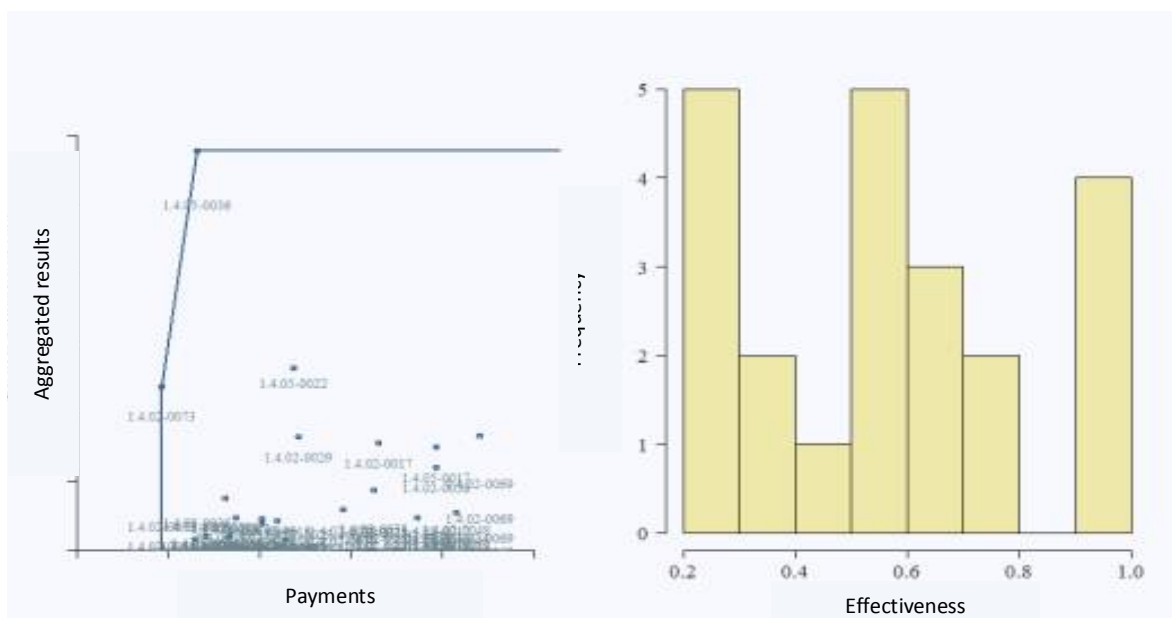
Figure 6: Efficiency by projects and histogram of the efficiency of interventions for road infrastructure



Source: Data from the MA of OPRD 2007-2013, UMIS and own calculations

Based on 22 completed projects for **improving the urban environment**, the analysis showed an average efficiency of 0.57, with relatively big differences between individual projects (coefficient of variation 0.45).

Figure 7: Efficiency by projects and histogram of the efficiency of interventions for improving the urban environment



Source: Data from the MA of OPRD 2007-2013, UMIS and own calculations

As seen from the chart above, in projects for improving the urban environment, there is definitely observed a strong and significant negative correlation between the size of the project, as measured by its budget, and the efficiency of the resources spent for it.

? What needs to change and what needs to be kept in the following programming period in order to achieve better effectiveness and efficiency in planning the interventions?

Based on the analysis and the review of the projected interventions in the next programming period, there can be some comparisons, conclusions and recommendations about what should change and what should be kept in order to achieve better efficiency in planning the interventions for the period 2014-2020.

To this end, there is a comparative table of the output/ result unit costs in terms of the different indicators for the purposes of the programming for the period 2014-2020 and for this evaluation.

Table 30: Comparison between the output/ result unit costs assessed in this evaluation and the ones used to calculate the target values for 2014-2020 OPRG (EUR)

ORUC based on the calculations of projects completed under 2007-2013 OPRD						ORUC used to determine the target values of the indicators under 2014-2020 OPRG		
Output/ results reported in projects under 2007-2013 OPRD	Unit of measurement	ORUC	ORUC adjusted by the variations in the price level	Coefficient of variation	Number of projects used for the calculation of the indicator	Output/ results projected in 2014-2020 OPRG	Value of ORUC	Difference, in percentage terms, with adjustment by the ORUC price level
Educational infrastructure								
Students benefiting from the improved educational infrastructure	Number	510	596	0.82	110	Capacity of the supported infrastructure for children's care or education	995	67%
Improved educational infrastructure	Number	260 809	304 973	0.63	116	Modernized educational institutions	297 300	-3%
Social care infrastructure								
Improved infrastructure in the field of social services	Number	310 373	362 929	0.78	17	Modernized sites for social services	467 834	29%
Population benefiting from the renovated buildings (except for the educational and healthcare institutions)	Number	72	85	0.98	17	Population concerned by the improved social care	94	12%
De-institutionalization								
Children benefiting from the process of de-institutionalization	Number	20 763	24 279	0.29	20	People in institutional social care [1]	56 100	131%
Homes/ centres constructed/ reconstructed as a result of the de-institutionalization of children	Number	293 723	343 460	0.19	44	Number of supported sites of the social care infrastructure in the process of de-institutionalization	331 924	-3%
Cultural infrastructure								
Improved infrastructure in the field of culture	Number	325 348	380 440	0.84	26	Number of supported sites of the sports and cultural infrastructure	607 948	60%
Road infrastructure								



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Operational Programme Regional Development 2007-2013 and
their contribution to the implementation of the horizontal policies of the EU



Km reconstructed roads	km	220 815	258 206	0.40	71	Total length of the reconstructed or modernized roads	262 984	2%
Tourist infrastructure								
Additional annual number of visitors of attractions supported	Number	14	16	1.17	19	Growth in the expected number of visits to the supported sites of the cultural or natural heritage and the tourist attractions	50	205%
Urban environment								
Population benefiting from the improved urban environment	Number	27	32	0.83	39	Population benefiting from the improved urban environment	28	-11%
Parks, green areas, children's playgrounds (sq.m.)	Sq.m.	28	33	1.35	38	Created and reconstructed opens spaces in urban regions	44	33%

Source: Data from the MA of the OPRD as of September 2014 and own calculations as of December 2014

Based on the comparisons, three reasons have been identified for the observed differences between ORUC calculated for the purposes of the current assessment and those used to calculate the target values of the indicators in OPRG 2014-2020:

1. For the calculation of ORUC for programming of 2014-2020, the budgets of the projects are used as a measure of the costs, while in the calculations presented in this chapter are used the sums actually paid. We recommend the use of the latter, because they measure more accurately the inputs for the achieved reported results and products.
2. In these calculations, the identified extreme values are excluded. Since these values differ significantly from the products and results in comparable projects and often lead to a significant increase of the ORUC, we recommend their exclusion.
3. For some indicators for the programming of the 2014-2020 programme, data were used only for the 39 cities under Priority Axis 1 (from 1st to 3rd level), while we have used all available data. Of course, the calculations for OPRG 2014-2020 should be consistent with the scope of the interventions financed under the relevant priority axis. We, however, have included all projects with reported values on relevant indicators, which are appropriate to the subject matter of this contract, which relates to the impact assessment of the OPRD in the previous programming period.

On the whole, the calculations of the output/ result unit costs show lower results than those used to determine the target values of the indicators under 2014-2020 OPRG, which is due both to the chosen measure of input resources and to the exclusion of some extremely high ORUC.

Both evaluations use as reference values the average values of ORUC. This approach is appropriate for homogeneous groups of projects, such as the ones under PA2. However, in other cases, the scope of the projects is very different (e.g. in the case of improving the healthcare infrastructure) and the use of average values is not so justified. They might be used if there is no alternative approach to determine the target values of the indicators in the programming period 2014-2020 but, when reporting the results, special attention should be paid to the heterogeneous nature of projects for certain types of interventions, and possibly, making additional reports or reporting more detailed results or results accompanied by explanations.

As **general recommendations on the planning and implementation of 2014-2020 OPRG**, which should lead to increasing the effectiveness/ efficiency of the programme, we would add the following proposals:

- Consider the possible introduction of simplified costs in the projects under 2014-2020 OPRG. This could be, for example, setting the costs of project management as a flat rate of the total project amount or setting a lump sum for a particular type of projects of the same kind or setting units costs. All these options would lead to reducing the administrative costs of management and control for the implementation of the respective projects and, at the same time, would reduce the risk of implementing

highly inefficient projects. Specific examples, including projects financed by the ERDF, are presented in the EC Guidelines for simplified costs⁸⁵.

- Improve the project implementation monitoring system by monitoring the reports on the pre-defined indicators in order to ensure comparability in reporting the results of the respective projects. Apart from the Methodological Guidelines, specific guidance and trainings for the beneficiaries which have already been proposed, this can also be achieved, for example, as follows:
 - Return for reconsideration the beneficiaries' reports which do not contain information on all the relevant indicators
 - Return for reconsideration the beneficiaries' reports which do not contain correct information on the sources for the indicators
 - Discuss with the beneficiaries and/ or return for reconsideration the reports which report unrealistic values of the indicators. Experts from the MA may evaluate whether the reported indicators are realistic on the basis of a comparison with the other similar projects and with the projected target values in the programme. This would lead to much less cases of extreme values of the indicators reported as part of activities 1 and 2 of this evaluation.
- The review of the effectiveness shows cases of indicators whose values have been exceeded many times. The target values of the indicators "Students benefiting from improved educational infrastructure," "Improved educational infrastructure" and "Population benefiting from refurbished buildings (except for the educational and healthcare institutions)" were achieved in 2011 and the target value of the indicator "Population benefiting from small-scale investments" was achieved in 2010. At the same time, the target value of the indicators "Patients benefiting from improved healthcare infrastructure" and "Projects improving the physical environment, the attractiveness of towns and cities" can hardly be achieved. The manifold exceedance of the target values and the non-achievement of the target values have negative impact on the effectiveness and the efficiency of the programme. Accordingly, the process of monitoring and evaluation should monitor the relation between the target values and the achieved values and to respond in a timely manner as early as the middle of the programming period by reconsidering the target values and/ or opening schemes which contribute to achieving the projected values of the indicators.

? What is the **utility** and **sustainability** (the relation between the identified needs and the achieved results) of the interventions under OPRD? Do the interventions really contribute to achieving the objectives and the needs identified in the programme?

Utility and sustainability are two of the evaluation criteria which are part of the logic of the interventions for the period 2007-2013. Both criteria presuppose the use of qualitative

⁸⁵ EC. Guidance on Simplified Cost Options (SCOs). September 2014. These can be found at the following web address: http://ec.europa.eu/regional_policy/sources/thefunds/fin_inst/pdf/simpl_cost_en.pdf

methods, unlike the efficiency and effectiveness which also require the use of quantitative methods.

The tables below show the needs for regional development identified in the OPRD grouped according to the individual sectors in which the interventions under 2007-2013 OPRD may be grouped:

- Educational infrastructure
- Energy efficiency and renewable energy sources
- Social care infrastructure
- De-institutionalization
- Cultural infrastructure
- Healthcare infrastructure
- Road infrastructure
- Tourist infrastructure
- Urban environment
- Risk prevention

Along with this, the tables below show the operations under 2007-2013 OPRD which are aimed at addressing the identified needs and the specific objectives underpinning these interventions.

Educational infrastructure

The desk study brought to the fore 5 key needs of the educational sector in Bulgaria which are emphasized in 2007-2013 OPRD. 2 operations of OPRD focus on this sector – 1.1 and 1.4 – and their specific objectives directly address 3 of the needs identified under the operational programme. As to 2 other needs of OPRD – bringing the educational system in line with the requirements of the economy and reducing the share of the dropouts from the educational system – no target interventions are explicitly stated. These needs may be targeted, instead, by a combination of programmes and policies which include both infrastructural and the so-called “soft” measures.

Table 31: Identified needs in the sector of educational infrastructure

Educational infrastructure		
Needs (2007-2013)	Operation/ Specific objective	Results
1. Bringing the educational system in line with the requirements of the economy; 2. Rehabilitation of school buildings and yards; 3. Modernization of the facilities; 4. Reducing the share of school dropouts; 5. Equal access to education.	Operation 1.1. Social care infrastructure: Provide appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future needs of the population in the urban centres and the territories belonging to them.	Increased number of students benefiting from improved educational infrastructure

	<p>Operation 4.1. Small-scale local investments:</p> <p>Support the local development by the implementation of important and useful small-scale local investment solutions.</p>	
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The OPRD provides for and implements a number of interventions in the field of educational infrastructure which are in line with the needs for the rehabilitation of school buildings and yards as well as the overall modernization of the facilities. Accordingly, these interventions are also linked to the objective of Operation 1.1 to ensure appropriate and advantageous educational infrastructure. It is more difficult to monitor the relation between the needs and the general objective of operation 4.1 specified above. The general objective is linked to an indicator which is too general. Nevertheless, the review of the interventions under operation 4.1 shows that they address the problems identified in the field of educational infrastructure. As to the equal access, there are activities which are implemented under OPRD and which are aimed at the disabled students and the children from minority groups.

In view of the fact that the values of the relevant result indicators have been exceeded, it may be concluded that the investments in the educational infrastructure are very useful and contribute to addressing the identified needs.

The objective of operations 1.1 and 1.4 is too broad because of the large scope of the projected activities. This makes it difficult to give a specific evaluation on the OPRD's contribution to their implementation but it may be stated that the activities under the programme contribute to ensuring the appropriate educational infrastructure.

Energy efficiency and renewable energy sources

The review of OPRD brings to the fore 5 key needs of the energy sector in Bulgaria. Three major operations under OPRD – 1.1, 2.3 and 4.1 – are programmed to address these needs.

Table 32: Identified needs in the sector of energy efficiency and renewable energy sources

Energy efficiency and renewable energy sources		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Extending the access to natural gas; 2. Development of the gas transmission network, incl. interconnectors with neighbouring countries; 3. Development of electricity production from renewable energy sources; 4. Improving the energy efficiency in public buildings; 5. Reducing the dependence on supplies of primary energy sources.	<p>Operation 1.1. Social care infrastructure: Ensure appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future needs of the population in the urban centres and the territories belonging to them.</p>	Reduction of greenhouse gas emissions (CO ₂ and equivalent) Energy savings from refurbished buildings
	<p>Operation 2.3. Access to sustainable and efficient energy resources: Implementation of projects on the gas link between Bulgaria and Serbia which is to ensure the security and</p>	Implemented project "Preparation, survey and design for the construction of a gas interconnector Bulgaria - Serbia"

	diversification of natural gas supplies to Bulgaria.	
	Operation 4.1. Small-scale local investments: Support the local development by the implementation of important and useful local investment solutions.	Reduction of greenhouse gas emissions (CO ₂ and equivalent) Energy savings from refurbished buildings

Energy efficiency in public buildings is identified as a need in the text of OPRD and in this regard, operations 1.1 and 4.1 provide for a number of interventions. In view of the energy savings achieved and the reduction of greenhouse gas emission, it may be said that OPRD has considerable contribution to addressing the needs of increased energy efficiency.

There is not such high utility in terms of identified needs of developing the electricity production from renewable energy sources. In practice, a very small number of beneficiaries report the indicator “Electricity production from alternative and renewable energy sources (% of the total energy consumption).” If this need is identified in OPRD for the next programming period, there should be an additional emphasis on the implementation of and reporting the activities in terms of electricity production from renewable energy sources.

The OPRD identifies several important needs in terms of the gas transmission network and provides for an objective to implement the project on the gas interconnector between Bulgaria and Serbia which is to increase the security and diversification of natural gas supplies to Bulgaria (Operation 2.3). 2013 sees the completion of the project whose result is the preparation of a preliminary study on the construction of a gas interconnector Bulgaria-Serbia, the application form and a complete set of documents related to the application for a larger project within the meaning of art.39 Regulation EC No. 1083/2006, costs-benefit analysis for the project and an analysis and a report on the environmental impact assessment. According to information from the MEET, „2013 sees the introduction of measures to tackle the identified difficulties/ risks related to the implementation of the project and the preparation of analyses and proposals on the division of the projects in stages and it is provided that the actual construction of the gas pipeline is to be implemented as part of OP Innovation and competitiveness“ in the programming period 2014-2020⁸⁶. The activities under OPRD contribute to achieving the objectives and the identified needs in terms of gas transmission network but the contribution is indirect. In view of the serious needs and the objective, the utility of the activities completed under OPRD cannot be highly rated before the implementation of the construction itself.

Social care infrastructure

OPRD identifies 2 key needs in terms of the social care infrastructure in Bulgaria and they are the focus of two OPRD operations – 1.1 and 1.2.

Table 33: Identified needs in the sector of social infrastructure

Social infrastructure

⁸⁶ Annual report on the implementation of the 2007-2013 Development of the Competitiveness of the Bulgarian Economy Operational Programme for 2013.

Needs (2007-2013)	Operations/ Specific objective	Results
1. Increasing the number and improving the quality of the social services provided to vulnerable groups; 2. Ensuring modern social homes for the accommodation of vulnerable, minority and socially disadvantaged groups of the population and other disadvantaged groups of people.	Operation 1.1. Social care infrastructure: Ensure appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future needs of the population in urban centres and the territories belonging to them.	Population benefiting from refurbished buildings/ rooms
	Operation 1.2. Housing policy: Ensure better living conditions to citizens and contribute to the social integration by increasing the living standard and the general improvement of the quality of life of urban communities of disadvantaged people and vulnerable people.	Increased number of people in social homes

In terms of the social care services, one of the major priorities specified in OPRD is to increase the number and to improve the quality of the social care services provided to vulnerable groups. Given the infrastructural nature of OPRD, the programme finances activities which support the centres providing services (scheme 1.1.01) and buildings of the directorate “Social Support” (scheme 1.1.03) and directorate “Employment Offices” (scheme 1.1.04). These activities are aimed at providing infrastructure which contributes to the quality of the services and, thus, contributes to achieving the objective (despite the general character of the objective). The second identified need “Ensuring modern social homes” is addressed by the activities under scheme 1.2.02.

De-institutionalization

In the context of the de-institutionalization process in Bulgaria, OPRD defines two main needs which are the focus of the activities under operation 1.1.

Table 34: Identified needs in the sector of de-institutionalization

De-institutionalization		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Development of a modern network of services in the community; 2. Passing from institutional care to services whereby the person remains in his/ her community and family environment.	Operation 1.1. Social infrastructure: Ensure appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future needs of the population in urban centres and the territories belonging to them.	Increased number of children benefiting from the process of de-institutionalization

The activities under the scheme “Support for the de-institutionalization of social institutions providing services to children at risk” focus on addressing the identified needs in this regard.

The target value of the indicator “Children benefiting from the process of de-institutionalization” is already surpassed and it can be stated that the activities under the programme contribute to addressing the identified needs of the de-institutionalization. As is the case with the comments on the other sector, the objective of operation 1.1 is general in nature but it can be stated that the activities under OPRD contribute to constructing appropriate social care infrastructure.

Cultural infrastructure

The review brought to the fore the need to improve the buildings in the field of culture which is the focus of Operation 1.1 of OPRD.

Table 35: Identified needs in the sector of cultural infrastructure

Cultural infrastructure		
Needs (2007-2013)	Operations / Specific objective	Results
1. Improving the conditions of the buildings in the field of culture	Operation 1.1. Social care infrastructure: Ensure appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future needs of the population in urban centres and the territories belonging to them.	There is no provision for a specific result apart from the general indicator “People benefiting from refurbished buildings (except for the educational and healthcare institutions)”

In the field of cultural infrastructure the OPRD provides for activities under schemes 1.1.01 and 1.1-5 which include construction, rehabilitation and modernization of buildings having cultural functions. In this sense, the activities financed by OPRD contribute to addressing the identified needs and the general objective of ensuring the appropriate cultural infrastructure. It should be taken into account that in terms of the cultural infrastructure no specific result is envisaged, apart from the general indicator “People benefiting from refurbished buildings (except for the educational and healthcare institutions)” which is very difficult to measure unless the visitors to the supported cultural infrastructure or its capacity are reported.

Healthcare infrastructure

OPRD brings to the fore 4 key needs in relation to the development of the healthcare structure in Bulgaria. Two OPRD operations are to address the identified needs and one of the identified needs is more general in nature (improving the health of the population).

Table 36: Identified needs in the sector of healthcare infrastructure

Healthcare infrastructure		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Improving access to healthcare services; 2. Improving the health of the population; 3. Modernization and modern	Operation 1.1. Social care infrastructure: Ensure appropriate and advantageous educational, healthcare, social and cultural infrastructure in line with the future	Increased number of patients benefiting from the improved healthcare infrastructure

equipment of the healthcare centres and clinics; 4. Improving the condition of the buildings of the healthcare institutions;	needs of the population in urban centres and the territories belonging to them.	
	Operation 4.1. Small-scale local investments: Support the local development by the implementation of important and useful small-scale local investment solutions.	

Activities in the field of healthcare infrastructure are implemented under the following schemes of OPRD: “Support for the reconstruction, renovation and equipment of state healthcare and treatment institutions in urban agglomerations” (operation 1.1) and “Support for the reconstruction/ renovation and equipment of municipal healthcare institutions in urban agglomerations” (operation 1.1) and “Support for the reconstruction/ renovation and equipment of municipal healthcare institutions in the municipalities outside the urban agglomeration areas” (operation 4.1). The activities are aimed at addressing the identified needs for modernization of healthcare institutions, including by improving their buildings and facilitating the access to them. It may be concluded that the achieved results for the patients benefiting from the improved healthcare infrastructure, in general, lead to improving the health of the population. Nevertheless, the utility of the activities of OPRD is reduced by the fact that the projected value for the indicator “Patients benefiting from improved healthcare infrastructure” has not been achieved yet and the reasons for this are examined in the efficiency analysis of 2.2.1 Socio-economic impact evaluation. The activities and the results contribute to achieving the objective to provide appropriate healthcare infrastructure and to implement important small-scale investments despite the general nature of the objectives (especially under operation 4.1).

Road infrastructure

OPRD highlights 3 main needs in the context of development of the republican road infrastructure which are envisaged as activities under OPRD in operation 2.1.

Table 37: Identified needs in the sector of road infrastructure

Road infrastructure		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Improving the transport access to the peripheral territories; 2. Construction of ring road links; 3. Reducing the time needed to reach the centres of the agglomerations.	Operation 2.1. Regional and local road infrastructure: Promotion of accessibility, interconnection and cohesion within the regions by improvement and repair works of the regional and local roads	Saved time in EUR/year as a result of the reconstruction of passenger and freight roads Increased passenger and freight traffic on the rehabilitated roads (baseline 2006)

The investments under operation 2.1 have a clear intervention logic and the achieved results are directly related to the specific objective and the identified needs. As mentioned, the only problem at this stage is to establish specific values of the achieved results. Yet, it may be

concluded that OPRD contributes to addressing the identified needs in the road infrastructure as well as to achieving the objective to promote accessibility.

Tourist infrastructure

OPRD identifies 3 key needs of the tourist sector in Bulgaria. Within the framework of this sector, there is a large number of operations under OPRD – 3 (just like the sector “Energy efficiency and renewable energy sources”). The whole of priority axis 3 is aimed at introducing measures to develop tourism and meeting the identified needs.

Table 38: Identified needs in the sector of tourist infrastructure

Tourist infrastructure		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Overcome the deficits in the main and specific (tourist) infrastructure; 2. Provision of high quality tourist services; 3. Dissemination of tourist information.	Operation 3.1. Improving the tourist attractions and the infrastructure related to them: Development of the integrated and specific tourist out based on competitive and demanded attractions which contribute to the diversification and territorial distribution of tourism	Increased net annual revenues from international tourism Increased bed occupancy Additional annual number of visitors of attractions supported
	Operation 3.2. Development of regional tourist output and marketing of destinations: Increase in the number of visitors and the duration of their stay, improving the seasonal and territorial distribution of tourism in the different regions and territories, based on integrated management and marketing of destinations and the use of different means, techniques and systems ensuring efficient tourist information and marketing	Increase in the satisfaction of visitors with the attractions and the information services
	Operation 3.3. National tourist marketing: Increase in the efficiency and the impact of the national marketing activities, the marketing information and transparency in order to support the diversification of the tourist products and markets and sustainable development of tourism	

The results achieved under OPRD in terms of the tourist infrastructure are indicative of addressing the identified needs and of achieving the projected objectives. As mentioned, the projected results have been achieved, to a large extent, (except for the bed occupancy) which leads to the inevitable conclusion that the operational programme has considerable contribution to the needs and objectives.

Urban environment

The review of OPRD brought to the fore 3 key needs in the context of urban environment development. Two operations of OPRD are aimed at addressing them – 1.4 Improvement of the physical environment and risk prevention and 1.5 Sustainable urban transport systems.

Table 39: Identified needs in the sector of urban transport

Urban transport		
Needs (2007-2013)	Operations / Specific objective	Results
1. Development of sustainable urban transport systems in line with environmental requirements; 2. Rehabilitation and modernization of residential areas; 3. Expanding and improving the green areas.	Operation 1.4. Improvement of the physical environment and risk prevention: improving the quality of life and the respective environmental conditions, including risk prevention as well as improvement of the physical environment of urban centres and agglomerations as part of the wider strategy of social and environmental recovery	No programming indicator is provided. The beneficiaries report the indicator “Population benefiting from the renovated urban environment” but the data on the achieved values has not been aggregated yet.
	Operation 1.5. Sustainable urban transport systems: Ensure accessibility and cohesion by efficient and sustainable urban transport systems	They cannot be reported yet because the projects on sustainable urban transport are underway.

The lack of information on the results achieved in this field makes it difficult to report the utility of the investments in the field of urban environment. The contribution to the development of sustainable urban transport systems cannot be evaluated yet because these projects are being implemented. The investments in the urban transport systems are expected to contribute mostly to improving the air quality by the introduction of environment-friendly urban transport and reduction of congestions. The OPRD will also contribute to reducing noise pollution and increasing the quality of urban transport services which will increase its attractiveness.

The programme does not provide for an indicator on improving the physical environment. In order to report the achieved results in this field, it is recommended to include an aggregate value of the indicator “Population benefiting from the renovated urban environment” in the final report on the implementation of OPRD. Based on the review of the activities funded under the programme, it may be concluded that it contributes to identifying the needs in the field of urban environment as well as to achieving the objectives concerning the physical urban environment and the sustainable urban transport systems.

Risk prevention

OPRD identifies a general need in terms of risk prevention and there are 2 operations to address this need.

Table 40: Identified needs in the sector of risk prevention

Risk prevention		
Needs (2007-2013)	Operations/ Specific objective	Results
1. Risk prevention related to erosion, floods and landslide	Operation 1.4. Improvement of the physical environment and risk prevention: improving the quality of life and the respective environmental conditions, including risk prevention as well as improvement of the physical environment of urban centres and agglomerations as part of the wider strategy of social and environmental recovery	No programming indicator is provided. The beneficiaries report the indicator “Population benefiting from the constructed infrastructure on prevention from floods and/or shore erosion” but the data on the achieved values have not been aggregated yet.
	Operation 4.1. Small-scale local investments: Support the local development by the implementation of important and useful small-scale local investment solutions	

As with the interventions in the field of urban environment, the lack of information on the achieved results in this field makes it difficult to evaluate the utility of the risk prevention activities. The programme does not provide for a result indicator in terms of risk prevention. In order to report the achieved results in this field, it is recommended to include an aggregate value of the indicator “Population benefiting from the constructed infrastructure to prevent floods and/ or shore erosion” in the final report on the implementation of OPRD. Although no specific evaluation may be made on the basis of the values of achieved results, it may be concluded, on the basis of the activities implemented in the field of risk prevention that the programme interventions contribute to identifying the needs and to achieving the objectives of risk prevention.

? To what extent are the results of the interventions sustainable?

Site visits were undertaken in the framework of this project in order to assess the sustainability of the results and impacts from the OPRD interventions and identify good practices in the development and implementation of OPRD projects (see Annex 4). The site visits included interviews with beneficiary representatives based on a standardised questionnaire and checklist (included in Annex 1).

Before proceeding to the analysis of the information gathered during the site visits, it is important to note that from the perspective of institutional sustainability, by the end of its implementation period the Operational Programme maintains strong positions in general,

since the structures which were in charge of managing the projects continue to operate. Nevertheless, there are certain factors which need to be addressed because of their unfavourable implications on institutional stability. The consolidated conclusions on the theme of sustainability, made on the basis of the experts' assessment of the measures implemented and the expectations shared by beneficiary representatives with the evaluating team, are described in the next pages. The conclusions have been divided conditionally in two groups depending on whether their effect on the sustainability of project achievements is favourable or unfavourable.

Factors which have favourable effect on the sustainability of results

- One of the key factors which contribute to the attainment of high sustainability levels of the results and impacts from OPRD interventions is the embedding of perspectives for further development yet at the project definition phase. Thus, long-term goals are set and conditions are created for the achievement of more sustainable results (impacts). The following projects can serve as examples in this respect:
 - „Modernization of the radiotherapy department at the Complex oncological center – Stara Zagora“ is a project implemented by the Oncological Center in Stara Zagora. Radiotherapy equipment was purchased and a dedicated room for the installation of that equipment was built in the framework of the project. The next phase will include procurement of a second linear accelerator – a step which was included in the initial technical project.
 - The project of Rousse municipality “Development of cultural and historical attractions in an urban tourism ensemble” is part of a holistic concept for promoting the city’s tourist industry. There are provisions for follow-up projects which will build on the achievements by complimentary interventions in already renovated and rehabilitated buildings and by inclusion of new sites.
 - In the framework of the project „Protection of Balchik’s coast from abrasion and erosion“ the municipality of Balchik refurbished facilities which protect part of the town’s coastline from the impact of sea waves. The project is part of a holistic concept for the reinforcement of the coastal line all the way from the sea resort Albena to Balchik.
- The development of interrelated projects relating to different interventions contributes to the achievement of synergies, which in turn improve the overall sustainability of OPRD outcomes. This is readily demonstrated by two separate projects implemented in the town of Tryavna. The main focus of the first one, namely „Tryavna – the city where the beauty rises“, was the renovation of nine places of sightseeing in the town, some of them situated very near the shores of Trevnenska river. The other project was „Construction of infrastructure facilities along Trevnenska river in the town of Tryavna to prevent floods“ and its objective was to protect from floods that part of the town, including the sites renovated by the first project. The combination of these two projects creates conditions for increasing the sustainability of the results produced by different interventions.

- Sustainability of intervention results is the highest when interventions are based on in-depth knowledge of the core of the problem and on a clear vision about the measures required to resolve the problem. A profound pre-survey of the site which would be targeted by the project activities is an important precondition for the avoidance of unforeseen costs during the implementation of the project and for the prevention of other risks. An example is the project in Balchik („Protection of Balchik’s coast from abrasion and erosion“), where the technical design of the facilities to protect the coast from sea waves was based on a detailed survey, including visual inspection of the site by sea divers. That measure enabled an accurate assessment of the target environment and of the construction and installation works required. Another example is the project „Implementation of energy efficiency measures in the municipal and educational infrastructure of Lovech municipality“, wherein the renovation of local schools was preceded by a full structural audit of the relevant school buildings to ensure that the activities would not produce unintended negative effects on their technical condition.
- It is equally important that experts with recognised qualification in the area of the proposed activities (such as civil engineers in the case of renovation or construction of buildings) become actively involved in the design of the interventions in order to avoid unintended scenarios during the implementation phase. In addition, apprehension of earlier experience with similar activities carried out in the country and abroad in order to absorb good practices can have highly favourable influence on the sustainability of intervention results. This is especially true for schemes which include the procurement of high-tech equipment, as in the example with the Oncological Center in Stara Zagora, where a team of the hospital made a study visit abroad (before the implementation of the project) in order to obtain insight of the intricacies in operating a linear accelerator. Another example is a tour of foreign museums undertaken by the project experts in Rousse municipality to see how expositions are organised and arranged there.
- An important factor for achieving sustainability of intervention results and impacts is the retention of administrative experience and memory over time. A common conclusion which can be drawn from the site visits is that staff retention at the administrations (beneficiaries) over a longer period is an advantage. All municipal administrations have set up teams responsible for the preparation and implementation of EU-funded projects. The experience gained with the implementation of such projects has a strong effect on the ability of the staff to promptly resolve difficulties arising during the implementation of future projects and prevent the occurrence of frequently encountered problems. At each meeting it was confirmed that the successful implementation of the relevant project is a source of valuable experience which facilitates the implementation of subsequent projects.
- High sustainability of the intervention results is also achieved when the personnel affected by the changes is equipped with the required knowledge and skills for (technically) correct and safe working. If new equipment is being procured, it is important to deliver appropriate training to staff who will be working with it before the equipment is put in service. An example in this case is a project in Pazardzhik, namely „Support for provision of appropriate and cost-effective social infrastructure

contributing to development in Pazardzhik municipality“, where social workers who provide social patronage services were trained how to use the new equipment procured by their center, which significantly reduced the risk of damaging the equipment by improper handling.

- Similarly, a crucial factor for ensuring sustainability of the results and impacts from interventions related to the procurement of new and sophisticated equipment is to create appropriate conditions for the storage and operation of such equipment. A convincing example in this respect is the project developed by the Oncology Centre in Stara Zagora, which included the building of a special room for the linear accelerator system so as to prevent the release of radioactive emissions in the surrounding environment; maintain optimal operating temperature for the system; ensure uninterruptible power supply, etc. All this makes it possible to maximise the time between system outages.
- An important factor to achieve sustainability of intervention results is the ex-post control by the beneficiary on the condition of the site. For example, the Mayor of Lovech has appointed experts responsible for monitoring and scheduled on-the-spot checks on the sustainability of the results achieved. The Road Infrastructure Agency (RIA) has set up commissions at the level of its local divisions which inspect the technical condition of the road network in Bulgaria and also carry out certain maintenance work (such as cleaning the drain shafts, repairing crash guards, etc.). In certain cases, when the broad public is keenly interested in the results achieved, this adds up to informal public control, which is very useful because it is perpetual.
- Regular maintenance (cleaning, fixing damages, etc.) of the equipment or facility after it is put in service is an important measure to achieve sustainability of intervention results and impacts. This means that the beneficiary should allocate a budget to this end, unless a warranty maintenance period applies. An example in this respect is the project in Balchik, where the municipal budget contains an annual allocation for small-scale repair of educational buildings.
- Strong public interest in the intervention results is key for sustainability from another perspective as well – it has the potential to drive further evolution of the developed idea. An interesting example in this respect is the annual art festival which Pazardzhik continues to organise every year even after the end of the OPRD project with permanently increasing audience and ever more performers willing to take part.
- Leveraging the OPRD with municipal funding helps achieve the full scope of the activities required by the beneficiary and ensure sustainability of the results. Thus, the beneficiary complimented the project „Implementation of energy efficiency measures in the municipal and educational infrastructure of Lovech municipality“ with municipal financing and managed to repair and renovate the school buildings throughout.

Factors which have unfavourable effect on the sustainability of results

- Together with the measures which favour the achievement of sustainability of results and impacts from OPRD interventions, as described above, a number of adverse factors make it difficult to retain the achievements. In a number of cases these are natural factors and the options available to address them are limited. In Rousse for example, the building of the city library sits on loess soil, which is very prone to sagging. For this reason, much of the funding planned for renovation of the building under the project “Development of cultural and historical attractions in an urban tourism ensemble” was used to shore up the foundations of the building and some of the initially planned renovation works were postponed until the next project. A similar example is the RIA project for reconstruction of the Kazachevo – Velchevo road, much of which crosses a mountain area with many sunless stretches where the snow blanket can remain for long and compromise the road surface.
- Another fundamental threat to the sustainability of intervention results is the depreciation/amortization of equipment and facilities after they are put in service. Their everyday use inevitably leads to failures and when these failures remain neglected they may evolve in barriers to the achievement of the sustainable results. This factor can be offset by the allocation of budgets for inspection and maintenance of the equipment/facilities and by ex-ante training of the personnel which will be in charge of the relevant site.
- The lack of financial resources for the maintenance of sites in the beneficiary’s budget is a critical factor which can disrupt the sustainability of the results and impacts from OPRD interventions. Of course this conclusion comes with the caveat that it does not pertain directly to the role of the OPRD in the achievement of sustainable results, because maintenance expenses are ineligible pursuant to the SCF regulatory framework. That is why the possible sources of follow-up funding should be considered as early as during the project proposal development phase so as to avoid any loss or impairment of the functionality of project achievements.
- A serious factor affecting the achievement of sustainability of the results and impacts from OPRD interventions is the turnover of beneficiary staff, which translates in loss of experience gained with the implementation of projects. The significant additional responsibilities for the management of EU funds assumed by beneficiary staff engaged in the implementation of OPRD projects and the limited incentives for performing this type of work create preconditions for loss of human resources and discourage staff members from being proactive. The meetings with beneficiary representatives unanimously upheld the opinion that the entry into force of Decree of the Council of Ministers No 330 of 2011, which limits the remunerations of civil servants responsible for the management of projects at central and municipal level, has had an unfavourable effect on the motivation of beneficiary personnel and has contributed to the loss of promising executives.
- In certain cases, problems related the ownership of certain sites or facilities impede the achievement of sustainable results since they render difficult (or impossible) the implementation of follow-up projects to build on what has been achieved. Thus, the coastal protection facilities built in Balchik form part of a wider project to strengthen

the coastline in the territory of the municipality. This larger project can not, however, proceed for the time being, since the adjacent elements (spur dikes) are owned by the State, so the municipality is not authorised to work on them. Since the facilities along the coastline form an integrated system, the rehabilitation of the remaining parts is a necessary condition for the proper functioning of that system. Moreover, the delayed rehabilitation of the remaining elements means that the facilities built by the project „Protection of Balchik’s coast from abrasion and erosion“ may in fact be exposed to faster abrasion and erosion.

Integrated effect

The discussion about sustainability of the results and impacts from OPRD interventions should also consider the integrated effect ensuing from the parallel implementation of projects under different Operational Programmes. It was already mentioned in the present analysis that the implementation of complimentary OPRD projects creates synergies which foster the sustainability of the results. The same conclusion can be drawn in respect to the implementation of financing schemes under different OPs, which pursue a shared objective. Thus, a number of OPRD and OPHRD schemes follow similar intervention logic. There has been closer cooperation between the two programmes in the area of de-institutionalization of childcare in accordance with the adopted National strategy “Vision for the de-institutionalization of children in the Republic of Bulgaria” and with the related action plan. The complimentary model works so that the OPHRD aims to support the development and functioning of community social services, while the OPRD finances the deployment of related infrastructure.

The objective of the OPRD-funded procedures “Support for the de-institutionalization of social institutions providing service to children at risk” and “Support for the reconstruction/renovation and equipment of state healthcare institutions in urban agglomerations”, which are implemented in the framework of Priority axis 1 “Sustainable and integrated urban development”, is to improve the social infrastructure intended for the provision of community services to disabled children and adolescents placed at homes for mentally retarded children, homes for children with physical disabilities and disabled children at homes for medical and social childcare. The deployment of the infrastructure necessary for residential services is financed by OP Regional Development within the framework of urban agglomerations.

Interventions in the infrastructure are based on a National map of the planned residential care, while the activities are related to deployment of alternative forms of services for the children leaving specialised institutions (family-type accommodation centres and sheltered housing) and to the restructuring of homes for social and medical childcare. The municipalities which have concluded contracts under the abovementioned OPRD scheme have access to additional financial support for the newly-introduced social services under the following OPHRD schemes:

- Scheme “Do not leave a child behind” is aimed at the de-institutionalization of children from homes for disabled children;

- Scheme “Chance for a happy future” is aimed at the de-institutionalization of children from homes for social and medical childcare.

Apart from these, some other OPHRD schemes are being implemented in pursuance of the objectives set out in National strategy “Vision for the de-institutionalization of children in the Republic of Bulgaria”, including:

- “Living in the community” is a scheme for the de-institutionalization of children from orphanages and from homes for persons with physical disabilities, psychiatric disorders and mental retardation;
- “Foster me” is a scheme which aims to create a sustainable model for the development of replacement family care for children and foster care;
- “Strengthening the capacity of the Social Assistance Agency to improve the quality and efficiency of social work” is designed to upgrade and improve the working capacity and efficiency of the institutions and structures which operate in the area of social services in order to bolster the efficiency of working processes.
- “Development of a scheme for the planning and provision of social services at regional level” is focused on strengthening the capacity of local stakeholders for planning and management of the social services system.

Complementarity between the OPs is also expressed in the provisioning and application of an integrated approach which contributes to the social inclusion of marginalized groups. The OPHRD operation “Integra” compliments interventions in the framework of the OPRD procedure “Support to ensure modern social homes for vulnerable minority groups and socially disadvantaged people and other groups of disadvantaged people”. The main objective of the procedure is to foster the inclusion of disadvantaged and vulnerable people by increasing their living standard and to achieve an overall improvement of the quality of housing stock in urban communities. The scheme includes provision of modern social housing for the accommodation of vulnerable minority groups and socially disadvantaged people and other groups of disadvantaged people, of the one part, and then opportunities for social inclusion, spatial integration and equal access to adequate living conditions for disadvantaged and vulnerable people, of the other part. Specific beneficiaries of the OPRD procedure and of the OPHRD “Integra” scheme are the municipalities of Vidin, Devnya and Dupnitsa.

After the construction of social housing, the complimenting OPHRD operation “Integra” envisages the implementation of mutually complimentary activities in four main areas, “Access to employment”, “Access to education”, “Social inclusion” and “Measures for sustainable desegregation” with a view to achieving sustainable integration of the marginalized communities in the included municipalities.

In addition, the OPRD-funded procedure „Support for the provision of appropriate and efficient infrastructure of employment services contributing to the development of sustainable urban areas“, with specific beneficiary the Employment Agency (EA), compliments the OPHRD-funded measures for increasing the capacity and quality of the services provided by the EA in the framework of the schemes “Improving the quality of the services provided by the Employment Agency to citizens and businesses with a focus on vulnerable groups in the labour market” and “Modernisation of the system for the provision of services” in OPHRD Priority axis 6.

Similarly, the OPRD procedure “Support for provision of adequate and effective state social infrastructure, contributing to development of sustainable urban areas”, with specific beneficiary the Social Assistance Agency (SAA), provides financing for activities aimed at the modernisation of Social Assistance directorates. These activities compliment two OPHRD schemes financed under Priority 6 and designed to strengthen the capacity of the SAA, namely “Development and implementation of information systems and databases for the social assistance system, provision of social services and social inclusion” and “Strengthening the capacity of the Social Assistance Agency to improve the quality and efficiency of social work”.

Besides the channels of OPRD-OPHRD complementarity discussed above, an integrated effect is also achieved through the distribution of interrelated activities between the OPRD and other Operational Programmes implemented in the period 2007-2013. Priority axis 2 of the OPRD is focused on regional and local road infrastructure and intra-regional transport services. These operations compliment the priority axes and the operations included in OP Transport, which encompass the motorways included in the Trans-European Transport Network (TEN-T) as well as Class 1 and Class 2 roads which form part of the TEN-T. The activities under OPRD Priority axis 3 compliment the measures for support and development of SMEs available from OP Competitiveness to all sectors (including tourism) as well as activities under the Rural Development Programme for diversification, startup and development of agricultural micro-enterprises (including tourism) in 231 rural municipalities.

The integrated effect from the implementation of OPRD 2007-2013 is measured quantitatively with the SIBILA model and is described further down in this section.

? What are the examples of good practices and successful projects with the OPRD interventions?

Overview of the good practices identified earlier

Identification of good practices is not a new theme for OP Regional Development 2007-2013. The Single information portal of the Structural Funds identifies 17 projects which are designated as “good practices”⁸⁷. It should be noted that the good practices list does not feature projects completed after the end of 2012. The list is not accompanied with a definition of what is “good practice” or with a description of the selection methodology used. This section will attempt to propose a working definition of the “good practices” concept together with clear selection criteria, which may help Managing Authorities apply a systematic approach for the identification and promotion of good practices in order to facilitate their multiplication.

Methodology for the identification of good practices

Identification of good practices is an important element of the management of EU strategies, policies and programmes. The term “good practices” was adopted by the European

⁸⁷ The list is available publicly at <http://www.eufunds.bg/bg/page/788>.

Commission as a guiding principle already in the year 2000 with the formulation of the Open Method of Coordination (OMC), the objective of which is to promote partnership and exchange of experience between Member-States for the implementation of measures in areas of common interest. Discovery of workable solutions and dissemination of experience with their application contribute to increasing the overall performance since these approaches encourage the mutual learning process.

In the absence of a precise and generally accepted definition of what constitutes “good practice”, the concept is being used in diverse contexts and meanings. In the abovementioned list of OPRD good practices, the term is understood as an exemplary project which has achieved the intended results within the planned timeline. However, the term may pertain not only to entire projects, but also to particular actions in the framework of a given initiative. By way of example, these may be activities which offer an innovative and efficient solution to a commonly occurring problem and can be reproduced as part of other projects and in different environments. Furthermore, a good practice may relate to an action undertaken during the planning or during the implementation of a project. The advantage of this approach for the assessment of good practices is that it helps identify the success drivers of a project and the individual measures/activities that make the difference between a well-implemented and a failed project. That said, the present report makes a distinction between a good practice and a successful project such that the latter pertains to initiatives which satisfy two or more good practice identification criteria.

The next table provides an overview of our proposed model for the identification of good practices, including precise criteria and relevant sources of information. In developing the methodology, our team used as a stepping stone its experience gained from research of good practices in the area of administrative governance, and also drew ideas from other existing reports of the EC⁸⁸ and the OECD⁸⁹.

Table 41: Criteria for the identification of good practices and their applicability to the various project development phases

Criterion	Characteristics	Source of information
Innovativeness	The proposed action/measure includes an off-mainstream approach to address a problem and thus optimises the use of the available resources and improves the results achieved. The innovativeness can pertain to the core nature of the proposed measure and/or to the way in which it is implemented. Accordingly, innovativeness can be used as a criterion for the evaluation of planned measures and of completed activities alike.	FTR; Information from site visits; Expert judgment

⁸⁸ European Commission (2006), “Ageing and Employment: Identification of Good Practice to Increase Job Opportunities and Maintain Older Workers in Employment”, ec.europa.eu/social/BlobServlet?docId=214&langId=en;

European Commission (2009), “A Selection of Leader + Best Practices”, http://ec.europa.eu/agriculture/rur/leaderplus/pdf/bestpractice/bp4_en.pdf.

⁸⁹ OECD (2001), “Best Practices in Local Development”, <http://www.oecd.org/employment/leed/bestpracticesinlocaldevelopment.htm#getbook>

Impact	According to the EC's updated views about impact (for the period 2014-2020), the actions carried out within a project should have clear logical link with the results achieved and possess straightforward potential to produce an effect on the ultimate objectives. Moreover, this analysis is also aligned with the EC's initial view about impact (for the period 2007-2013), according to which project activities should have long-term effects on the surrounding environment.	Impact evaluation of OPRD interventions 2007-2013; FTR; Information from site visits
Effectiveness	For an action to be identified as good practice, it should have led to the achievement of the intended goals. This criterion is similar to impact, but the focus here is on the contemporaneous existence of an action and a measurable effect, rather than on the identification of the logical path between the implementation of the action and the final result. An effective project is one which has achieved (and even surpassed) the initially set target values of the indicators.	Effectiveness assessment; FTR; Information from site visits
Efficiency	Similarly to effectiveness, this criterion is also about achieving the intended objectives, but the difference is that the focus of efficiency is on the amount of resources used to produce a unit of output. Projects which satisfy this criterion have been identified using the unit/product calculations made in the framework of the present evaluation.	Efficiency assessment; FTR; Information from site visits
Reproducibility	A criterion of major importance for the overall utility of any given activity. Depending on the extent to which it is possible to transplant experience from one environment in another, a given practice can be defined as a good one. Where a particular result depends a lot on variables in the implementation environment, the activities which have led to the achievement of that result can not be designated as good practice, because their applicability in future projects would be limited.	Information from site visits; Expert judgment
Partnership	The widest possible involvement of stakeholders in the development and implementation of a project is important from the perspective of mobilisation of local resources and ensuring that the undertaken measures are adequate to local needs. As the stakeholder groups concerned vary from project to project, so does the profile of appropriate project partners.	Information from site visits; Expert judgment
Sustainability	Regional development is a long-term process and the initiatives intended to drive it forward should take this into account. Accordingly, measures designed to sustain the achievements of an initiative and carry it on in the future should be defined yet at the planning phase of the project. An objective evaluation of the sustainability of the project results is feasible at least two or three years after the completion of the activities, i.e. at a time when it would probably be too late to disseminate good practices. Therefore, the focus of this criterion should be on the identification of activities specifically designed to ensure sustainability of the results and embedded in the project already at the planning phase.	Expert judgment; FTR; Information from site visits

Awareness	The activity should visibly raise public awareness of the project objectives achieved and of the overall contribution of the Operational Programme. Examples of good practices include measures which optimise the available resources in order to accomplish the desired awareness objectives, in other words the focus in on efficiency. This criterion may apply both to the nature of the proposed awareness measures and to the way in which they are applied.	Impact evaluation of the Communication Plan; Information from site visits; FTR
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Updated list of good practices

The updated list of good practices for OPRD 2007-2013 includes measures and actions which satisfy the above set of criteria. Each criterion is illustrated with success stories from completed OPRD projects. The collection of good practices (see the table below) can be used by OP beneficiaries as a tool for exchange of experience in the development and implementation of project activities, for addressing frequently encountered difficulties and for the reproduction of workable innovative solutions. Each of the proposed criteria for the identification of good practices is supported with two or more examples of successful application.



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Table 42: Updated list of good practices under OPRD

Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Innovation			
Project BG161PO001-1.1.10-0021-C0001 “Regional art festival – Pazardzhik”	Development and expansion of an innovative integrated cultural product Regional art festival – Pazardzhik.	A novelty product representing a platform for including and combining different art forms was developed under the project. Thus a wider circle of people is addressed and a greater resonance of the project activities is achieved.	Cultural infrastructure
Project BG161PO001-1.4.05-0017-C0001 “Improving spaces of public significance in support of social integration and sustainable development of the urban environment in Burgas Municipality”	Wide public discussion of a project proposal for development of the urban environment in Burgas Municipality	A novel approach including the public in deciding on the scope and objectives of project actions was used in the development of the project proposal. The final version takes into account the main opinions and attitudes of the public, thereby ensuring that the authentic needs for public works are addressed and also increasing the social commitment of the affected population groups to the project activities.	Urban environment
Project BG161PO001-4.2.01-0048-C0001 “Electronic platform for exchange of good practices and development of regional tourism”	Developing a partnership between Stara Zagora Municipality and municipalities in Greece and France for the purpose of exchanging good practices in the promotion of local tourism. Development of an electronic platform for exchanging and sharing information relating to local tourist products.	An innovative product – electronic platform for promoting local tourist services – was developed in the course of the project. The online portal provides information useful both for the local business and for the users of tourist services.	Tourist infrastructure
Project BG161PO001-1.1.07-0024-C0001 “Reconstruction, modernization and energy efficiency measures at the Presidency complex of Sofia University St. Kliment Ohridski”	Purchasing of equipment for digitalisation of the book stock. Installing an innovative system for storing of printing and paper editions.	By purchasing the equipment for digitalisation of books, the library of the Sofia University joined the few libraries in Bulgaria capable of performing such activities. On the other hand, the commissioned system for storing printing and paper editions is an innovative solution for optimising the use of space, allowing the accumulation of a book stock much larger than it was possible before the project implementation.	Educational infrastructure



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-1.1.09-0038-C0001 “Implementation of energy efficiency measures in the municipal and educational infrastructure of Lovech municipality”	Installing solar panels to ensure constant supply of hot water	This innovative activity was implemented within the project based on the conclusions of the energy survey and the needs analysis of kindergartens. Such an investment is well justified in terms of kindergartens, as there is a constant need for access to hot water in these buildings. With regard to the buildings of schools the investment is not justified as there is no such need. For this reason no solar panels were installed on school buildings.	Energy efficiency
Project BG161PO001-3.1.03-0012-C0001 “Tryavna – the city where the beauty rises”	Developing an internet service for purchasing tickets. Providing electronic guides for tourist attractions. Purchasing electric vehicles for organising tours around the town.	A number of innovative practices improving the quality of the tourist product offered were implemented within the project. The created opportunity for purchasing tickets for attractions via an online system enhances the access to attractions and expands the group of potential visitors. The purchasing of electronic guides under the project contributes to increasing the attractiveness of tourist objects as it makes it possible for the cultural and historic context to reach each visitor. Electric vehicles are both an attractive way to make a tour around the town and an energy efficient approach/	Tourist infrastructure
Project BG161PO001-3.1.03-0030-C0001 “Development of cultural and historical attractions in an urban tourism ensemble”	Developing an Eco-museum with aquarium	The innovative idea for providing a cultural product was successfully implemented under the project. The Eco-museum presents to the public the rich natural and scientific collection accumulated over the years, arranged in a way to provoke the interest of visitors and raise their awareness of certain environmental problems caused by human activity. The exhibition includes a series of interactive elements and a large number of electronic devices.	Tourist infrastructure
Impact			
Project BG161PO001-1.1.12-0002-C0001 “Modernization of the radiotherapy department at the Complex oncological centre – Stara Zagora”	Delivery and commissioning of hi-tech medical equipment for radiotherapy and construction of a premise for its installation.	The delivery and commissioning of hi-tech medical equipment for radiotherapy is a large-scale investment affecting a large group of the population not only of the town but also in the region. According to the FTR, the total number of the population benefiting from the renovated buildings of the healthcare facilities is 555,812. At the same time, the result from the project activities will have an impact on the population over a long period of time.	Healthcare infrastructure



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-1.4.05-0017-C0001 “Improving spaces of public significance in support of social integration and sustainable development of the urban environment in Burgas Municipality”	Development of the urban environment in Burgas Municipality	Like the project aimed at improving the tourist attractiveness of Veliko Tarnovo Municipality, an integrated approach to addressing the needs was adopted in this project. The implementation of the project activities aims at improving the physical and technical condition of a large group of objects and not just of one object like in the wide-spread approach under the OPRD. Using the comprehensive approach increases the scope and significance of the project results.	Urban environment
Project BG161PO001-1.1.11-0006-C0001 “Building Family type accommodation centre in IL XVIII, quarter 62, residential complex “Pobeda” in Cherven bryag and sheltered housing in IL XI, quarter 75 following the plan of the Fifth quarter according to the DDP-BIP of Cherven Bryag”	Building a FTAC and sheltered housing in the territory of Cherven Bryag	The implementation of this project has a particular impact on the social climate in the town as it creates the necessary conditions for the provision of specific services that were not offered in the municipality prior to the project implementation. This has an important long-term impact for the town and its surroundings as it allows the return of local children who were placed in other centres in the country, far from their birthplace.	Deinstitutionalisation
Project BG161PO001-1.1.11-0008-C0001 “Building three Family-type accommodation centres on the territory of Ruse”	Construction of 3 FTACs in the town of Ruse	The implementation of this project is of particular importance for Ruse Municipality as before its completion there was an acute shortage of places in the existing FTACs. The impact of the project is not limited to the territory of the town but extends to the entire country, as the new FTACs accommodate children from different parts of Bulgaria.	Deinstitutionalisation
Effectiveness			
Project BG161PO001-1.1.07-0024-C0001 “Reconstruction, modernization and energy efficiency measures at the Presidentship complex of Sofia University St. Kliment Ohridski”	Achieved level of effectiveness: 28,995 students benefiting compared to an average of 6,833 for the scheme.	This project is among the most effective projects of the projects discussed in terms of the number of students (university students in the specific case) benefiting from improved educational infrastructure.	Educational infrastructure
Project BG161PO001-1.1.01-0085-C0001 “Support to provide adequate and cost-effective social infrastructure contributing to the development in Pazardzhik Municipality”	Achieved level of effectiveness: 4 repaired buildings of the social infrastructure in Pazardzhik Municipality.	The project activities of the Pazardzhik Municipality were registered as an example of good practice because they affect a large number of buildings of the social infrastructure and also contribute to improving the quality of social services: home social patronage and sheltered housing.	Social Infrastructure



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-2.1.01-0020-C0001 “Lot 18 “Rehabilitation of road III-3505 Kazachevo – Stefanovo – Debnevo – Velchevo, Lovech district”	Construction of a road and a number of road facilities in the mountainous area.	The project is special because the route passes through a mountainous area and includes a large number of road facilities, including a large bridge over the Osam river. This road artery is also extremely important from a social and economic perspective as this is the only access route for some of the settlements. The project is a good example also in terms of the achieved time efficiency, even though the initial contractor for the activities was removed on the grounds of breach of contractual obligations.	Road Infrastructure
Project BG161PO001-1.1.09-0038-C0001 “Implementation of energy efficiency measures in the municipal and educational infrastructure of Lovech municipality”	Complementing the energy efficiency measures envisaged under the scheme and carrying out complete overhauls of buildings of the educational infrastructure in Lovech	This project is extremely well implemented from a technical point of view. A comprehensive structural survey and energy audit were carried out prior to the start of the project activities and on the basis thereof the technical design was developed. In addition to the measures envisaged under the scheme (replacement of joinery and installing insulation), a number of additional construction and installation works were carried out (placing under-roof insulation, renovation of sanitary premises, replacing doors, interior, etc.), and thus the buildings were fully renovated.	Energy efficiency
Project BG161PO001-3.1.03-0030-C0001 “Development of cultural and historical attractions in an urban tourism ensemble”	Developing an Eco-museum with aquarium	The developed eco-museum exceeded the expectations of the implementing team with the interest it caused among the public. The number of visitors is constantly growing.	Tourist infrastructure
Project BG161PO001-1.1.09-0009-C0001 “Increasing the energy efficiency of the educational infrastructure on the territory of Balchik municipality”	Rehabilitation of buildings of the educational infrastructure in Balchik Municipality	After the completion of the project activities, the schools covered by these activities reported serious economies in the heating costs in winter. In addition to the rehabilitation, the newly-purchased boilers of the heating system acquired with municipal funds outside the project contributed to a large extent to the achievement of the good results.	Energy efficiency



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Project BG161PO001-1.1.01-0033-C0001 “Improvement of educational infrastructure in Burgas municipality”	Measures aimed at achieving energy efficiency and renovation of facilities	The prerequisites for achieving high levels of energy efficiency were laid down as early as at the stage of feasibility studies by choosing for participation in the project schools which were at the most advanced stage of the procedure for obtaining energy certificates. Thus the opportunity was created to achieve the highest results from the project implementation. The other key aspect regarding the effectiveness of the project is related to the inclusion of an activity for purchasing of equipment for the purpose of providing facilities for the learning process, thus allowing to build on the energy efficiency topic and improve the functionality of the educational establishments affected by the project. Both IT equipment and general purpose equipment (such as washing machines) was purchased under the project. Equipment for technical exercises and practical work (such as geodetic instruments) was purchased.	Educational infrastructure
Efficiency			
Project BG161PO001-1.1.07-0024-C0001 “Reconstruction, modernization and energy efficiency measures at the Presidentship complex of Sofia University St. Kliment Ohridski”	Achieved level of efficiency: BGN 76 per benefiting pupil (student) compared to an average of BGN 602 for the scheme.	One of the largest educational institutions with a large number of students participated in the project. In this sense, a relatively greater number of individuals is affected by a unit of costs. The logic of the economy of scale allows to achieve a high level of efficiency. The achieved level of efficiency was almost 8 times higher than the average for the scheme.	Educational infrastructure
Project BG161PO001-1.1.09-0009-C0001 “Increasing the energy efficiency of the educational infrastructure on the territory of Balchik municipality”	All active schools in the municipality (a total of 17) were covered by the project.	The project is as comprehensive as possible, as all active schools in the municipality are rehabilitated. Thus an economy of scale is achieved which allows to achieve a high level of efficiency.	Energy efficiency
Replication			
Project BG161PO001-1.1.10-0021-C0001 “Regional art festival – Pazardzhik”	Regional Art Festival – Pazardzhik	The cultural product developed as part of the project is an event the format of which allows its replication in other locations after adapting the contents to the requirements of the corresponding environment.	Cultural infrastructure
Project BG161PO001-1.4.05-0017-C0001 “Improving spaces of public significance in support of social integration and sustainable development of the urban environment in Burgas Municipality”	Wide public discussion of a project proposal for development of the urban environment in Burgas Municipality	The preliminary public discussion of this key project for Burgas is an example of good practice that could easily be replicated in other similar interventions, as it is relatively independent of the local specifics of the environment.	Urban environment



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Project BG161PO001-4.2.01-0048-C0001 “Electronic platform for exchange of good practices and development of regional tourism”	Developing a partnership between Stara Zagora Municipality and municipalities in Greece and France for the purpose of exchanging good practices in the promotion of local tourism.	An innovative product – electronic platform for promoting local tourist services – was developed in the course of the project. This innovative product could be replicated by other municipalities, thus achieving a cumulative effect consisting in the generic promotion of innovation.	Tourist infrastructure
Project BG161PO001-1.4.06-0021-C0001 “Protection of Balchik’s coast from abrasion and erosion”	Strengthening the coastline for protection from rough seas. Development of an assessment of the need for intervention.	The preparation of a preliminary analysis and assessment of the need for intervention is a good practice ensuring sustainability of the project results. It can be reproduced easily within other projects, relatively independently from the local specific features of the environment and the corresponding sectoral policy.	Risk prevention
Project BG161PO001-1.1.11-0006-C0001 “Building Family type accommodation centre in IL XVIII, quarter 62, residential complex “Pobeda” in Cherven bryag and sheltered housing in IL XI, quarter 75 following the plan of the Fifth quarter according to the DDP-BIP of Cherven Bryag”	Developing conditions for the residential type social service “Sheltered Housing” and Family type accommodation centre	The offering of the residential type social services “Sheltered Housing” and FTAC does not depend much on the specific features of the environment where they are developed. In this sense, there are no major obstacles to its successful replication in other projects.	Deinstitutionalisation
Project BG161PO001-2.1.01-0020-C0001 “Lot 18 “Rehabilitation of road III-3505 Kazachevo – Stefanovo – Debnevo – Velchevo, Lovech district”	Construction of a road and a number of road facilities in the mountainous area.	The project is a good example of a sound approach in dealing with problems associated with defaulting on a contract by the contractor. RIA terminated the contract with the contractor, urgently held a new public procurement procedure and signed a contract with another contractor that managed to comply with the completion deadline.	Road Infrastructure
Project BG161PO001-3.1.03-0012-C0001 “Tryavna – the city where the beauty rises”	Developing an internet service for purchasing tickets. Providing electronic guides for tourist attractions. Purchasing electric vehicles for organising tours around the town.	A number of innovative practices improving the quality of the offered tourist product and capable of being reproduced as parts of other projects were implemented within the project.	Tourist infrastructure



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-4.1.04-0006-C0001 “Construction of infrastructure facilities along Trevnenska river in the town of Tryavna to prevent floods”	Complementarity of project objectives and results from other projects	The developing of individual projects including complementary activities is an example of good governance at the local level, which can be replicated in the conditions of other municipalities.	Risk prevention
Project BG161PO001-1.1.11-0008-C0001 “Building three Family-type accommodation centres on the territory of Ruse”	Construction of 3 FTACs in the town of Ruse and implementation of a complementary project under OP HRD	The developing of individual projects under different operational programmes having complementary objectives is an example of good governance at the local level, which can be replicated in the conditions of other municipalities.	Deinstitutionalisation
Project BG161PO001-1.1.01-0033-C0001 “Improvement of educational infrastructure in Burgas municipality”	Preliminary energy survey	The project is a good example of successful selection of objects to be addressed by the intervention. The selection of schools which have achieved progress in the process of issuing energy certificates is a good solution for selection of objects of the intervention with limited resources. The approach used allows resources to be targeted where they will produce the greatest effect.	Educational infrastructure
Partnership			
Project BG161PO001-4.2.01-0048-C0001 “Electronic platform for exchange of good practices and development of regional tourism”	Developing a partnership between Stara Zagora Municipality and municipalities in Greece and France for the purpose of exchanging good practices in the promotion of local tourism.	Stara Zagora Municipality developed partnerships with Larissa Municipality and the department of Drôme, within which study visits were held and good practices in the field of tourism and promotion of interregional cooperation were exchanged. Valuable ideas for promoting the development of regional tourism were exchanged and applied at a later stage and in the conditions of Stara Zagora Municipality.	Tourist infrastructure
Project BG161PO001-1.1.10-0021-C0001 “Regional art festival – Pazardzhik”	Regional Art Festival – Pazardzhik	The project is a good example of a working wide partnership. The following participated in the project development and implementation: the Youth Centre, the Regional Museum of History, the Art Gallery, private galleries, a local library, dance ensembles, writers’ clubs and others. The partnership is an association of virtually all organisations in Pazardzhik, developing cultural activities.	Cultural infrastructure
Project BG161PO001-1.1.12-0002-C0001 “Modernization of the radiotherapy department at the Complex oncological centre – Stara Zagora”	The project was implemented in a partnership between Stara Zagora Municipality and the Complex Oncological Centre	The partnership developed between the two institutions within the project yielded good results in the course of the successful implementation of the project. At the same time, the partnership is maintained after the completion of the project activities, and there is an idea for a project application for the purchase of another linear accelerator.	Healthcare infrastructure
Sustainability			



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-1.1.10-0021-C0001 “Regional art festival – Pazardzhik”	Development and expansion of an innovative integrated cultural product Regional art festival – Pazardzhik, which will be held every year.	The developed format of the cultural event provides an opportunity to hold it periodically, and the experience gained allows the product to be adapted to the preferences of the audience. The festival continues being held every year even after the completion of the project activities.	Cultural infrastructure
Project BG161PO001-1.1.12-0002-C0001 “Modernization of the radiotherapy department at the Complex oncological centre – Stara Zagora”	Delivery and commissioning of hi-tech medical equipment for radiotherapy and construction of a premise for its installation. The staff was trained for work with the newly purchased equipment prior to its commissioning. Creating a special premise for installing the equipment. Plan for purchasing a second linear accelerator developed	The delivery and commissioning of the medical equipment is an activity with a long-term impact. The training held ensures that the newly purchased equipment will be used appropriately in order to extend as much as possible the period of its continuous operation. The building of a special premise, which provides all necessary conditions for the functioning of the equipment, contributes to achieving a sustainable effect. At present funding opportunities are sought for the purchase of a second linear accelerator to allow to cover in a timely manner the needs of all patients needing treatment.	Healthcare infrastructure
Project BG161PO001-1.4.06-0021-C0001 “Protection of Balchik’s coast from abrasion and erosion”	Strengthening the coastline for protection from rough seas. Development of an assessment of the need for intervention.	The completed project activities are based on preliminary analyses and assessment of the need for intervention. Taking such a step created prerequisites for the sustainability of the project as early as at the stage of the design of the intervention, as it ensured the performance of activities that meet the real justified needs.	Risk prevention
Project BG161PO001-1.1.01-0085-C0001 “Support to provide adequate and cost-effective social infrastructure contributing to the development in Pazardzhik Municipality”	The staff was trained for work with the newly purchased equipment prior to its commissioning.	The training course held in advance ensures that the equipment will be used and maintained correctly and thus its period of operation will be extended.	Social Infrastructure
Project BG161PO001-1.1.09-0038-C0001 “Implementation of energy efficiency measures in the municipal and educational infrastructure of Lovech municipality”	Complementing the energy efficiency measures envisaged under the scheme and carrying out complete overhauls of buildings of the educational infrastructure in Lovech	In addition to the energy efficiency measures envisaged to be financed under the scheme, an overall renovation of the buildings affected by the project was carried out. The adopted comprehensive approach to the repair of schools and kindergartens in the town ensured that the construction and installation works will have a lasting effect on the buildings.	Energy efficiency



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Project	Actions/Achievements	Comments and conclusions	Sectoral policy
Project BG161PO001-4.1.04-0006-C0001 “Construction of infrastructure facilities along Trevnenska river in the town of Tryavna to prevent floods”	Complementarity of project objectives and results from other projects	The implementation of the project activities contributes to achieving sustainability of the results from other projects. Some tourist attractions renovated under project “Tryavna – the city where the beauty rises” and some buildings renovated under a third project are situated in the proximity of Trevnenska river and are in a risk area vulnerable to flooding. The implementation of the envisaged activities achieves risk prevention and creates conditions for achieving sustainability of the results from other projects.	Risk prevention
Project BG161PO001-1.1.11-0008-C0001 “Building three Family-type accommodation centres on the territory of Ruse”	Construction of 3 FTACs in the town of Ruse and implementation of a complementary project under OP HRD	The development of the required technical infrastructure under the project was complemented by the implementation of a project under OP HRD for developing the offered service. The combining of projects under different operational programmes is a good example of a method to achieve sustainability of the results.	Deinstitutionalisation
Project BG161PO001-3.1.03-0030-C0001 “Development of cultural and historical attractions in an urban tourism ensemble”	Renovation of the Regional Museum of History, opening of an Eco-museum, repair of the town library as part of a comprehensive concept for developing tourism in the town	The project is a good example because it implements activities that are part of an overall vision of the town administration for the development of the tourism sector in the municipality. In addition, within the project ideas originated for building on the results, which will be implemented in future projects.	Tourist infrastructure
Project BG161PO001-1.1.01-0033-C0001 “Improvement of educational infrastructure in Burgas municipality”	Obtaining a high class energy certificate and implementation of long-term plan for renovation of facilities	The project is a good example in terms of the sustainability criterion, as its development will continue after the implementation of the OPRD contract. After the end of the required number of heating seasons and after going through the required administrative procedures, the objects affected by the project will obtain high class energy certificates to serve as proof of the level of energy efficiency. Along with that, the implementation of the overall plan for renovation of facilities in schools continues.	Educational infrastructure
Awareness			
Project BG161PO001-1.1.10-0021-C0001 “Regional art festival – Pazardzhik”	A wide range of activities relating to awareness	Along with the mandatory awareness measures, a number of additional measures were implemented under the project, including: film about the festival available online, enhanced media presence, active use of different social networks, etc.	Cultural infrastructure
Project BG161PO001-3.1.03-0012-C0001 “Tryavna – the city where the beauty rises”	A wide range of activities relating to awareness	Within the project a large number of activities were implemented relating to achieving the widest publicity of results, including: creating a project website, preparing an advertising film, report broadcast on national television and radio, etc.	Tourist infrastructure

Updated list of successful projects

Based on the good practices identified, as described in the table above, an additional list of the successful projects under OPRD was drawn up. These are examples of projects which combine two or more of the requirements for categorisation as good practice. The list includes at least one successful project for each sectoral policy which falls within the scope of OPRD. The list is included in Appendix 8.

The following main conclusions can be drawn based on the good practices and successful projects discussed:

- The MA shall update the examples of good practices and successful projects under OPRD more frequently
- Examples of good practices/successful projects shall be based (where possible) on clear criteria, such as: effectiveness, efficiency, sustainability
- Examples of good practices/successful projects shall be disseminated among beneficiaries in order to create opportunities for their replication. The following can be identified as the most appropriate means for disseminating good practices: training events for beneficiaries and web sites (of OPRD and the Single Information Portal).

? What are the main lessons in terms of the interventions' design?

This section summarises the main lessons in terms of the interventions' design and the connection with the key issues of this evaluation discussed above: effectiveness, efficiency, utility and sustainability.

Effectiveness

The overall conclusion regarding the effectiveness is that the completed interventions have led to the high effectiveness of interventions (in terms of final target values) under PA3 and PA4, and to a relatively lower effectiveness under PA1⁹⁰. Nevertheless, the following lessons regarding the interventions' design were identified:

- The described methodological difficulties in the reporting of indicators vitally affect the effectiveness of the programme. For example, energy efficiency indicators significantly reduce the overall effectiveness of the programme as the values achieved have not been fully accounted for yet. At the same time, the broad interpretation of the indicator "Population benefiting from refurbished buildings (except educational and healthcare institutions)" leads to achieving the target many times and therefore to high effectiveness. The overall conclusion in this case is that the design of each intervention shall envisage indicators using clear methodological basis.

⁹⁰ As mentioned above in the text of the report, no final conclusions about the effectiveness of PA2 can be made yet as the information on the results of the reconstruction of the road network is incomplete and the intervention in the ICT network was not completed in December 2014.

- The analysis of effectiveness demonstrated cases of indicators the values of which have been exceeded many times, and indicators the values of which have not been achieved. It should be noted that the interim evaluation of OPRD 2007–2013 established that not all objectives set in 2006 were realistic, and proposed that target values of indicators be reduced (except for the indicators regarding the educational infrastructure and under the Technical Assistance). The results from the current evaluation show that it was not necessary to reduce the target values of all indicators. As a whole, however, the process of monitoring and evaluation shall follow up on the relationship between target and achieved values and react promptly in the middle of the programming period by reviewing the target values and/or launching schemes that contribute to achieving the set values of the indicators. However, interim values were not actually used as a monitoring instrument for early warning. For example, the procedures relating to healthcare infrastructure were launched relatively late, when there was not even a theoretical possibility of achieving the interim value set for 2009. In practice, the measures required for achieving (or revising) the target value for indicator “Projects improving the physical environment, attractiveness of the towns” were not taken regardless of the fact that the interim target value was achieved as late as in 2013. The general lesson is that the design of interventions for the 2014–2020 programming period should be orientated to a greater extent to the planned final and interim targets.
- Ongoing analyses of the relevance of indicators shall be made. As already mentioned in the description of the results from Activity 1 of this evaluation, the indicator “Reduced greenhouse gas emissions (CO² and equivalent)” is not relevant to the design of interventions under PA2 and is recommended not to be taken into account for this priority axis.
- The same methodology shall be used when targets are set and reported. Otherwise the situation with indicator “Value for time savings in Euro / year stemming from reconstructed roads for passengers and freight”, where the initial and the current methodology differ and this affects considerably the analysis of effectiveness, might be repeated.

Efficiency

As already mentioned with regard to the contracted funds, the financial progress can be considered good as over 3% more than the funds envisaged for the programme have been already contracted. In this connection the conclusion can be made that the interventions’ design under OPRD has resulted in strong interest in the programme thus allowing to contract the funds allocated under the programme.

When programming the interventions for the next programming period it should be borne in mind that the disbursed funds (at the end of 2014) account for an average of 77% of the contracted funds under OPRD. In addition to being an argument in support of overcontracting, this is also an argument supporting the launching of procedures as early as possible during the next programming period. Thus there will be sufficient time to reallocate financial resources, as savings can be expected again as a result of the non-utilisation in full of the financial resources contracted under the individual projects. This is especially valid for the funds under PA

"Technical Assistance", where the disbursed funds as a percentage of contracted funds are the lowest.

The analysis of efficiency showed that the costs for improving a single object of healthcare and cultural infrastructure are higher than the costs in the field of education and social activities as a result of the more specific requirements for healthcare infrastructure and the activities required for restoration of cultural sites. This means that besides their lower effectiveness, interventions in healthcare and cultural infrastructure are characterised by lower efficiency compared to investment in education. The relatively lower effectiveness and efficiency of interventions in healthcare and cultural infrastructure shall be taken into account when designing the interventions for the next programming period in terms of setting target values and allocating budgets for the procedures.

As stated above, in order to increase efficiency in the design of interventions for the next programming period it is recommended to consider the introduction of simplified costs in the projects under OPRG 2014–2020.

Further conclusions regarding the efficiency of interventions at territorial level are presented in section 2.2.2 'Evaluation of Territorial Impact'.

Utility

The analysis of the utility (see question "What is the utility and the sustainability (the relation between the identified needs and the achieved results) of the OPRD interventions") examines the relationship between needs, operations/specific objectives and achieved results, which are essential elements of the design of interventions under OPRD. This section presents only the main conclusions regarding the utility.

With regard to the interventions in **educational infrastructure** it was established that the objective of operations 1.1 and 1.4 is too wide because of the large scope of the envisaged activities. This makes it difficult to assess specifically the contribution of the OPRD to their implementation, but it can be argued that the programme activities contribute to the provision of adequate educational infrastructure.

With regard to the achieved **energy** savings and the corresponding reduction in greenhouse gas emissions it can be argued that the design of interventions under OPRD leads to a significant contribution of the programme to the addressing of the need to increase energy efficiency. As stated above, the utility in terms of the identified need for developing electricity generation from RES is not so high as a very small number of beneficiaries report on the indicator "Production of electricity from alternative and renewable sources". Because of the identified essential needs and target, before the implementation of the works of the intersystem gas connection the utility of the activities under OPRD can not be given a high assessment.

With regard to the investments in **social infrastructure**, the design of interventions goes beyond the framework of OPRD and they are an example of synergy with interventions under OP HRD.

The activities under OPRD contribute to overcoming the needs identified with regard to **deinstitutionalisation**. This also applies to interventions in **cultural infrastructure**, but for them no specific reporting of results, for example on the increased number of visitors to cultural infrastructure, has been envisaged.

The activities carried out and the results under OPRD contribute to the objectives for ensuring adequate **healthcare infrastructure** and to the implementation of important small-scale investments regardless of the wide nature of objectives (especially under operation 4.1). Nevertheless, the utility of the activities under OPRD is reduced by the fact that the target set for the indicator "Patients benefiting from improved healthcare infrastructure" has not been achieved yet.

As mentioned above, investments in **road infrastructure** have clear intervention logic, and the results achieved are directly related to the specific purpose and identified needs.

The reporting on the utility of the interventions in **urban environment** is hindered by the absence of information on the results achieved in this area. The absence of an indicator for improving the physical environment represents another difficulty. In this connection we recommend to include in the final report on the implementation of OPRD aggregated values for the indicator "Population benefiting from renovated urban environment", on which beneficiaries report.

Like in the interventions to improve the urban environment, assessing the utility of **risk prevention** activities is hampered by the lack of information about the achieved results. For the purpose of reporting on the results achieved in this field, we recommend to include in the final report on the implementation of OPRD aggregated values for the indicator "Population benefiting from the infrastructure built to prevent floods and/or bank erosion", on which beneficiaries report.

Sustainability

The design of interventions under OPRD ensures institutional sustainability as the beneficiaries of the operational programme (such as central and municipal authorities) are characterised with high sustainability and will continue existing after the completion of the financed projects.

The factors having positive or negative effects on sustainability are discussed in the answer to the question "To what extent are the results and impact of the interventions sustainable?". In **terms of the interventions' design**, the factors affecting sustainability are:

- Development and financing of projects that are interconnected
- Financing of projects which have undergone thorough preliminary study of the objects
- When new equipment is purchased within a project, it is important to conduct specialised training of the staff who will work with it and to create conditions for the safekeeping and operation of the equipment
- On some occasions problems relating to the ownership of certain facilities or equipment create obstacles to achieving the sustainability of project results, as they make difficult (or impossible) the implementation of further projects that build on the achievements.

? What are the identified non-planned effects (positive and negative) of the OPRD

interventions, incl. indirect and induced effects, unexpected effects, etc.?

What is the integrated effect achieved from the implementation of 2007-2013 OPRD?

In order to give an answer to the questions raised in terms of the non-planned effects from the implementation of OPRD, as part of this evaluation, the results of the SIBILA macroeconomic model are used. Some technical notes are needed before describing the effects registered by using SIBILA.

Technical notes on the analysis of the macroeconomic effects of the implementation of OPRD

The impact evaluation of the costs under OPRD⁹¹ covers the programme implementation period 2007-2013. The effects in the period 2014-2015 are also monitored for some key macroeconomic indicators in order to evaluate the sustainability of the impact.

The evaluation is made on the basis of the official data on the funds paid under the programme as of February 2015 published in UMIS which are around 75% of the funds provided in the beginning of the programming period. The key macroeconomic indicators whose effects are monitored include: actual GDP at 2005 prices and the components of aggregate demand (public and private consumption, private and public investments, import and export), employment and average annual salary. In addition, there is evaluation of the net impact on employment, production and gross investments in the sectors of Construction and Services.

Monitoring the effects of the programme implementation in the SIBILA model is based on the structural dependencies in the Bulgarian economy among the individual industrial sectors (real, financial, external and fiscal) and the economic activities. The focal points in constructing the economy concern modelling the aggregate demand and supply in the economy as well as the behaviour of labour demand and supply. The aggregate supply in the economy is monitored by the macroeconomic productive function which includes the basic production factors as well as the economic growth factors which are of key importance to the economic policy, namely: human capital, technological capital (related to the activity of innovation) and infrastructure. The introduction of an infrastructural block in the SIBILA model makes it possible to monitor more precisely the effects of the implementation of the specific OPRD interventions.

The infrastructural block is one of the parts of the model which generates long-term endogenic economic growth. As there are no official statistical data on the values of the infrastructure in the country, SIBILA adopts approaches which are used in the calculation of the physical capital such as production factor, using statistical data which, in terms of meaning, are closest both to the term "infrastructure" and to the formulated policies financed by the European funds, incl. the ones under OPRD. On the basis of this, there is identification of infrastructural investments whose effects are to be monitored in the model.

⁹¹ The impact evaluation is made by using the model SIBILA (Simulation of Bulgaria's Investment in Long-term Advance), developed on the basis of the European impact evaluation practice of the Structural Funds. For further information on the model, see: <http://www.eufunds.bg/bg/page/872>. The quantitative evaluations provided here for the period 2007-2014 are prepared together with and officially provided by the Ministry of Finance which is currently responsible for the application of the SIBILA model and the preparation of the official impact evaluations of the SCF. The expected impact in 2015 is prepared by ECORYS.

The main statistical indicator, which is used, is the gross capital formation by types of assets provided by Eurostat.⁹² Out of the six types of assets, the indicator "Other assets and structures" (AN.1112) is closest to the definition of infrastructure. Its definition covers non-residential buildings (AN.11121) and other structures (AN.11122). In view of the fact that the indicator refers to all the construction, except for housing construction, then it covers road network, sewerage infrastructure, industrial buildings, public buildings (incl. for entertainment), etc. In this sense, the infrastructure in the model is broadly interpreted. However, this does not, by any means, change the modelling logic because all the above-mentioned examples of infrastructure contribute to improving the productivity in the economy by leading to economies of scale. The objective is to establish the impact of the infrastructure investments made in relation to the European funds (part of which are aimed at developing any infrastructural sites falling into the definition by Eurostat) and, therefore, the assumption and the respective construction of an approximate variable is legitimate in terms of the modelling.

In the empirical framework of the model, the values of the infrastructure indicator are at constant prices with an assumption of a 10% depreciation of the infrastructure capital.⁹³ In this regard, the assumption means that with a linear depreciation, with no supporting investments, this capital would be completely unusable after 10 years. Accordingly, the initial value of the infrastructure capital is calculated by dividing the first available value of the rate of depreciation. The subsequent values, after the initial one, are calculated by using the method of constant inventory. The formula for calculating the value of the infrastructure also includes the costs for infrastructure in relation to the European funds. Based on this relation, the effect of the effects is reported from the investments in infrastructure which are financed by the SCF in relation to supply.

The elasticity of the infrastructure in the macroeconomic production function in this case is identified by the elasticity of the public capital (which in turn is predominantly infrastructure) in accordance with the empirical studies in the economics literature and the values established for other economies. This is determined by the fact that the SIBILA model focuses above all on the effect of public investments in infrastructure financed by the EU. The value of elasticity, which is taken for the infrastructure capital in the production function, is determined at 0.3 based on the results of the empirical studies for other countries.

The impact of OPRD on the macroeconomic development is most evident as to the incentives to the evolution of several factors for economic growth:

- Firstly, OPRD is aimed at developing the infrastructure in the country – 93.4% of the funds under the programme may be defined as investments in the infrastructure. The infrastructural projects have impact on the economic performance both in the short term and in the long term. On the one hand, the improved infrastructure has positive impact on the current business processes, including as a result of the direct incentives to the sector of Construction which registers growth in terms of production, employment and investments and, hence, indirectly incentives to other economic activities too. On the other hand, the

⁹² The classification is available at http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/nama_esms.htm

⁹³ Other models for the leading economies make use, for example, of a 0.15 rate of depreciation. The model makes use of a slightly lower rate which allows for a longer useful life of the infrastructure capital. This is justified, on the one hand, by the lower intensity of the use of the infrastructure and, on the other hand, by the lack of sufficient investments in new infrastructure which inevitably leads to longer use of the old one.

effects of the infrastructure improvement also continue in the medium and long term because the improved infrastructure improves the overall competitiveness of the country, reduces the transaction costs in the economy and improves access to national and foreign markets.

- Secondly, albeit to a lesser extent, OPRD is aimed at developing the human capital in the region and this is also a key production factor in the macroeconomic production function of the economy. Approximately 3.5% of the investments under the programme may be classified as investments in human capital.
- Thirdly, OPRD has positive impact on the growth factor "technological level" which includes entrepreneurship, management skills, scientific and publishing activity, innovation, etc. This factor influences the regional economy in the long term and has a leading role in the achievement of higher and sustainable level of economic growth. Nearly 3.2% of the costs under the programme are investments aimed at improving the so-defined technological level.
- Last but not least, although OPRD does not provide direct subsidies to employment and does not ensure automatic increase in the number of the employed, the implementation of the programme measures relates to the employment, especially in some economic activities, such as the sectors of Construction and Services. This indirect incentive to employment leads to considerable economic effects in the short term.

Net macroeconomic impact from the implementation of the policies under OPRD

The implementation of the policies under OPRD has positive impact on the economic development of the country in the programming period. However, the statistically relevant effects become clear only after 2009 when a large number of projects are underway. On the one hand, this results from the higher absorption levels of funds under OPRD in the period of economic crisis characterized by a particularly strong negative impact on the sectors of Construction and Services and by very limited public and private investments. On the other hand, a considerable part of the funds under OPRD are aimed mostly at improving the infrastructure and, to a lesser extent, at technological development and human capital – long-term factor of economic growth which has impact on the economy in the medium term and the effects are felt at least one-two years after the implementation of the investments.

The net impact evaluation of OPRD shows that, as of the end of 2014, the cumulative effect of the programme on the real GDP of the country amounts to 1.1% and it is expected to reach 1.2% as of the end of 2015 (the real GDP as of the end of 2014 was by 1.1% lower with no funds spend under OPRD in the whole programming period). The evaluated contribution of the programme to the growth of GDP amounts to 10.2% on average for the period 2010-2015. The positive contribution of OPRD of this programming period will continue after the end of absorption of funds and, as of the end of 2020, the net impact of OPRD is expected to lead to an increase of the real GDP by 1.7% in comparison to the scenario whereby no investments are made under the programme.⁹⁴

The cumulative macroeconomic effects from the implementation of OPRD in the programming period in terms of the key macroeconomic indicators are as follows:

⁹⁴ Strategic report of the Republic of Bulgaria for 2012, Council of Ministers.

- As of the end of 2013⁹⁵, the real GDP is by 0.8% higher compared to the scenario whereby there is zero absorption of funds under the programme and the effect is expected to be sustainable in the following two years and as of the end of 2015⁹⁶ and it is expected to amount to 1.2%;
 - The net impact of the absorption of funds under the programme is most evident in the sectors of Construction and Services and the production in them is respectively by 7.7% and 0.2% higher than it would be without the implementation of OPRD;
- As of the end of 2013, the private investments are by 2.5% higher in real terms compared to the scenario with zero absorption under the programme and the effect is expected to be sustainable in the following two years and as of the end of 2015⁹⁷ and it is expected to amount to 5.0%;
 - The net impact of the absorption of funds under the programme is most evident in the sectors of Construction and Services and the investments made in them are respectively by 10.8% and 1.9% higher than they would be without the implementation of OPRD;
- As of the end of 2013, the government investments are by 15.6% higher in real terms compared to the scenario with zero absorption under the programme;
- As of the end of 2013, the private consumption is by around 0.3% higher in real terms compared to the scenario with zero absorption under the programme;
- As of the end of 2013, the government consumption is by 0.2% higher in real terms compared to the scenario with zero absorption under the programme;
- As of the end of 2013, the export is by 0.2% higher in real terms compared to the scenario with zero absorption under the programme and it is expected to be sustainable in the following two years and as of the end of 2015⁹⁸ and it is expected to amount to 0.7%;
- As of the end of 2013, the import is by 1.7% higher in real terms compared to the scenario with zero absorption under the programme;
- As of the end of 2013, the number of the employed is by 0.1% higher compared to the scenario with zero absorption under the programme;
 - It should be noted that the actual absorption of fund is implemented after 2009 when the negative effects of the economic crisis on the Bulgarian economy are felt, including the decrease in employment and an increase in the number of the unemployed. However, the crisis itself is preceded by buoyancy and improvement at the labour market which is not typical for the period of economic transition in Bulgaria. That is why, the monitoring of the cumulative effect on the increase in the employment in the economy is based on a longer time horizon from the programming period. The contribution of OPRD to the growth of jobs amounts to around 3.1% for the period 2006-2013.⁹⁹
 - The net impact of the absorption of funds under the programme is most evident in the sectors of Construction and Services and the employment in them is

⁹⁵ All the effects presented for the period 2007-2014 are evaluated by using the SIBILA model with data as of the end of February and provided by the Ministry of Finance.

⁹⁶ Evaluations of ECORYS, March 2015.

⁹⁷ Evaluation of ECORYS, March 2015.

⁹⁸ Evaluation of ECORYS, March 2015.

⁹⁹ Evaluation of ECORYS, March 2015.

respectively by 8.3% and 0.2% higher than it would have been without the implementation of OPRD;

- As of the end of 2013 the average salary is by around 2.0% higher in nominal terms compared to the scenario with zero absorption of funds under the programme and the effect is expected to be sustainable in the following two years and as of the end of 2015 and it is expected to amount to 4.6%.

As to the evaluated effects on the sectors, the construction sector sees the predominant impact and this is extremely important for the sector given the economic crisis and, to a considerably lesser extent, the sector of services. The statistically relevant effects are to be seen only after 2009 when the real absorption of funds under the programme begins.

As of the end of 2010 and 2011, employment and production in the sector of construction are higher by around 3% as a result of the implementation of the programme and the positive impact has been increasing considerably over the following two year. There is particularly positive impact on the investments made in the sector and in 2010 and 2011 they are around 4% more than they would have been without the regional development projects and at the end of the period the net impact reaches nearly 11%.

Logically, given the content and the scope of the interventions implemented under OPRD, there are positive effects, to a considerably lesser extent, in the sector of services. There is favourable impact on the employment, the production and the investments and in 2010 there are deferred investments in the sector of Services which is offset in the following periods.

Table 43: Net effects from OPRD on the sectors of Construction and Services

Effects on the sectors	2010	2011	2012	2013
Employment (15-64)				
<i>Sector Construction</i>	3.060%	3.008%	5.155%	8.271%
<i>Sector Services</i>	0.150%	0.195%	0.242%	0.187%
Production of the sectors				
<i>Sector Construction</i>	2.880%	2.818%	4.813%	7.677%
<i>Sector Services</i>	0.163%	0.202%	0.254%	0.202%
Gross investments in the sectors				
<i>Sector Construction</i>	3.841%	3.827%	6.614%	10.811%
<i>Sector Services</i>	-0.174%	0.491%	1.046%	1.874%

Source: Evaluated effects by using the SIBILA model, Ministry of Finance

As to the different interventions implemented as part of the OPRD, the specific effects in terms of the individual priority axes may not be directly compared for three main reasons:

- Firstly, the volume of financing in terms of the different priority axes is different; it determines the scale of the effect.
- Secondly, the individual priority axes have impact on different factors of the economic growth, such as infrastructure, human capital, and technological level in the economy. The improvement of certain factors leads to considerably economic effects in the short term while other factors have impact on the economy in the long term.
- Thirdly, the economic theory and practice does not identify a single important factor of economic growth which should have precedence over others in terms of investments. On the contrary, it has been found that every single factor for economic growth (human capital, technological capital, infrastructure and labour) has its role for the production in

the economy and the absence of any factor would make it impossible for the economy to function. That is way incentivizing the regional development would hardly take place by investing in a single factor of growth and every single priority axis formulated in the OPRD has its place and role in the overall incentivization to the regional economic development in Bulgaria.

The table below shows the effects from the implementation of the whole programme as well as from the implementation of the projects by individual priority axes for the period 2007-2013.

Table 44: Net effects from OPRD and its priority axes on key macroeconomic indicators as of the end of 2013

Macroeconomic indicator	OPRD – all priority axes	OPRD - PA1 "Sustainable and integrated urban development"	OPRD – PA2 "Regional and local accessibility"	OPRD – PA3 "Sustainable development of tourism"	OPRD - PA 4 "Local development and cooperation"	OPRD – PA5 "Technical assistance"
GDP at prices of 2005, BGN million	0.8%	0.413%	0.227%	0.053%	0.049%	0.020%
Private consumption at prices of 2005, BGN million	0.3%	0.154%	0.048%	0.062%	0.024%	0.039%
Government consumption at prices of 2005, BGN million	0.2%	0.086%	0.000%	0.057%	0.000%	0.095%
Private investments at prices of 2005, BGN million	2.5%	1.382%	0.815%	0.128%	0.167%	0.017%
Government investments at prices of 2005, BGN million	15.6%	9.271%	2.970%	2.002%	1.391%	0.000%
Export of goods and services at prices of 2005, BGN million	0.2%	0.114%	0.055%	0.016%	0.018%	0.010%
Import of goods and services at prices of 2005, BGN million	1.7%	0.976%	0.417%	0.171%	0.136%	0.022%
Employment (15-64)	0.1%	0.038%	-0.017%	0.041%	0.008%	0.037%
Average annual salary	2.0%	1.079%	0.569%	0.106%	0.136%	0.046%

Source: Effects evaluated by using the SIBILA model, Ministry of Finance

In accordance with the allocation of spent funds and the nature of the measures provided under the individual priority axes of OPRD, the most significant effects on GDP and its components result from the implementation of the measures under Priority Axis 1 "Sustainable and integrated urban development" and Priority Axis 2 "Regional and local accessibility."

The contribution of the first two axes to the net impact of the whole programme on the real GDP at the end of the programming period amounts to 83% and at the end of 2015 the cumulative effect on this indicator of the first axis is expected to be 0.7% and of the second on – 0.3%. The impact of both axes on the consumption is considerable and their contribution to the actual impact of OPRD is considerable – 59% in terms of private consumption and 36% in terms of government consumption. The positive impact of these axes on the investments in the economy is considerable. The net effect of Priority Axis 1 on the private investments as of the end of 2013 amounts to 1.4% (and this effect is expected to reach 2.9% at the end of 2015) and the effect on the government investments is 9.3% (viz. the government investments would have been more than 9% lower, if there had been no projects implemented under sustainable and integrated urban development). The net impact of Priority Axis 2 on the private investments as of 2013 is

evaluated at 0.8% (and this effects is expected to reach 1.2% as of the end of 2015) and the impact on the government investments amounts to nearly 3.0% (viz. the government investments would have been by 3% lower, if there had been no projects implemented under regional and local accessibility). These two axes of the programme also have positive impact, albeit small, on the import and export of the country.

Priority Axis 3 "Sustainable development of tourism" and Priority Axis 4 "Local development and cooperation" rank next in economic terms for the achievement of higher GDP levels. The effects of the complementary priority axis, which comprises the technical assistance under the programme, are least tangible and this is absolutely in line with the expectations given the auxiliary nature of its measures and the limited funding.

Although the scope of the measures under OPRD does not include active employment measures and, hence, does not imply any direct effect on employment, the implementation of the programme has positive net effect on the labour market. Firstly, the programme significantly contributes to the short-term increase in employment, and, secondly, it has positive impact on the increase of the nominal remuneration levels in the short term and in the medium term.

Table 45: Net effects from OPRD and it priority axes on employment

Employment (15-64)	2010	2011	2012	2013
OPRD – all the priority axes	0.24%	0.20%	0.24%	0.13%
OPRD – PA 1 "Sustainable and integrated development"	0.14%	0.09%	0.10%	0.04%
OPRD – PA2 "Regional and local accessibility"	0.06%	0.06%	0.04%	-0.02%
OPRD – PA3 "Sustainable development of tourism"	0.01%	0.03%	0.04%	0.04%
OPRD – PA4 "Local development and cooperation"	0.02%	0.01%	0.02%	0.01%
OPRD – PA5 "Technical assistance"	0.01%	0.01%	0.03%	0.04%

Source: Effects evaluated by using the SIBILA model, the Ministry of Finance

As the mechanism of impact on the labour market is based on the direct incentives by means of sector and institutional dependencies in the economy, then the effects on employment are, to a certain extent, more specific compared to the ones on GDP and its components.

After the beginning of the actual absorption of funds at the end of 2010 the most significant effect on employment results from the implementation of Priority Axis 1 "Sustainable and integrated urban development" – 0.14%, followed by Priority Axis 2 "Regional and local accessibility" – 0.06%, Priority Axis 4 "Local development and cooperation" – 0.02% and finally – priority axes 3 and 5 with effects amounting to 0.01%.

In 2011 the total net effect of the programme is kept but there is redistribution of the role of employments in terms of the individual priority axes:

- The effect of the measures under *integrated urban development* on employment gradually decreases and at the end of the period their impact is only related to PA3 and PA5. The effect of the measures under *regional and local accessibility* on employment also gradually decreases and in the last programming year there is slight negative effect as a result of the insignificant transfer of the employed to other priority axes of OPRD and other programmes financed by SCF (which is also the result of the dynamics as to the financial distribution of the absorbed funds among the other axes and programmes).

- Since 2011 the measures under *sustainable development of tourism* and *technical assistance* are linked to the increasingly more pronounced net impact on employment reaching up to 0.04% in 2013.
- The measures under *local development and cooperation* are characterized by a relatively constant net effect on employment varying between 0.01% and 0.02%.
- The net impact of OPRD on the average nominal salary amounts to nearly 2.0% at the end of 2013¹⁰⁰.

The macroeconomic assessment the net impact of OPRD in the first programming period clearly shows significant effects of interventions implemented under the programme on the real gross value added, employment, investment and other important economic indicators at national and sectoral level. The lack of investments under OPRD would have affected noticeably on lower values of surveyed indicators. Although it is not possible and correct for OPRD to be compared with other operational programmes, as each of them has its own specifics and volume of financing, it could be argued that the OPRD is successful in achieving its objectives for regional development and socio-economic progress. On one hand, this positive effect is due to the vital role of these investments in times of economic crisis and severely limited public investments. On the other hand, the positive effect is due to the simultaneous effects of various growth factors within the programme, which contributes to the complex improving of economic conditions in the country.

? What is the impact of the global financial crisis on the results and the impact of the interventions under OPRD?

The impact of the economic crisis on the results and the impact of the interventions under OPRD should be sought in two aspects: on the one hand, in terms of the management and implementation of the programme, and, on the other hand, in terms of the main objective of OPRD, namely "Improving the quality of life and the work environment by better access to the main services and new opportunities for increased regional competitiveness and sustainable development."

The financial and economic crisis in Bulgaria has had a **very negative effect on the public finances**¹⁰¹ since 2009 and has led, on the one hand, to the reduction of the revenues part because of the shrinking tax base, and, on the other hand, to the increase of some, mostly, social, costs and benefits.

The limited freedom in using the public resources also had a twofold effect: firstly, it puts pressure on the country's capacity to ensure the necessary national co-financing under the European programmes and the liquidity buffer for the period between the payment of funds to the beneficiaries and their certification by the EU.

Secondly, it has created difficulties to the financing of projects on the part of the beneficiaries. In the case of OPRD, the beneficiaries' own financing is envisaged for a big part of the projects and in some cases (e.g. schemes 1.1-09 and 4.1-03) it is a mandatory requirement. The beneficiaries

¹⁰⁰ Strategic report of the Republic of Bulgaria for 2012, Council of Ministers.

¹⁰¹ See e.g. Faucheur, Patrick (2014), "Cohesion Policy Facing the Crisis: What Effects for the EU's Regions?", Notre Europe Policy Paper 123, Jacques Delors Institute, p. 5.

also have to provide buffer financing until the interim and final projects payments are made. As a great part of the beneficiaries under 2007-2013 OPRD are public institutions, the need for fiscal consolidation has led to considerably limited resources for these authorities and municipalities and it might even have led to the refusal of some beneficiaries to implement the projects they won.

It should be noted that in an attempt to counter the lack of financial resources to implement the European projects, especially as to the municipalities, in 2010, the maximum amount of advance payments to the beneficiaries under OPRD, OPT and EOP was increased from 20% to 35%. At the same time, there were also measures to ensure alternative sources of financing, such as EIB, FLAG, etc. That is why it may be said that the acceleration of payments under the programme and the increase in the share of payments in the agreed funds under OPRD over the recent years is the result of both accelerating the implementation of OPRD and of ensuring adequate financing for the implementation of the projects under the programme.

Except in terms of the public finances, the effect of the crisis on the achievement of results and impact of the 2007-2013 OPRD interventions may also be sought in terms of the level to which the programme contributed to achieving its general objective – improving the quality of life and the work environment by better access to the main services and new opportunities for increased regional competitiveness and sustainable development. As specified in the text of OPRD, the programme strategy is to increase the competitiveness and attractiveness of the regions and municipalities and to reduce the differences between and especially within the six regions at NUTSII level. The issue of regional differences is examined in detail in item 2.2.2 of this report and the general trends are presented below.

From the point of view of **inter-regional differences**, the prevailing opinion in the economic literature is that, in general, in the period after the crisis, the convergence in the economic development of the EU countries has continued, albeit at a slower pace, but the inter-regional differences in the individual countries have widened¹⁰². Dobrinsky and Havlick (2014)¹⁰³, for example, analyse the **convergence between the EU countries** in the period before and after the crisis. In the years before the beginning of the crisis there is convergence, at a rapid pace, between the EU countries, which is manifested by the fact the group of new EU member states overtake the countries from Western and Northern Europe in terms of development. For the period from 1995 to 2008, the new member states have overtaken the other countries and registered growth of 1.97 p.p. which is closer to rate, generally accepted in the economic literature, of 2-3 p.p. difference in the GDP growth level on an annual basis between the catching-up countries and the developed countries.

The different pace of economic growth between EU-10 and EU-27, however, is over 2 pp for the period 200-2010 and only 0.91 pp between 2008 and 2012. The analysis of Dobrinsky and Havlick (2014) shows that not all the countries of the EU-10 group have equally high levels of catching-up growth although each country has an increase in the GDP which is higher than the EU average. The new member states have lower development levels and register more rapid growth

¹⁰² Marzinotto, Benedicte (2012), "The Growth Effects of EU Cohesion Policy: a Meta-Analysis", Bruegel Working Paper 2012/14, available at: <http://www.bruegel.org/publications/publication-detail/publication/754-the-growth-effects-of-eu-cohesion-policy-a-meta-analysis/>

¹⁰³ Dobrinsky, Rumen & Havlick, Peter (2014), "Economic Convergence and Structural Change: the Role of Transition and EU Accession", wiiw Research Report 395, July, p. 3.

(e.g. the Baltic States), but this does not apply to Bulgaria and Romania. However, it should be noted that these two countries have joined the EU later which means that there have been barriers to the free flow of external interventions for a longer period and that they did not have access to the Structural and Cohesion Funds (SCF) of the EU.

Apart from the rate of convergence, Dobrinsky and Havlik have another argument on the convergence process stating that the latter is not automatic. Although the process has not stopped completely after 2008, in the context of unfavourable economic conditions, its pace has dropped below the rate of 2 pp. The crisis has had impact not only on the GDP growth but also on the employment levels. In this regard, the EC has classified the EU countries in terms of the negative effects measured by the contraction of GDP growth and the reduction of the employment rate. On the basis of this, the countries are grouped in 4 categories according to the extent to which they are affected by the crisis (see the figure below). The ones that tackle the best the effects of the recession are Poland, Sweden, Germany, Slovakia and some Central European countries where the GDP and the employment are slightly affected. At the other end of the spectrum, there are the Baltic States together with Greece, Spain and Portugal where the social-economic effect of the recession is felt the most. Bulgaria is in the second group in terms of extent to which the countries are affected, together with Italy, Portugal, Hungary, Slovenia and Denmark. Neighbouring Romania is in the category of countries which are affected to an average extent by the crisis because it registers considerably lower shrinking of employment.

Figure 8: Level of recover from the recession

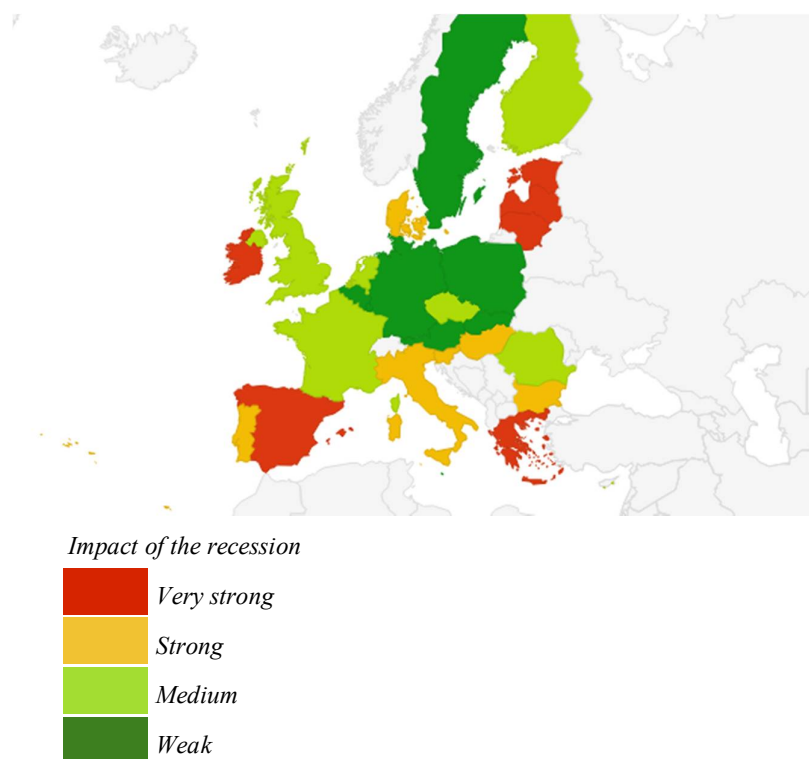


Diagramme: ECORYS; Source of data: European Commission (2013), "The Urban and Regional Dimension of the Crisis", Eighth progress report on economic, social and territorial cohesion, p. 19.

Apart from the convergence rate, the global economic crisis has also significant impact on the factors which determine the convergence in the European Union. If prior to the recession, the catching-up growth in EU-10 was determined by the unfulfilled potential of the newly transformed economies attracting enormous external investments, then after 2008 the convergence resulted, to a large extent, from the slowdown in the development of wealthier countries. In his study, Kovel points out that during the crisis the number of the poorest regions in the EU decreases at the same pace as the number of the wealthiest ones¹⁰⁴.

The focus on the **differentiated development of EU regions** which Kovel examines in his study is in line with the above-mentioned Marzinotto's study which finds a stark contrast in the development of the capital regions of the countries in the study compared to the overall growth in the respective member state which, in 90% of the cases, have GDP growth which is higher than the average one for the country¹⁰⁵. There is a trend to have the country's potential concentrated in the capital as is the case with Bulgaria where Sofia is the only region having social-economic development levels close to the average ones for the EU¹⁰⁶.

Urban areas are another category where consistently differentiated models of development are observed. The EC's report states that the urban regions in countries with growth register more rapid growth rates compared to the other regions in the respective country while the urban regions in countries where the effects of the crisis are felt more register more rapid slowdown of GDP. At the same time, the urban regions, as a rule, see higher sustainability of employment in the face of the negative effects of recession. In the case of the new member states, the higher employment rate also leads to improved indicators of poverty reduction and social exclusion in these regions while the regions of Western and Northern Europe experience the reverse trend.

By way of a summary, it may be said that despite the same type of effect in the member states and the subnational regions of the EU, the 2008 economic crisis has led, in general, to a slowdown and in some cases to a reversal of the trend of convergence between the regions in the EU. The crisis has negative impact on all the components of the main objective of 2007-2013 OPRD, namely:

- *Quality of life and work environment* – by reduction of the employment and the revenues in the country as a result of the crisis
- *Better access to the main services* – by limiting the fiscal resources for the main services, such as education, healthcare, etc.
- *New opportunities for increased regional competitiveness and sustainable development* – by contraction of the internal and external market and limiting the resources for R&D and innovations.

However, at the same time, with very limited public and private investments, the funds from SCF and, in particular OPRD, becomes a key priority in order to remedy the negative effects of the crisis both in the short term by the creation of demand in the economy and in the long term by accumulation of production factors, such as public infrastructure, human capital, etc.

¹⁰⁴ Kovel (2012), pp. 4-5.

¹⁰⁵ European Commission (2013), p. 15.

¹⁰⁶ Institute for market economy (2014), "Regional profiles: indicators of development", Sofia, available at: http://www.regionalprofiles.bg/var/docs/Editions/Regional_Profiles_2014.pdf.

The funds under 2007-2013 OPRD are allocated mostly for the construction of public infrastructure, but their impact might be expected to become evident through other production factors too. For instance, the investments in education, healthcare and cultural infrastructure should contribute to improving the human capital in the economy. As shown in the part of this report concerning the evaluation of the macroeconomic effects by using the SIBILA model, the OPRD has significant and positive contribution to the development of the Bulgarian economy both in the short term and in the long term. The economic crisis has had negative impact on the objectives of the programme but OPRD has, undoubtedly, contributed to improving the quality of life, the accessibility and the competitiveness of the regions in Bulgaria.

? **What are the other identified external factors which could influence (positively or negatively) the achievement of the results and the impact of the interventions under OPRD? What is the influence of these other external factors on the results and the impact of the interventions under OPRD?**

Apart from the impact of the financial crisis, there might be identified some other external factors which influence the achievement of the results and the impact.

As to **priority axis 1**, following the logic of programme interventions, the impact indicator "Reduction greenhouse gas emission" is directly linked to the result indicator "Energy savings from refurbished buildings." As has already been specified in item 1.1, these indicators are influenced by constructive decisions on the management of the building (e.g. greater used area, ensuring the temperature comfort required by law, passing from one type of fuel to another, the use of rooms for a longer period, etc.). The temperature of the environment also has impact – with lower average monthly temperatures, more energy is used for heating. However, in case the values of these indicators are measured correctly on the basis of an energy examination, then the influence of these external factors is reported and the achieved values are directly linked to the implementation of OPRD.

The other result indicators under the priority axis are linked to the general demographic trends which have impact on them: "Students benefiting from the improved educational infrastructure"; "Patients benefiting from the improved healthcare infrastructure"; "Population benefiting from refurbished buildings (except for the educational and healthcare institutions)"; and "Additional population benefiting from the improved urban transport". In order to limit the general demographic trends, capacity indicators may be used, for example, capacity of the supported educational infrastructure. The partnership with the MA of 2007-2014 OP Human Resources Development, which provides for the gradual introduction of social services, will have specific impact on the implementation of the target value of the indicator "Children benefiting from the process of de-institutionalization."

There is a different situation with **priority axis 2** in terms of the indicator "Reduction of greenhouse gas emission" because, as specified, it is not directly linked to activities projected under the axis. The overall socio-economic situation in the country, as well as the applied methodology, have impact on the indicators "Value of saved time in EUR/year as a result of the reconstruction of passenger and freight roads" and "Increased passenger and freight traffic on the rehabilitated roads (baseline 2006)", as was noted in the current report.

There is a particular case with the indicator "Additional population covered by broadband access (a main indicator)" because external factors have had considerable positive impact on it. The

value projected for the result indicator is 725 000 people additionally covered by broadband access. According to NSI data¹⁰⁷ the households with broadband access were 1 437 496 in 2013 compared to 275 103 in 2006, viz. in the period 2007-2013 the increase is 1 162 393 households. According to the 2011 census the average number of people in a single household is 2,4¹⁰⁸. Accordingly, the increase in the number of people covered by broadband access for the period 2007-2014 is 2 789 744 which exceed by over 2 million people the value projected in 2007-2013 OPRD. In practice, this is implemented without the support of 2007-2013 OPRD because the project "Development of high-speed broadband access in Bulgaria through the construction of critical, protected, safe and reliable public ICT infrastructure" has not been completed yet. The 2013 Annual report on the implementation of OPRD states that the project provides for the construction of optic infrastructure with a total length of 860 km for broadband access and the population to be covered is 277 765 people. These expected results exceed the expected value of the output indicator by 360 km but they are less than the expected value of 725 000 additional people covered by broadband access.

Priority axis 3 provides for two impact indicators: "Net annual revenues from international tourism" and "Bed occupancy". External factors have impact on both indicators. As is shown in the efficiency evaluation, the interim value and the target value of the indicator "Net annual revenues from international tourism" have already been achieved and seriously exceeded (see Table 24. Progress in terms of the indicators under PA3). At the same time, it is noteworthy that in the period 2010-2013 the increase in the net revenues from international tourism is only 92 million EUR and first three projects completed under PA3 of OPRD were only finalized in 2011. As no projects are completed under PA3 before 2011, at first glance, it may not be concluded that the projects under PA3 have tangible impact on the net revenues from international tourism because for the period 2007-2013 the sharpest rise in the revenues is in the period 2009-2010. At the same time, as to the net revenues from international tourism, the activities under Operation 3.3 may be expected to have impact because they include the international marketing of the Bulgarian tourist destinations. In this regard, it should be noted that:

- In the period 2008-2011 there is the project "Conducting of an All-Year-Long Advertising Campaign of Bulgaria on Leading Pan-European Television Channels" (BG161PO001-3.3.01-0007-C0001)
- In the period 2008-2012 there are projects on improving the tourist attractions as well as advertising campaigns which should contribute to the net revenues from international tourism, e.g. the project "Integrated Advertising Campaigns of the Bulgarian Tourist Product in Germany, Great Britain and Russia" (BG161PO001-3.3.01-0003-C0001), Development and Distribution of Advertising and Information Materials for Promoting Bulgaria as a Tourist Destination (BG161PO001-3.3.01-0005-C0001), Multimedia Catalogue of Tourist Sites and Electronic Marketing of Destination Bulgaria (BG161PO001-3.3.01-0006-C0001)

¹⁰⁷

<http://www.nsi.bg/bg/content/2810/%D0%B4%D0%BE%D0%BC%D0%B0%D0%BA%D0%B8%D0%BD%D1%81%D1%82%D0%B2%D0%B0-%D1%81-%D1%88%D0%B8%D1%80%D0%BE%D0%BB%D0%B5%D0%BD%D1%82%D0%BE%D0%B2-%D0%B4%D0%BE%D1%81%D1%82%D1%8A%D0%BF-%D0%B4%D0%BE-%D0%B8%D0%BD%D1%82%D0%B5%D1%80%D0%BD%D0%B5%D1%82>

¹⁰⁸ <http://www.nsi.bg/census2011/pagebg2.php?p2=175&sp2=192&SSPP2=194>

- Apart from the projects under Operation 3.1, in the period 2009-2013 the project Development of a Strategy for "Bulgaria" Brand and Introduction of a Practice for an Integrated and Consistent Brand Management (BG161PO001-3.3.01-0010-C0001) was completed.

As to the project "Integrated Advertising Campaigns of the Bulgarian Tourist Product in Germany, Great Britain and Russia", the tables below shows the time series of nights and the number of people staying from the three countries in the period 2008-2013:

Table 46: Number of tourists from the targeted markets

Nights (%)	2008	2009	2010	2011	2012	2013
Germany	25%	23%	21%	20%	19%	16%
United Kingdom	10%	9%	8%	7%	7%	7%
Russia	13%	13%	16%	17%	19%	20%
Total	48%	45%	45%	44%	45%	43%
People staying (%)	2008	2009	2010	2011	2012	2013
Germany	17%	14%	15%	15%	14%	12%
United Kingdom	8%	7%	7%	6%	6%	6%
Russia	9%	9%	10%	10%	13%	13%
Total	35%	31%	31%	31%	33%	32%

Source: NSI, sector statistics

The data on the tourists from Germany, the United Kingdom and Russia show three clearly marked trends:

- The number of nights of the tourists from Germany decreases for the whole period 2008-2013 which shows that no effect may be established from the advertising campaign conducted in that country;
- The number of nights of the tourists from the United Kingdom and the number of people staying is relatively constant which also questions the effectiveness of the advertising campaign;
- The number of nights and the number of tourists staying from Russia register growth in the period 2008-2013 which points to the efficiency of the advertising campaign conducted in that country.

The values of the indicator "Bed occupancy" have also been examined in the analysis of the efficiency and they are elaborated below.

Table 47: Bed occupancy

Bed occupancy	2008	2009	2010	2011	2012	2013	Change 2011-2013
Total for the country	30%	25%	26%	32%	36%	37%	5
North-western region	18%	15%	13%	15%	18%	19%	4
Vidin	16%	18%	14%	16%	16%	17%	1
Vratsa	19%	16%	12%	15%	21%	22%	7
Lovech	16%	13%	12%	15%	17%	20%	5
Montana	15%	12%	11%	13%	14%	15%	2

Pleven	28%	18%	17%	20%	25%	22%	2
Northern Central region	18%	13%	11%	16%	18%	17%	1
Velika Turnovo	16%	11%	10%	14%	16%	16%	2
Gabrovo	19%	13%	9%	15%	18%	15%	0
Razgrad	12%	9%	11%	18%	19%	16%	-2
Rousse	24%	20%	18%	22%	24%	24%	2
Silistra	22%	14%	14%	14%	17%	14%	0
North-eastern region	37%	31%	33%	42%	46%	47%	5
Varna	39%	32%	34%	40%	44%	46%	6
Dobrich	36%	31%	35%	54%	57%	57%	3
Targovishte	19%	15%	13%	13%	12%	16%	3
Shumen	11%	8%	8%	13%	16%	16%	3
South-eastern region	39%	34%	39%	47%	50%	50%	3
Burgas	41%	36%	44%	52%	55%	55%	3
Sliven	12%	10%	8%	10%	11%	13%	3
Stara Zagora	29%	22%	22%	21%	26%	24%	3
Yambol	20%	24%	14%	17%	19%	20%	3
South-western region	23%	19%	18%	21%	25%	26%	5
Blagoevgrad	17%	14%	14%	18%	23%	25%	7
Kyustendil	15%	15%	13%	13%	17%	16%	3
Pernik	14%	10%	7%	7%	13%	9%	2
Sofia	21%	20%	19%	21%	22%	22%	1
Sofia (capital)	31%	24%	24%	27%	32%	34%	7
Southern Central region	19%	16%	14%	17%	22%	22%	5
Kardzhaly	15%	14%	14%	13%	15%	18%	5
Pazardzhik	25%	20%	17%	22%	28%	31%	9
Plovdiv	23%	19%	19%	20%	27%	26%	6
Smolian	14%	11%	10%	13%	15%	16%	3
Haskovo	16%	15%	15%	17%	20%	20%	3

Source: NSI, sector statistics

As these data show, the target values were not achieved. At the same time, impact on this indicator as result of the measures under 2007-2013 OPRD may only be expected from 2011 onwards when the first projects under PA3 are completed. In this case, the 2010 baseline value is lower by 9 pp than the value of 35% reported in 2005/2006. The 2009 interim value is irrelevant because, by then, projects under PA3 are not completed. If a lower baseline value is reported in 2010, then the increase by 10 percentage points, envisaged under the programme, has already been achieved. The data show that they are characterized by natural dynamism which is not related to OPRD. That is why it is practically impossible to estimate the direct impact of the programme on bed occupancy.

The result indicators "Additional annual number of visitors of attractions supported" and "Satisfaction of visitors with the attractions and the information services" were exceeded. The

first indicator also depends on the natural dynamics in the sector of tourism. The impressive result of the indicator against the backdrop of slowdown, measured by impact indicators, comes to show that the external factors have less impact on it, viz. the contribution to the programme is more direct and positive. The survey also identified the direct and positive effect of OPRD on the satisfaction of visitors with the tourist attractions.

Priority Axis 4 has two result indicators "Innovative practices exchanged and applied on the basis of inter-regional cooperation" and "Population benefiting from small-scale investments". As to the first indicator, no significant external factors may be identified and as to the second one the general demographic trends have impact on it. In view of the wide scope of the indicator "Population benefiting from small-scale investments," the general demographic trends may only have insignificant influence.

? To what extent have the recommendations on the impact of OPRD, contained in the mid-term evaluation, been fulfilled?

The analysis of the Mid-term evaluation of 2007-2013 OPRD on the impact of the programme was taken into consideration when answering this question.¹⁰⁹ The analysis of the impact is small element of the Mid-term evaluation because there were few completed projects when the analysis was carried out. That is why the evaluators concluded that it was too early to make any conclusions as to impact only on the basis of 81 projects. Nevertheless, the evaluation report contains some conclusions on the impact:

- Although there are no target values in terms of the impact indicator "Jobs creation" at programme level, the evaluators conclude that the impact of OPRD in terms of this indicator is insignificant.
- The impact indicator "Jobs creation" does not reflect the character of the programme because it is not directly linked to promoting employment and competitiveness.
- The beneficiaries involved in the study conducted as part of the Mid-term evaluation expect their projects to achieve the desired impact.
- Representative of the MA, interviewed as part of the Mid-term evaluation, state that the small interventions have small or limited impact in terms of minimizing the regional differences.

On the basis of this, there is the following recommendation in relation to the impact of the programme: "There should be a more targeted approach in order to determine the priority investments focusing more on large projects and projects of strategic importance."¹¹⁰ This recommendation is for the next programming period and, therefore, its implementation may not be evaluated in this evaluation report.

The findings and the recommendation of the environmental impact assessment made as part of the Mid-term evaluation are specified in item II.2.3.

¹⁰⁹ KPMG. Mid-term evaluation of 2007-2013 Operational Programme Regional Development, Final Report, 28 February 2011

¹¹⁰ *Ibid.* p.144

2.2.2. Territorial impact evaluation

? What is the **territorial distribution of the interventions** under OPRD and is there territorial concentration of the interventions?

This section examines and analyses the distribution of investments under OPRD in terms of their place of implementation and in terms of the number of projects on a particular territory, the total amount of the investments and the intensity of the investments per 1 inhabitant on a particular territorial unit – as total amount of the investments and in terms of interventions.

The distribution and the analysis of the data are based on the information on the contracts concluded under OPRD by UMIS for the period from 01.01.2007 to 31.12.2014.¹¹¹

The methods of descriptive statistics are mostly used to analyse the data – median, arithmetic mean, standard deviation, coefficient of variation. Maps of the territorial distribution are used to illustrate the distribution – they contain data on the current value of grants and/ or the amount of funds paid although the interactive diagrammes at some points of comparison also indicate the analogical aggregate information on the amount of investments based on the approved budget and the total budget of the projects – see Appendix 3.

The number of inhabitants used as the basis for calculation of the investments per 1 inhabitant in the respective territorial unit is based on data from NSI on the average annual number of the population in Bulgaria in 2013.¹¹² The territorial distribution is presented according to the levels set in the division of regions for statistical and administrative purposes (NUTS 2), regions (NUTS 3) and municipalities (LAU 1)¹¹³. The analysis is further supplemented by an analysis of the programme strategy (broadly dividing the territory of the country into capital, 6 large cities, 36 centres of agglomerates, 86 municipalities in the agglomerates and 178 small municipalities) as well as by examination of support under the programme in line with the polycentric model under the 2013-2025 National Concept on Spatial Development covering 67 cities from 1-st to 4-th hierarchical level.

It should be noted that in individual cases the investments are made on territory of several municipalities, several regions or even on the territory of several NUTS 2 regions (e.g. projects on the rehabilitation of roads). In some cases, although the investment is made on the territory of a single municipality, it concerns several municipalities, an entire region (e.g. hospitals) or the investment has impact on the entire territory of the country (e.g. marketing and advertising of tourism, projects implemented by the ministries) and it is not possible to refer them to a particular territorial unit.

This section contains the general findings and the distribution and further information is available in Appendix 3.

¹¹¹ As there are no data as of the end of 2014, as to scheme 1.4-01 use is made of data received from the MA as of October 2014; as to scheme 1.4-08 and as to the project BG161PO001-1.1.08-0025-C0001 the distribution of the funds paid in terms of territorial units is carried out in proportion to the amount of grants set for implementation within the respective territorial unit.

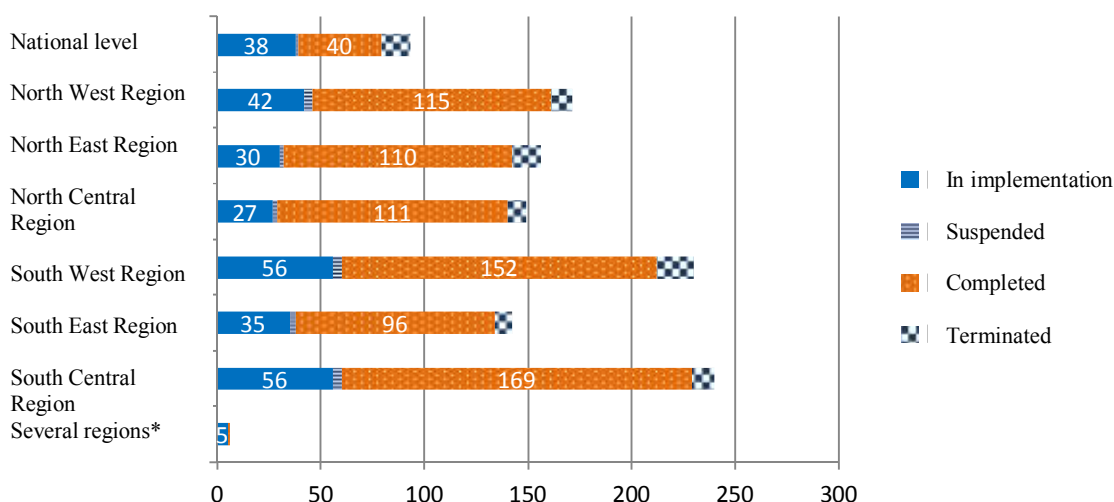
¹¹² NSI, [Средногодишно население през 2013 г. по области, общини и местоживееене](#)

¹¹³ The analysis is based on the municipalities established and existing for the most part of the implementation of OPRD – 264 municipalities. The municipality of Sarnitsa established on 25.06.2014 is not subject to the analysis but it is considered as part of the municipality of Velingrad.

Territorial distribution of the concluded contracts on support

- 1187 contract on support in total were concluded and as of 31.12.2014, 794 of them were completed, 289 were being implemented, 20 were suspended and 84 were terminated. The diagrams below show the distribution of contracts concluded under the programme by areas and regions.

Figure 9: Distribution of contracts in terms of regions and status of implementation

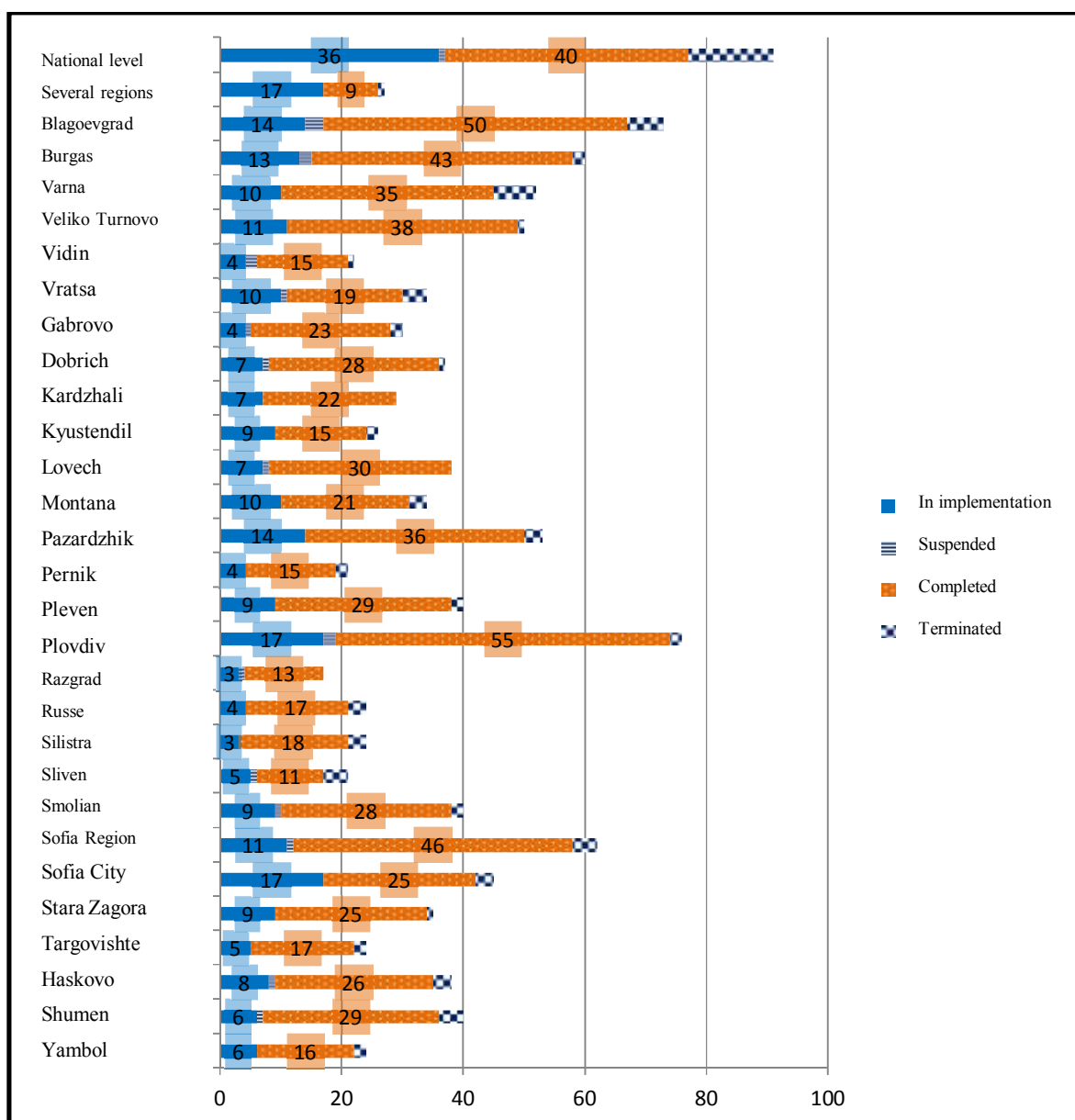


Source: information from MA, own calculations

* The term "several regions" covers the projects which are implemented on the territory of two or more regions of NUTS 2 level but do not refer to the territory of the whole country (they are not implemented in all 6 regions of NUTS 2).

- The project types are distributed relatively equally by regions and it is noteworthy that the South-western and the South central region stand out from the other regions for the higher number of contracts under the programme which have been implemented or are being implemented. The diagram shows that, as to the South Central region, this is, to a large extent, the result of the contracts concluded in the region of Plovdiv.

Figure 10: Distribution of contracts by regions and status of implementation



Source: information from the MA, own calculations

* The term "several regions" covers the projects which are implemented on the territory of two or more regions but do not refer to the territory of the whole country.

- The average number of projects, which have been or are being implemented, at the level of region is 40 projects and the highest number of projects is implemented on the territories of Plovdiv, Blagoevgrad, Burgas and Sofia region.
- OPRD projects have been implemented/ are being implemented on the territory of 229 municipalities, in total, in Bulgaria; however, there are certain differences among them: on the territory of 180 municipalities one out of five projects is implemented and in 29 –

between 5 and 10 projects and in only 20 municipalities – over 10 projects. Undisputed leader in terms of implemented projects/ projects in implementation is Sofia Municipality – 40 projects.

- At the same time, on the territory of 5 municipalities (Borovo, Breznik, Suhindol, Hitrino and Chiprovtsy) one project is implemented and subsequently terminated and **on the territory of 30 municipalities no projects under OPRD** are implemented (see Appendix 5). On the whole, these municipalities are not concentrated on the territory of a particular region or region of level 2 although in North-western and Northern Central Region there is more significant accumulation of such municipalities. There are municipalities that do not participate on the territory of 16 regions – 20 municipalities in Northern and 15 in Southern Bulgaria.

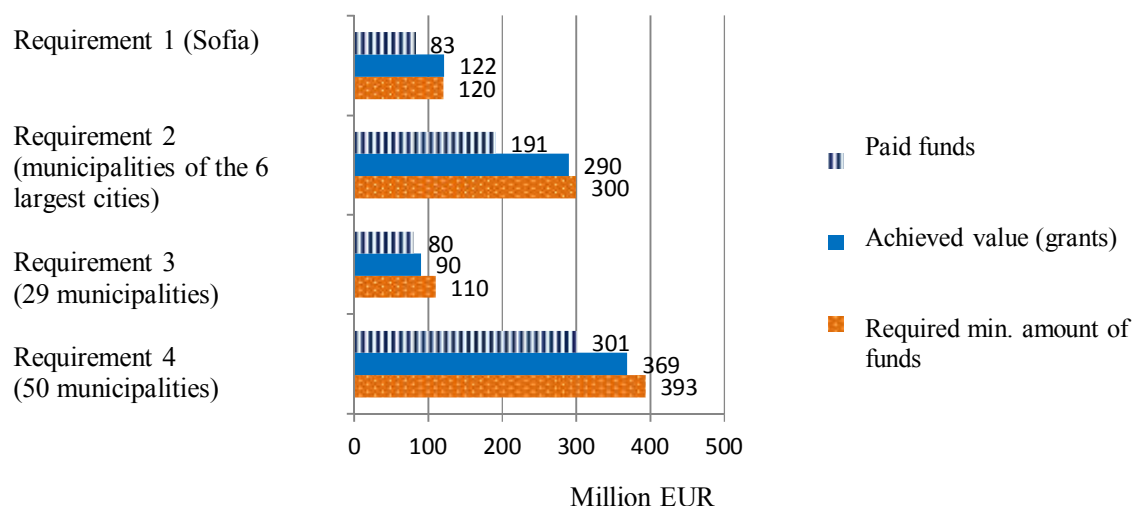
In percentage terms the number of municipalities where no projects are implemented is 13,3% of all municipalities and the total number of inhabitants in these municipalities is 249 thousand or only 3.4% of the population of the country, viz. 2007-2013 OPRD covers, to a large extent, the entire population.

Implementation of the programme strategy

In accordance with the latest revision of OPRD, approved by the EC on 17.08.2012, the strategic focus of the operational programme needs to be achieved, including by the allocation of a minimum amount of funds from the budget of PA1 to the urban agglomerate areas specified in Appendix 3a of the programme – “Territorial scope of the urban agglomerate areas”¹¹⁴. At the end of 2014, PA1 projects were implemented on the territory of each of the 86 municipalities making up the 36 agglomerate areas, albeit with a different scope. The diagramme below shows the minimum territorial concentration levels based on the data provided by the MA on the conclusion of contracts and the implementation of project under the priority axis as of 31.12.2014 for the amount of the grants and funds paid under the projects as of the end of the year.

¹¹⁴ According to the indicative distribution, at least (1) 120 million EUR need to be channelled to the capital of Sofia, (2) 300 million EUR to the municipalities of the 6 largest cities (Plovdiv, Varna, Burgas, Russe, Pleven, Stara Zagora), (3) 110 million EUR to the 29 municipalities which are part of the agglomerate areas of Sofia and the 6 largest cities and (4) 393 million EUR to the 50 municipalities which are part of 29 agglomerate areas of the 24 medium-sized town with population of 30 000 inhabitants, the 4 town with population between 20 000 and 30 000 inhabitants and Panagyurishte.

Figure 11: Meeting the requirements for minimum territorial concentration of resources



Source: information from the MA, own calculations

Based on the diagramme above, the following may be concluded:

- Sofia City Municipality has projects for grants amounting to slightly over 122 million EUR which exceeds the set threshold of 120 million EUR;
- The municipalities of the 6 largest cities following Sofia implement projects for grants amounting to 290 million EUR or by around 3% less than the target value of 300 million EUR;
- The requirement concerning the 29 municipalities which are part of the agglomerate areas of Sofia and the 6 largest cities does not yet fulfil the target of 110 million either – by around 20 million EUR or by 18%.
- The 50 municipalities which are part of the 29 agglomerate areas of the medium-sized cities (incl. Panagyurishte) on the basis of information as of the end of 2014 does not fulfil the threshold of 393 million EUR (and the projects implemented on their territory amount, currently in total to grants worth 369 million EUR);
- As to the funds paid under the programme, none of the four requirements was met as of 31.12.2014.

At the same time, it should be noted that PA1 of OPRD covers projects amounting in total to grants of over 34 million EUR which is difficult or impossible to refer to a single agglomerate area or a municipality and they are not taken into account when calculating the achieved values. These are the project "Energy renovation of Bulgarian homes" of the MRDPW (contract number in UMIS BG161PO001-1.2.01-0001-C0001, the current value of the grant is 25, 6 million EUR)

as well as the projects of the Employment Agency and the Social Assistance Agency which are implemented simultaneously on the territory of several municipalities (agglomerate areas). Projects under the JESSICA initiative have not been taken into account either (contract number in UMIS BG161PO001-1.4.08-0001-C0001, budget 33 million EUR), which will be implemented mainly in 2015.

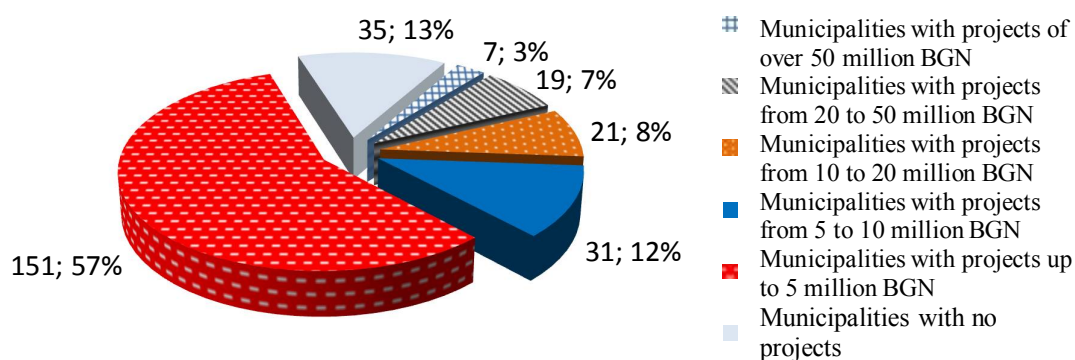
In view of the foregoing, it may be concluded that the set minimum thresholds of funds to be invested in the agglomerate areas in the country as part of the implementation of the programme strategy will be exceeded, albeit to a minimum degree.

Territorial distribution of the contracted funds

When juxtaposing the support under the programme with the number of inhabitants at the level of region and region of level 2, the data show that there are no great differences among the regions and areas in terms of grants received per 1 inhabitant of the respective territorial unit. The dispersion compared to the average value for the country (the coefficient of variation) at the level of region of level 2 is extremely low – 10% and the level of region – 7%. This, in turn, means that there is even distribution of financial resources under the programme on the territory of the whole country and there is no marked territorial concentration in individual regions or regions of level 2.

As to the concentration of support among the municipalities, there are, however, differences among the municipalities both in terms of the absolute amount of funds agreed under the programme (the value of grants) and in terms of the support per 1 inhabitant. The regions where there is the most marked concentration of funds are the ones where the largest cities (municipalities) in the country are – Sofia, Varna, Burgas, Plovdiv, Russe, Stara Zagora and Pleven. The distribution is relatively homogeneous in the other ones.

Figure 12: Distribution of the municipalities in terms of the number of projects and the total value of the projects



Source: Ecorys

The grants agreed under the programme per 1 inhabitant in the respective municipality vary considerably: there are, on average, 355 BGN grants per one inhabitant in the country (from the municipalities where the projects are implemented) but in the municipality of Belogradchik it is 1509 BGN/ inhabitant, while in the municipality of Elhovo – it is only 13 BGN/ inhabitant. The dispersion compared to the average value is considerable – 70%.

At the same time, it should be noted, however, that the maps of the territorial distribution do not show any particular territorial patterns – there is no concentration of support in particular regions or areas. Therefore, it may be concluded that the attraction of funds under the programme depends, to a large extent, on the needs and the capacity of the beneficiaries and on their activeness.

As to the territorial distribution in terms of types of interventions, the general conclusion is that the distribution of the interventions on the territory of the country is relatively even and there is no considerable territorial concentration. The exceptions to this are the project such as the Northern high-speed ring road and the National Museum Complex – projects which account for a considerable part of the resources for the respective type of investments. It is quite natural that, as to the absolute amount of the funds agreed under most types of investments, the largest municipalities are leaders while, as to the agreed funds per 1 inhabitant, the less populous ones are the leaders. At the same time, it should be taken into consideration that there can hardly be any conclusive findings as to the territorial concentration of the projects or funds in particular municipalities or regions. In some cases (e.g. healthcare projects) the number of projects is not sufficiently high while in other cases the number of projects implemented simultaneously on the territory of 2 or more municipalities is considerable. With some types of projects it is striking that there is a large number of municipalities which do not participate in the programme with projects – this, however, is determined by the nature of the operations and the schemes under the programme, e.g. the cultural infrastructure schemes. In view of the foregoing, the following main findings may be made:

- The supported projects on improving the educational infrastructure are relatively evenly distributed on the territory of the country. The amount of the agreed funds per 1 inhabitant is also normally distributed in the municipalities where such projects are implemented – viz. there is significant number of municipalities with disproportionally large support for the educational infrastructure juxtaposed to the number of its inhabitants.
- Projects on improving the cultural infrastructure are implemented on the territory of 46 municipalities. The distribution on the territory of the country and the distribution of funds are relatively even. An exception to this is the project of Sofia Municipality on the construction of the National Museum Complex (project No BG161PO001-1.1.05-0021-C0001) which accounts for 23 out of the total 89 million BGN allocated.
- Projects on the introduction of energy efficiency measures are implemented on the territory of 113 municipalities out of all the 28 regions in the country. The total amount of the support agreed under the programme for the projects in implementation follows the relatively normal distribution and there are no considerable differences. The differences become evident when it comes to the values per 1 inhabitant. The values vary considerably – from 2 BGN/ inhabitant in the capital to 440 BGN/ inhabitant in the municipality of Chavdar. However, this is mainly the result of the small number of people in some municipalities and not so much of the size of the projects they implement.
- There are in total 75 projects on urban environment which are being implemented on the territory of 51 municipalities in 27 out of the 28 regions in the country. Albeit relatively small in number (they are implemented on the territory of less than 20% of the country), the projects are relatively evenly distributed. As to the absolute amount of the agreed support, the distribution is also relatively even. As to the support per 1 inhabitant of the respective

municipality, there are more extreme deviations from the average one (75 BGN/ inhabitant) in some smaller municipalities – Dobrich (426 BGN/ 1 inhabitant), Beloslav (419 BGN/ 1 inhabitant) and Gotze Delchev (404 BGN/ 1 inhabitant).

- Risk prevention projects are implemented on the greater part of the territory of the country – on the territory of 143 municipalities out of all the regions in the country 144 projects are implemented. Notably, there is concentration of projects in the SWR and the SCR (39 projects each) while only 11 such projects are implemented in the NCR.
- Projects on improving the road infrastructure are implemented on the territory of 27 regions in the country (except for the region of Sliven). The distribution of funds per regions is relatively even, with the exception of the project of Sofia Municipality on the construction of the Northern High-speed Ring road which disproportionately large compared to the other projects in implementation. Support is agreed for it in the amount of 235 million BGN or nearly 30% of the budget for investments in road infrastructure.

The territorial distribution of the interventions in terms of the types of municipalities grouped according to the programme strategy (agglomerate areas, non-agglomerate areas) clearly shows that the main resource of the programme is concentrated in the municipalities which are part of the agglomerate areas. The table below shows the distribution of the support.

Table 48: Distribution of the funds agreed under OPRD in terms of types of interventions and areas

Amounts in BGN million

Type of intervention	Agglome rate area - Capital	Agglome rate areas – 6 largest cities	Agglome rate areas – medium- sized cities	Other municipali ties*	Some municipali ties**	Total
Educational infrastructure	31	75	79	45	0	230
Energy efficiency in the educational infrastructure	7	32	55	43	0	137
Social care infrastructure	1	7	34	1	3	46
Cultural infrastructure	39	21	29	0	0	89
Healthcare infrastructure	49	86	102	37	0	274
De-institutionalization	12	30	50	0	0	92
Urban environment	9	87	264	0	0	360
Risk prevention	16	44	87	53	1	201
Integrated urban transport	98	305	0	0	0	403
Road infrastructure	272	25	81	6	434	818
Tourist infrastructure and marketing	29	44	96	47	65	281

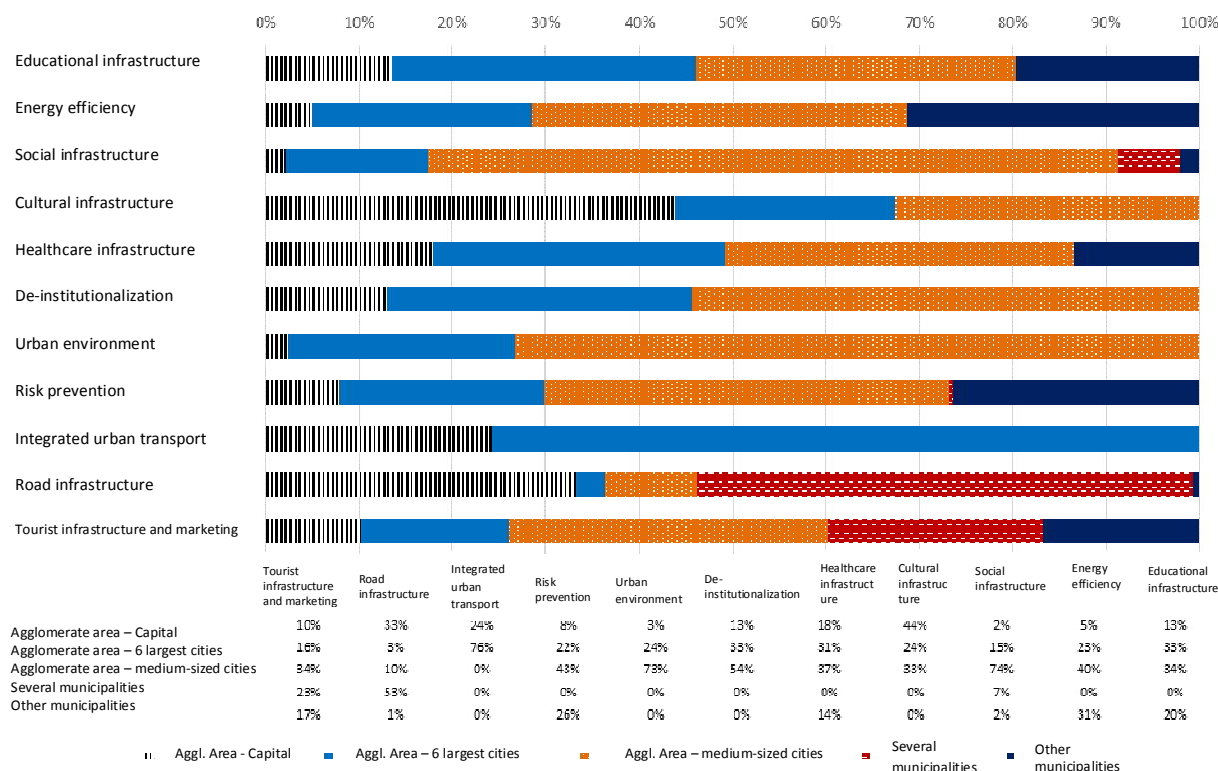
Source: own calculations (see Table 6 of the electronic appendixes)

* "Other municipalities" refers to the municipalities which are not part of defined agglomerate areas

** The column "Some municipalities" includes projects which are implemented on the territory of two or more municipalities in different areas

The data are presented in relative shares in the diagramme below for the sake of clarity.

Figure 13: Distribution of the financing agreed under OPRD in terms of types of interventions and areas (in relative shares)



Source: own calculations (see Table 6 of the electronic annexes)

The data on the distribution of the agreed funds show that the investments under OPRD outside the agglomerate areas are practically limited to the educational infrastructure (including energy efficiency), healthcare infrastructure, risk prevention and tourist infrastructure. As may be expected, with every type of investments the amount of grants under OPRD is considerably

higher to the municipalities in the agglomerate areas than to the municipalities outside them. The investments in the integrated urban transport made in the capital and the 6 largest cities are the most focused one. The investments in the cultural infrastructure are mostly in the capital agglomerate area (44%) which is not surprising either, considering the fact that it is natural for the capital to be a leading centre in the cultural life. Given the nature of the road infrastructure, in line with the expectations, the largest share of these investments is distributed among projects in several municipalities. The only result which comes as a relative surprise is the relatively large resources (73%) allocated to the urban environment in the medium-sized cities. In terms of effectiveness of these interventions, it should be expected that they will be concentrated in large urban centres, as in this way results can reach a greater number of people. The issue is discussed further below.

Territorial distribution of the interventions according to the adopted model of moderate polycentrism

In accordance with the National Concept on Spatial Development (2013-2015) the model of moderate polycentrism has been selected as a model urban development for the next 10 years. It also comprises a list of the cities – specific beneficiaries under priority axis 1 “Sustainable and integrated urban development” of the Operational Programme “Regions in Growth” for the period 2014-2020. The list contains 67 cities and town in total which are grouped at 4 levels.¹¹⁵ As a transition to the next regional development operation programme (for the period 2014-2020), the interventions in the educational, social and cultural infrastructure and in energy efficiency under OPRD were also considered in terms of the distribution adopted for the period 2014-2020. For the sake of an objective analysis, there are considered interventions (1) which are exclusively in populated places and (2) which have a relatively large number of projects or sites. As part of the programme there also other types of the interventions with a relatively large number of projects (risk prevention, tourist infrastructure and marketing); however, as they are not always carried out on the territory of the populated places and as the projects are diverse in nature, the latter are not part of the analysis.

As to the number of projects on improving urban environment 68% of all the implemented projects (77 projects in total) are in the cities and towns which are at levels from 1 to 3 which is indicative of a concentrated support under OPRD in the cities and towns which are the main points of reference of the selected model of spatial development.

Figure 14: Distribution of the supported projects aimed at improving the urban environment

¹¹⁵ National Concept on Spatial Development (for the period 2013 – 2025), p. 157.

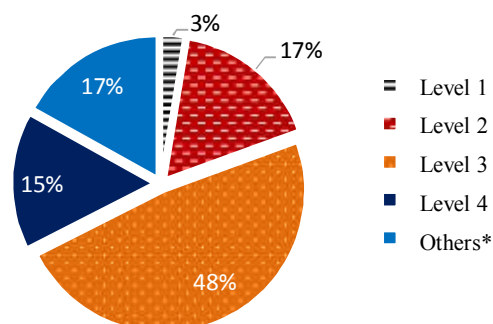


Diagramme: Ecorys; Source: MRDPW (see Table 7 of Appendix 1)

* "Others" in this and the following diagramme refers to sites which are not within the scope of any of the four levels specified in the National Concept on Spatial Development

As to the investments in the educational infrastructure, 419 buildings have been renovated or are being renovated in this programming period. As shown in the diagramme below, there is minimum number of sites in the capital (12, 3%) while there is a relatively similar number of supported sites at levels 2, 3 and 4. The small populated places is where the lowest number of supported sites are – these are mostly secondary schools or kindergartens.

Figure 15: Distribution of the supported sites of the education infrastructure in terms of hierarchy level

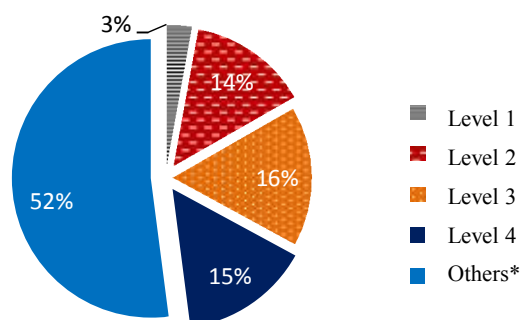


Diagramme: Ecorys; Source: MRDPW (see Table 7 of Appendix 1)

There are 147 supported sites from the social care infrastructure in total. The distribution is relatively similar to the one of the sites from the educational infrastructure and the difference is that there is an increased share of cities at level 3 at the expense of the small towns and villages.

Figure 16: Distribution of the supported sites from the social care infrastructure in terms of hierarchy level

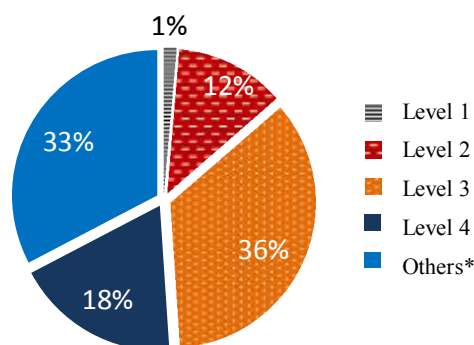


Diagramme: Ecorys; Source: MRDPW (see Table 7 of Appendix 1)

There are much less cultural sites – 63 in total. As shown in the diagramme below, with them, the share of cities and towns at levels 1 and 2 is considerably larger at the expense of the ones at levels 3 and 4.

Figure 17: Distribution of the supported sites from the cultural infrastructure in terms of hierarchy level

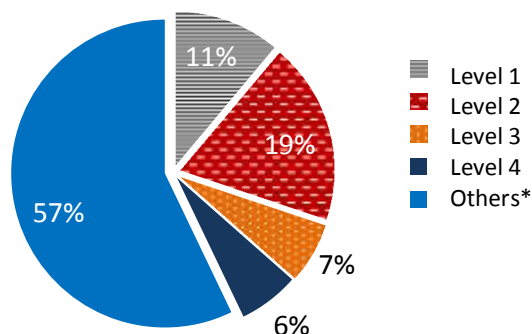


Diagramme: Ecorys; Source: MRDPW (see Table 7 of Appendix 1)

As to the distribution of the supported sites from schemes on improving energy efficiency, again the educational institutions in the small populated places have the largest share – out of 419 supported sites, 265 are in small towns or villages. Mostly daytime kindergartens and the secondary schools are subject to support.

Figure 18: Distribution of the supported sites from the energy efficiency schemes in the educational infrastructure in terms of hierarchy level

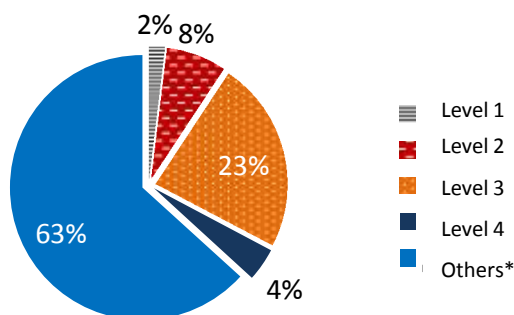


Diagramme: Ecorys; Source: MRDPW (see Table 7 of Appendix 1)

As shown in the figures above, the support under the programme has different focuses in this programming period. A great part of the supported sites of the cultural, educational and social care infrastructure under the programme are on the territory of the small populated places (over 50%), while less than 30% are on the territory of the cities of levels 2 and 3 (they are counted on to become a centre of attraction balancing the capital). On the other hand, the support aimed at improving the urban environment is concentrated precisely in these cities.

It may be concluded that OPRD is not completely in line with the logic of the concept on spatial development but no such objective was set for it. On basis of the fact that a number of smaller cities have already received support and have implemented major capital investments in the period 2007-2013 (field "Others" in the table above), it may be concluded that the focus during the 2014-2020 programming period may be on the cities and towns of 1-4 levels in accordance with the National Concept on Spatial Development.

Efficiency of the interventions at territorial level

The efficiency of the interventions at territorial level is analysed on the basis of the estimated costs per unit output/ result (ORUC) in terms of indicators and types of interventions which are grouped by regions and regions of level 2. In order to ensure the juxtaposition of the ORUC per interventions, they are centered and standardized, viz. an average value is calculated and they are divided by the standard deviation per indicators and interventions. Thus, ORUC values are calculated and they are rescaled so that their average value is 0 and their standard deviation is 1 regardless of the indicator and the type of intervention. Thus normalized, ORUC make it possible to calculate average values per districts and regions of level 2.

The diagramme below shows the average efficiency per regions and the lower values constitute the lower ORUC or the higher efficiency. The figure also shows that efficiency per regions varies in narrow range. It is the lowest for Haskovo Region (normalized ORUC=0.52), Gabrovo (normalized ORUC=0.41) and Veliko Turnovo (normalized ORUC=0.35) and the highest in Pleven (normalized ORUC=-0.29), Razgrad (normalized ORUC=-0.26) and Blagoevgrad (normalized ORUC=-0.23).

Figure 19: Cost-efficiency of OPRD funds in terms of regions



Source: own calculations (see Table 6 of the electronic appendixes)

At a higher aggregation level, in terms of planning regions of level 2, the absorption of funds under 2007-2013 OPRD in all the regions was relatively effective and it is only in the North-eastern region that efficiency is considerably lower. The normalized ORUC there is above one while it is slightly above zero in all other regions.

As to the efficiency of the individual types of interventions, we have examined the calculated ORUC in the educational infrastructure and for the projects on improving urban environment. The other types of interventions with calculated ORUC are not appropriate to analyse for one of the following three reasons: there are implemented on the territory of few municipalities (e.g.

integrated urban transport); there is no sufficient number of completed projects to justify the examination of the type of intervention; or the individual examination of the interventions' efficiency at the level of territorial units is inappropriate (e.g. road projects).

As to the efficiency of the interventions which have been examined and for which there is sufficient available information at municipality level, the following findings and conclusions may be made:

- While the average efficiency calculated on the basis of the data on all the indicators and interventions varies in relatively narrow range, it varies a lot in terms of regions in the case of the two selected types of interventions, educational infrastructure and urban environment.
- In the case of the interventions in the educational infrastructure there is higher efficiency in the larger cities and towns and in the higher education institutions compared to the smaller towns and the schools. This results mainly from the more possibilities for economies of scale in the case of the larger projects with more potential end beneficiaries.
- As to the funds invested in urban environment, the municipalities where the largest cities in the country are tend to be more effective. It is only logical because more people have access to the reconstructed urban sites. Accordingly, in terms of efficiency, it may be recommended that the investments in urban environment in the next programming period should be focused predominantly on the larger cities.

The analysis of the territorial distribution of efficiency confirms the expected conclusion that it is the interventions whose results are accessible to more people that are more effective. In this particular case, this is confirmed by the relatively higher efficiency of the interventions in the educational infrastructure and the urban environment in the larger cities.

? What is the **impact** of the interventions on the reduction of the regional differences in Bulgaria and compared to the average level for the EU?

What is the **impact** and contribution of the OPRD interventions to regional competitiveness and sustainable development?

This section presents a review of the differences between the regions and the role of the OPRD interventions starting from the state level to the district level.

The two evaluation issues are considered in parallel because, in the context of this evaluation, they refer to topics which overlap. According to the general definition of competitiveness adopted in the report, this term refers to the capacity of a particular territorial unit to provide sustainable and attractive environment for the citizens and the business to develop. In other words, this is a matter of quality of the social-economic conditions and their sustainability. The studies of the global, European and regional (for Bulgaria) competitiveness make use of a similar understanding of the term and make classifications in terms of a particular number of indicators for the social-economic situation of the respective territorial units. At the same time, we also analyse, in this report, the regional differences in Bulgaria and in the EU in terms of the indicators for the social-economic situation. In this sense, it may be concluded that both issues essentially come down to one and the same topic referring to the comparative analysis of the

social-economic situation of particular territorial units (states, regions of level 2 and regions). Apart from the overlap in terms of the sense, our responses to both issues also overlap in terms of the territorial scope because we apply the method of the multilayer comparative analysis in both cases.

Competitiveness – state level

There is a large number of scientific studies on the comparative analysis of the competitiveness¹¹⁶ of the economic regions in the world. There are different levels of analysis – some present a global picture of the global economy while other focus on the identification of regional and local differences. A key study of the first type is the periodic report of the World Economic Forum (WEF) which applies an innovative approach introducing the global competitiveness index. The study provides a world classification in terms of the results for this index. The latest report¹¹⁷ prepared in 2014 covers 144 countries and constitutes the most exhaustive evaluation of its kind. In this report Bulgaria is ranked 54-th in terms of the competitiveness level of the economy globally with results close to the average ones for the cluster of states in its group - Emerging and Developing Europe. The best ranked country in the EU for 2014 is Finland (4-th) and the country with the lowest results is Greece (81-th).

The ranking is based on the data collected for 119 indicators grouped in 12 pillars¹¹⁸. Bulgaria has the best indicators in the pillars “Macroeconomic environment” (36-th place) and “Technological readiness” (41-th place). The good place in the first case is mostly the result of the strict fiscal discipline in the period under consideration and especially of the lower level of external indebtedness (15-th place) while in the second case – of the good coverage of mobile networks and the relatively widely available internet access, including of high-speed connection. Bulgaria has the worst results in the area of “Institutions” (112-th place), “Innovations” (105-th place) and “Business sophistication” (105-th place). The key factors which determine the unsatisfactory situation in the first case mostly relate to the reported influence on political decisions (134-th place) and the judiciary system (126-th place). As to the innovations and business sophistication, there are insufficient achievements in the field of cluster development (129-th place) and of interaction between the universities and the industry in research and development (113-th place).

¹¹⁶ In this case, competitiveness generally refers to the capacity of a particular territorial unit to provide sustainable and attractive environment for the citizens and the business to develop. The definition is taken from: Annoni P. and Dijkstra L., Joint Research Centre (2013), EU Regional Competitiveness Index, it is available at:

http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf

¹¹⁷ Schwab, Klaus, World Economic Forum (2014), The Global Competitiveness Report 2014-2015 (Full Data Edition), available at: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf

¹¹⁸ The pillars are: Institutions, Infrastructure, Macroeconomic environment, Health and Primary Education, Higher Education and Training, Efficiency of the Commodity Markets, Labour Market Efficiency, Financial Market Development, Technological Readiness, Business Sophistication, Innovations.

Figure 20: Ranking in the EU in terms of the global competitiveness index (for 2014)

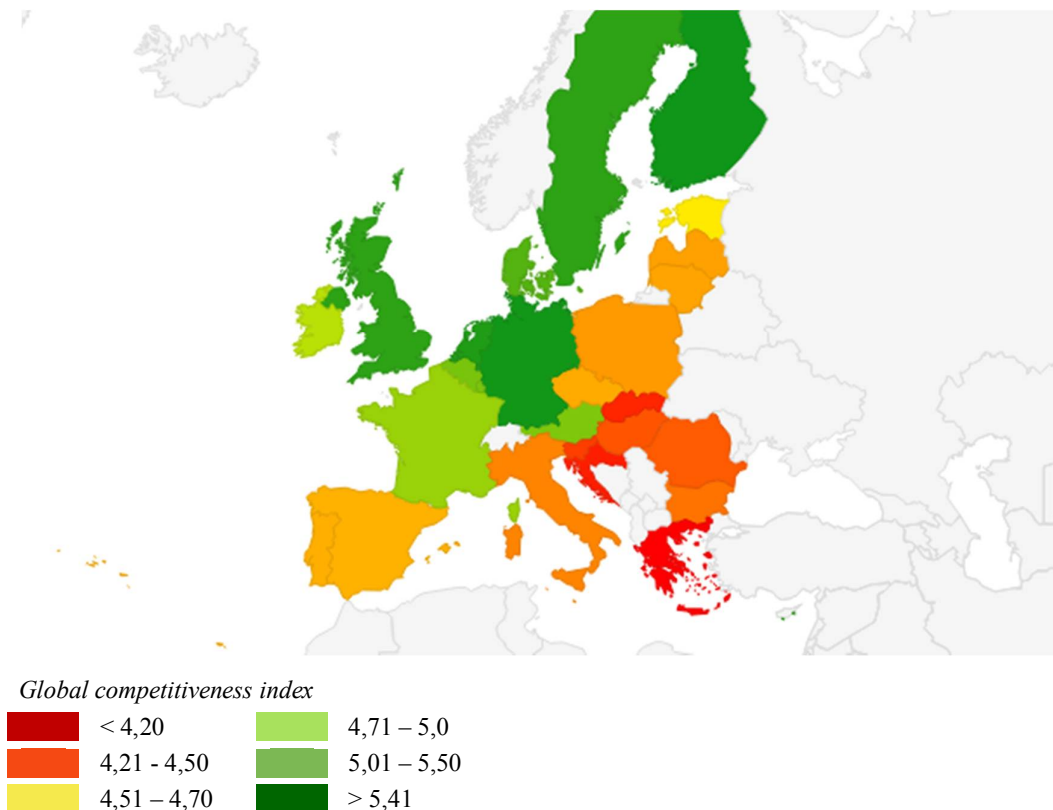


Diagramme: ECORYS; Source of the data: Schwab, Klaus, World Economic Forum (2014), The Global Competitiveness Report 2014-2015 (Full Data Edition), available at:
http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf

The map above clearly shows the relative place of Bulgaria compared to the other member states of the EU in terms of the 2014 competitiveness levels. The green colour indicates high competitiveness levels while the red colour – low levels. Finland, the Netherlands and Germany have the best results while Greece, Croatia and Slovakia have the worst results. This country has the results which are close to the average values for the EU (Estonia, Portugal and Spain) but it does not reach them although it ranks ahead of countries, such as Cyprus, Hungary and Romania.

In order to collect contextual information on the impact of the OPRD interventions on the competitiveness levels of the Bulgarian economy, it is necessary to juxtapose the latest results and the ones of the early stages of the programme implementation. To this end, the conclusions of the 2010 WEF report were considered.¹¹⁹ The results of Bulgaria for 2010 in terms of competitiveness levels were much lower than the ones for 2014 (see Figure 9). The country ranked 71-th while 4 year later it ranked 54-th which was a leap of 17 places globally. It is only Latvia, out of the EU member states, that goes up the most in the ranking – up 28 places – for the same period. For comparison, exactly half the EU member states neither kept their place in the

¹¹⁹ Schwab, Klaus, World Economic Forum (2010), The Global Competitiveness Report (2010-2011), available at:
http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

ranking nor managed to improve it. According to the findings of the 2010 report Bulgaria was very far away from the average competitiveness levels in the EU and it was even part of group of the three countries with worst indicators together with Greece and Croatia (which was not yet a member of the EU at the time).

Figure 21: Ranking in the EU in terms of the global competitiveness index (for 2010)

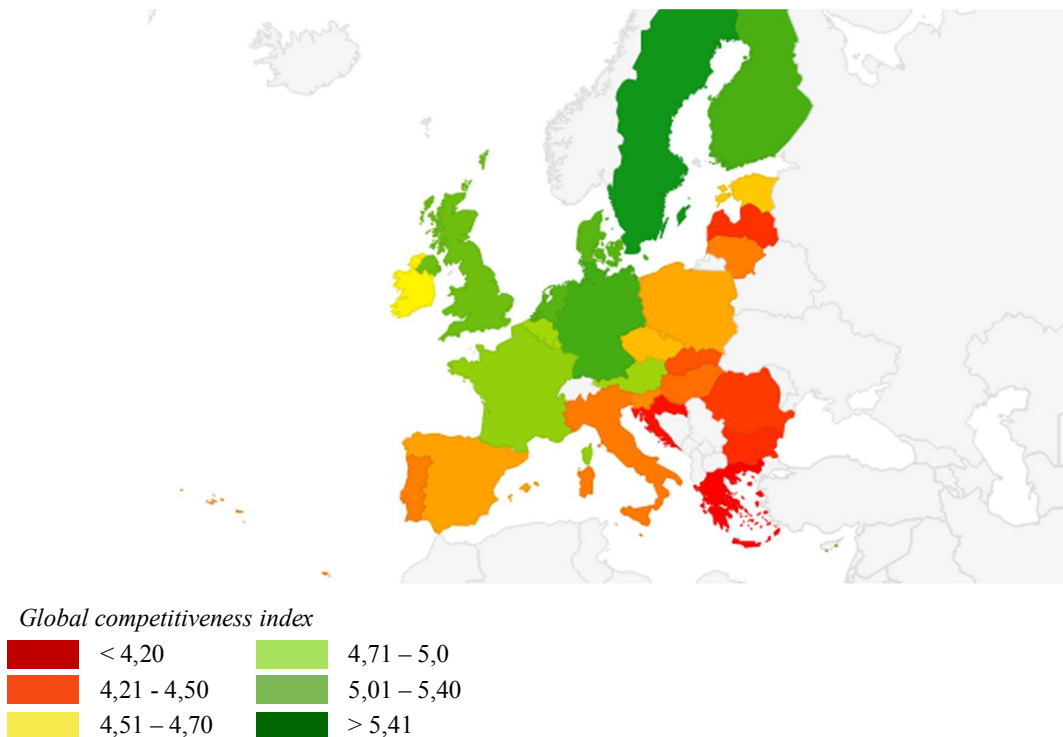


Diagramme: ECORYS; Source of data: Schwab, Klaus, World Economic Forum (2010), The Global Competitiveness Report (2010-2011), available at: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

The reason for the considerably change in the relative place of Bulgaria between 2010 and 2014 may be found by a review of the indexes of the individual pillars which make up the composite competitiveness index. In general, there is an overall improvement in the results of the individual groups of criteria (see the table below). It is only in the area of labour market efficiency that there is lower assessment for 2014 compared to the one for 2010 while there is no change in terms of the pillars Institutions and Innovations. It is important to note that the latter two pillars are the ones where the lowest values are kept – respectively 3,3 and 2,9. The best indicators in both reports are the ones in the field of health and primary education. The greatest improvement for the period under consideration is achieved in the areas of Technological readiness and Infrastructure where the differences are respectively 0,7 and 0,5. The pillar indicators Infrastructure is of key importance to this report because the OPRD interventions directly affect part of the reported values which include the quality of the entire infrastructure and of the quality of the roads. As shown in the table below, the value as to the quality of the road infrastructure¹²⁰

¹²⁰ Based on an annual study with the business. The methodology is presented in the WEF report.

is increased by one in 4 years and this might be attributed to the investments in the road infrastructure under OPRD 2007-2013.

The investments under OPRD have indirect effect on the indicators reported for the other pillars, viz. the contribution of the programme to the overall competitiveness level of the Bulgarian economy might be examined the best through the changes to the results in the Infrastructure pillar.

Table 49: Change in the competitiveness index of Bulgaria (2010-2014)

Pillar	2010	2014	Difference
Institutions	3,3	3,3	+ 0,0
Infrastructure, incl. road infrastructure	3,6 2,1	4,1 3,1	+ 0,5 + 1
Macroeconomic environment	5,0	5,4	+ 0,4
Health and primary education	5,8	6,0	+ 0,2
Higher education and training	4,1	4,5	+ 0,4
Stock market efficiency	4,0	4,4	+ 0,4
Labour market efficiency	4,5	4,2	- 0,3
Financial market development	4,0	4,2	+ 0,2
Technological readiness	4,0	4,7	+ 0,7
Market size	3,8	3,9	+ 0,1
Business sophistication	3,5	3,6	+ 0,1
Innovations	2,9	2,9	+ 0,0

Source: Schwab, Klaus, *World Economic Forum (2010), The Global Competitiveness Report (2010-2011)*, available at: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

Schwab, Klaus, *World Economic Forum (2014), The Global Competitiveness Report 2014-2015 (Full Data Edition)*, available at: http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf

The general review provided in the WEC reports gives a clear idea of the overall competitiveness level of the Bulgarian economy in comparative terms (against the backdrop of the global economy). However, this level of analysis does not make it possible to draw conclusions as to the regional development in Bulgaria and as to the competitiveness of the individual regions. In this sense, the level of differences in the country cannot be evaluated, nor can it be compared to the average levels for the EU and these are the key issues in this case. Therefore, this report shall focus on a different aspect of competitiveness which in many respects is similar to the one in the WER reports but which it is different in that it focuses on the territory of the EU and applies a lower level of analysis – region of level 2 (NUTS 2).

Competitiveness – region level of NUTS 2

The publication of the Joint Research Center (JRC) of the EC concerns the adaptation of the competitiveness index to the study of the regional differences in the EU¹²¹. As with the WEF report, this study also ranks the regions in terms of the results calculated by using a set of social-economic indicators. The objective of the study is to improve the understanding of territorial competitiveness at regional level by presenting the strengths and weaknesses of all the regions in the EU. Thus, there is identification of the factors which are an obstacle to the development of a particular region and informed decisions are made as to the nature of the social-economic measures to be applied on site.

The composite index indicating the competitiveness level of the respective region is a function of results in terms of indicators grouped in 11 pillars¹²². As part of this study the pillar Infrastructure is most directly linked to the OPRD interventions as is also the case with the WEF publication. However, it should be noted that JRC report makes use of other indicators for the evaluation in the field of infrastructure: potential access to motorways, potential access to railway transport and number of passenger flights.

According to the result of the study, six Bulgarian regions of NUTS 2 level have very low competitiveness levels for 2013. The region with the lowest competitiveness index in the entire European Union is the North-western region of level 2 and 5 Bulgarian regions of level 2 are among the 20 regions with the worst performance. It is only the South-western region of level 2 that is included in the group of regions with the lowest competitiveness levels and yet its result is far lower than the average values for the EU. The Bulgarian regions register the lowest values in terms of the pillar Institutions (the WER report points to weaknesses in terms of this pillar at national level too) and with respect to it the best ranked region (South Central) is only at 248-th place (out of a total of 262 regions) and the worst performer (North-western) is ranked last at 261 place (see the table below). There is a similar ranking of Bulgarian regions also in the category "Technological readiness"¹²³ with respect to which the South-western regions ranks 244 (out of 262 possible ones) and the North-western ranks 259. There are particularly poor results in the field of healthcare where the best ranked Bulgarian region is the South-western (228 place) and the worst ranked – the South-eastern (261 out of 262). It is only the South-western region that has good results in the category "Business sophistication" and ranks 29-th in the EU out of 261. However, the other Bulgarian regions rank much lower. The South-western region of level 2 registers an average result in terms of labour market efficiency – 130-th place (out of 262). Taking into account all the competitiveness indicators and calculating the average results for each state (while controlling the number of the population), Bulgaria ranks penultimate at 27-th place in the EU

Table 50: Ranking at EU level of the NUTS 2 regions in terms of the regional competitiveness index (places)

¹²¹ Annoni P. and Dijkstra L., Joint Research Centre (2013), EU Regional Competitiveness Index, available t: http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf

¹²² The pillars in this study are similar but not the same as the ones in the WEF ranking: Institutions, Macroeconomic stability, Infrastructure, Health, Primary education, Higher education and life-long learning, Labour market efficiency, Market size, Technological readiness, Business sophistication, Innovation

¹²³ The difference from the WEF report where Bulgaria ranks relatively high in terms of this pillar results from the use of different indicators in the two rankings. The WEF makes use of three additional indicators: enterprises with online orders; enterprises with online purchases; enterprises with high-speed internet access.

Pillar (total places)/ NUTS 2 region	NW	NC	NE	SW	SC	SE
Institutions (262)	257	254	234	249	235	253
Macroeconomic stability ¹²⁴	Non-appl.	Non-appl.	Non-appl.	Non-appl.	Non-appl.	Non-appl.
Infrastructure (259)	234	236	226	199	215	232
Health (262)	250	246	257	228	243	261
Primary education	Non-appl.	Non-appl.	Non-appl.	Non-appl.	Non-appl.	Non-appl.
Higher education and life-long learning (258)	257	225	229	187	238	241
Labour market efficiency (262)	234	229	232	130	228	220
Market size (261)	258	251	259	231	256	261
Technological readiness (262)	259	251	260	244	252	256
Business sophistication (261)	230	237	191	29	245	231
Innovation (262)	255	247	245	143	254	261
Total	262	246	247	208	248	259

Source: Annoni P. and Dijkstra L., Joint Research Centre (2013), *EU Regional Competitiveness Index*, available at: http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf

The review of the competitiveness situation of the Bulgarian regions leads to the conclusion that they lag far behind the average results for the EU. In this sense, the regional differences between the Bulgarian NUTS 2 regions and the average region of the EU are insignificant. In the more general terms of competitiveness of the EU regions, there are no particular differences between the NUTS 2 regions in Bulgaria: they are all grouped in the category of regions at the first stage of development (out of 5 stages of development) with the exception of the South-western region which is in the second group.

The information provided so far serves to outline a static picture describing the competitiveness level of the Bulgarian NUTS 2 regions but does not give a dynamic idea of the development of the regions. To this end, a comparison was made of the findings of the previous 2010 report of the WEF on the regional competitiveness in the EU¹²⁵. In absolute terms, the competitiveness indexes of 5 Bulgarian NUTS 2 regions decreased between 2010 and 2013 and it is only in the South-eastern region that registers an insignificant increase. The comparison of the relative places in the general ranking may only be made with clear condition that the region ranking methodology was changed in the second report (including a change to some of the indicators used) which also included two NUTS 2 regions of the new member state of the EU – Croatia. Having in mind this condition, it may be noted that there is no significant improvement in the

¹²⁴ This category, together with Primary education, is measured at national level.

¹²⁵ Annoni P. and Kozovska K., Joint Research Centre (2010), *EU Regional Competitiveness Index*, available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC58169/rci_eur_report.pdf

place of the Bulgarian NUTS 2 regions (see the table below) unlike the improvement in the competitiveness levels of the Bulgarian economy in the WER ranking.

It is only the Northern central and the North-eastern regions that register a leap of 8 places while all the other regions either kept their place or lost their place in the ranking (although it is only the latter that registers an increase in the index in absolute terms). The NUTS 2 regions with the best and the worst indicators in Bulgaria kept their places in both reports. In this sense, it may be concluded that there are no significant difference in the competitiveness level of the Bulgarian NUTS 2 regions between 2010 and 2013 and they remain low in both period under consideration.

Based on the results of the competitiveness index from JRS, the OPRD interventions did not contribute to achieving the best competitive place of the Bulgarian NUTS 2 regions. At the same time, the methodology used by JRS to determine the index needs to be taken into account too. For example, the group of indicators Infrastructure includes three indicators which are related to motorways, railway transport and the number of passenger flights. It is obvious that the investments under the programme have nothing to do with all three indicators. That is why, in order to verify the findings made in the JRS report, this section examines below the additional indicators which show the regional differences.

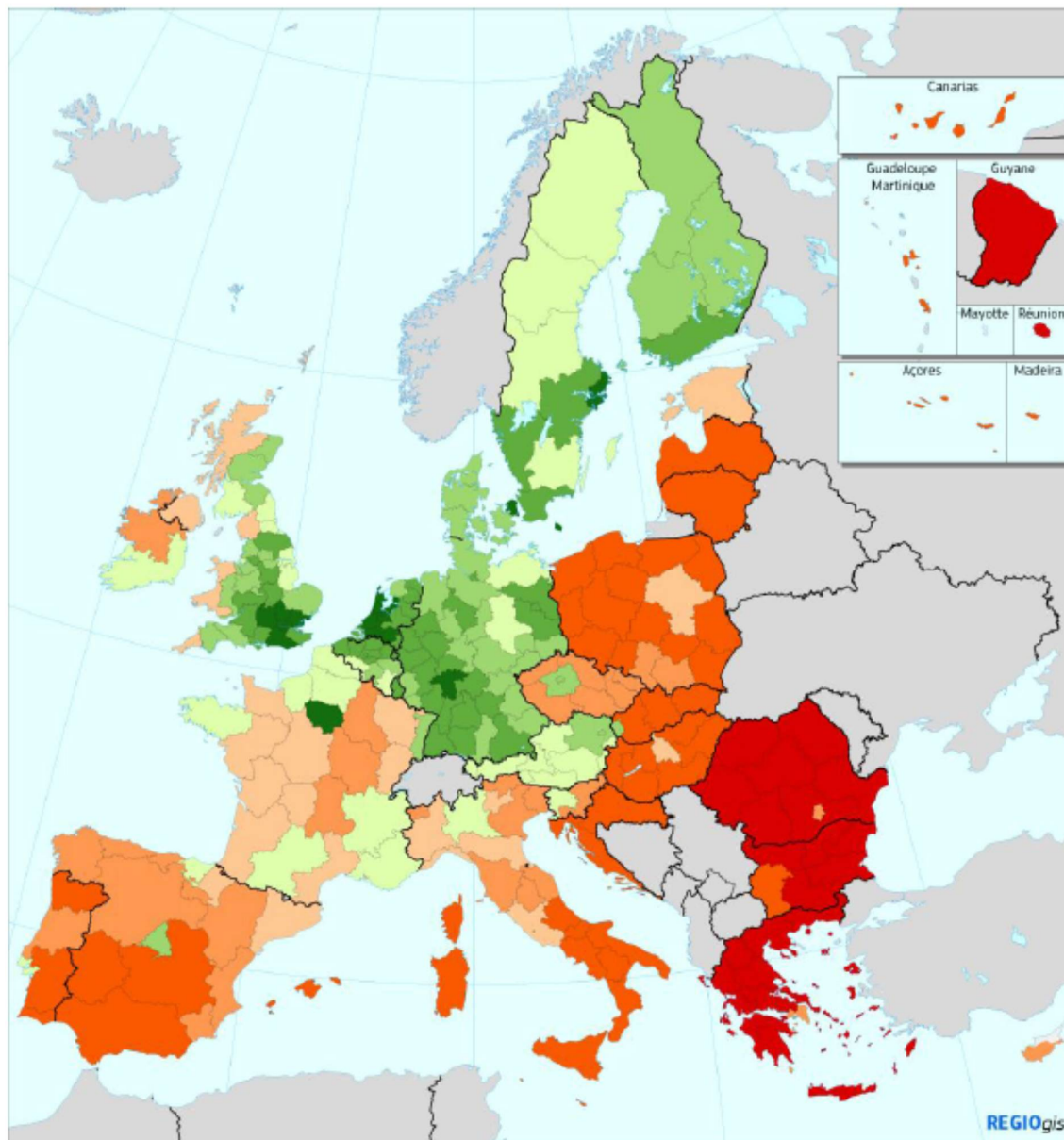
Table 51: Relative ranking at EU level of the NUTS 2 regions in term of the regional competitiveness index (index and place)

Year/ NUTS 2 region	NW	NC	NE	SW	SC	SE
2010: index (place out of 268)	-1,387 (262)	-1,275 (254)	-1,294 (256)	-0,562 (203)	-1.144 (243)	-1,291 (255)
2013: index (place out of 262)	-1,481 (262)	-1,279 (246)	-1,292 (247)	-0,715 (208)	-1,302 (248)	-1,403 (259)

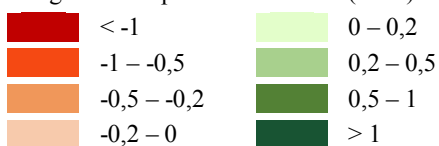
Source: Annoni P. and Dijkstra L., Joint Research Centre (2013), *EU Regional Competitiveness Index*, available at: http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf;
Annoni P. and Kozovska K., Joint Research Centre (2010), *EU Regional Competitiveness Index*, available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC58169/rci_eur_report.pdf

The map below shows the summarized results for the EU regions of NUTS 2 level for 2013. There are 268 regions grouped in 8 groups in terms of their competitiveness index which corresponds to the colour variations of the map. The region with the highest competitiveness index is Utrecht, the Netherlands, and the one with the lowest index – the North-western region, Bulgaria.

Figure 22: Regional competitiveness index at EU level



Regional competitiveness index (2013)



Source: Annoni P. and Dijkstra L., Joint Research Centre (2013), *EU Regional Competitiveness Index*, page. iv, available at:

http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/6th_report/rci_2013_report_final.pdf

It is important to note that the findings are based on limited information, viz. there are data only for 2010 and 2013 while many effects of the OPRD interventions will only be felt in the long term. Furthermore, although this is a regional index, the level of its analysis does not make it possible to report the differentiated development rate in some Bulgarian regions (regions intended as smaller territorial units). In order to have a more in-depth analysis of the competitiveness of the Bulgarian regions, the review will focus on lower levels of analysis.

Competitiveness – District level

Appropriate for the purposes of the analysis at district level is the regular study of the regional competitiveness, carried out by the Institute for Market Economics (IME)¹²⁶. By dividing the Bulgarian economy into 28 regions (instead of 6), this study provides the necessary basis for drawing more in-depth conclusions on the differentiated regional development of the country. As already reported, no significant differences in the regional development in Bulgaria have been found at the level of the JRC's analysis, with the exception of the marginally better position of the South-eastern NUTS 2 Region. It is noteworthy that the object of study of this publication differs from the approach adopted by JRC, i.e. it is not a question of analysing the discrepancies between the levels of competitiveness, but of providing a wider (comparative) assessment of the socio-economic condition of the regions in Bulgaria. Nevertheless, the competitiveness issue is not completely different from that concerning the socio-economic condition, as many of the elements studied are contained in both analyses: infrastructure, education, healthcare, administration (institutions). This allows to compare the conclusions of both studies with a view to extending and complementing them.

In a series of reports (for 2012, 2013 and 2014) the Bulgarian districts have been grouped in clusters, according to their level of socio-economic development. The cluster analysis is meaningful because it allows to outline and analyse specific types of regional profiles. A total of 8 groups (clusters)¹²⁷ have been put forward for the purposes of the classification, and the population of each of them is fixed according to 8 pillars of criteria¹²⁸. Like the reports of WEF and JRC, the IME's study also established a direct link between the OPRD and the indicators under pillar "Infrastructure", which includes the indicators "Road network density"¹²⁹ and "Share of the road surface in good condition"¹³⁰. Unlike the other two studies, however, the IME's reports include the pillar "Environment", which covers the indicators "Harmful substances emissions in the atmosphere per t/m2 of territory"¹³¹ and "Citizens' evaluation of quality of environment". A link can be established also between these indicators and the investments under OPRD, although it is not as direct as with the indicators under pillar "Infrastructure". OPRD

¹²⁶ Institute for Market Economics (2014), "Regional profiles: indicators for development", Sofia, available at: http://www.regionalprofiles.bg/var/docs/Editions/Regional_Profiles_2014.pdf

¹²⁷ The groups (clusters) are: "Very good socio-economic condition", "Good socio-economic condition", "Contrasts in the socio-economic condition", "Average socio-economic condition", "Contrasts in the socio-economic development", "Contrasts in the socio-economic condition and development", "Contrasts in the socio-economic condition, negative trends", "Very poor socio-economic condition".

¹²⁸ The pillars are: "Economy", "Taxes and administration", "Infrastructure", "Demography", "Education", "Healthcare", "Environment", "Social environment".

¹²⁹ The indicator density of the road network measures the sum of the length of motorways and roads (first, second and third class) relative to the respective region. The indicator excludes streets in the settlements.

¹³⁰ The indicator is not included in the index of the report for 2014

¹³¹ As described in the IME's methodology, this indicator measures in practice "Harmful substances emissions per t./m2 of territory"

refers also, albeit to a limited extent, to the indicator used "Number of visits to theaters or cinemas per capita of the average annual population", which falls under pillar "Social environment".

In the report for 2014, Sofia (capital) is a separate cluster, as it significantly differs from all other districts in Bulgaria in terms of its levels of socio-economic development. It should be noted that it is the capital that is the major factor underlying the better results of the South-western NUTS 2 Region, reported by the JRC's study. However, what the JRC's publication does not take into account are the other regional centres, which demonstrate advanced development. According to IME they are: Blagoevgrad, Bourgas, Varna and Plovdiv, where the economy is relatively better developed and the labour market conditions create a favourable environment for development of business activities. The underdeveloped districts in Bulgaria, according to the IME's study, are: Razgrad, Silistra, Targovishte, Lovech and Montana, which have the worst-performing economy, especially in the fields of education, healthcare and infrastructure. Attention should be paid to the fact that all districts in this cluster are situated in Northern Bulgaria, which is generally in a less satisfactory socio-economic condition compared to the southern part of the country. This conclusion is confirmed by the fact that three out of the four districts in the cluster "Good socio-economic condition" are situated in Southern Bulgaria. Sliven, Pazardzhik and Sofia (district) rank not far from the last 5 regions, where the negative trends in the infrastructure and the category "Taxes and administration" determine the poor performance of the socio-economic development.

To enable the drawing of a dynamic picture of the process of socio-economic development of the regions (districts) in Bulgaria, the conclusions of the IME's report for 2012 will be taken into account¹³². Since this is the first report in a series of reports, it is impossible to follow the pattern of this review, which takes 2010 as a reference point for comparison. The comparison, albeit to some extent inconsistent, is nonetheless useful with a view to identifying differentiated trends in the regional development. In the 2012 report, Sofia (capital) is the only district in a "very good socio-economic condition", outpacing all other regions by level of competitiveness. However, certain negative trends emerging in the capital were reported, such as worsened conditions for development of business related mostly to higher taxes, increased levels of crime, combined with low confidence in law enforcement authorities. The regions in good socio-economic condition are the same as in the 2014 report, including Blagoevgrad, Bourgas, Varna and Plovdiv. They have better performance not only in the economic sphere, but also in the field of demographic development, and the negative trends, valid throughout the country, are least pronounced in Bourgas and Blagoevgrad. The least developed districts in Bulgaria are Razgrad and Silistra, whose status remained unchanged in the 2014 report. These two regions are characterised by a worsened condition of both the economy and social environment, since the depopulation processes and increase in the age ratio have become chronic. Similar are the results observed in the districts included in the cluster "Poor socio-economic condition", covering 8 districts: Veliko Tarnovo, Lovech, Pazardzhik, Pernik, Sliven, Haskovo, Shumen, Yambol. This group of districts has the least developed infrastructure.

¹³² Institute for Market Economics (2012), "Regional profiles: indicators for development", Sofia, available at: http://www.regionalprofiles.bg/var/docs/Editions/Regional_Profiles_2012_BG.pdf

Table 52: Score changes (from 1 to 5) by key categories of indicators

District	2012		2014		Divergence	
	Infra-structure	Environ-ment	Infra-structure	Environ-ment	Infra-structure	Environ-ment
Blagoevgrad	2	3	3	5	1	2
Burgas	3	5	3	4	0	-1
Varna	3	4	5	1	2	-3
Veliko Tarnovo	3	3	3	4	0	1
Vidin	3	1	3	2	0	1
Vratsa	3	3	2	4	-1	1
Gabrovo	4	5	4	5	0	0
Dobrich	2	4	3	5	1	1
Kurdzhali	1	2	1	4	0	2
Kystendil	2	4	4	2	2	-2
Lovech	2	2	1	3	-1	1
Montana	2	3	1	5	-1	2
Pazardzhik	1	3	1	4	0	1
Pernik	2	2	4	1	2	-1
Pleven	3	3	3	4	0	1
Plovdiv	3	3	5	4	2	1
Razgrad	3	3	3	4	0	1
Rousse	4	2	4	4	0	2
Silistra	2	2	2	3	0	1
Sliven	1	4	3	5	2	1
Smolyan	2	4	2	5	0	1
Sofia (capital)	5	4	5	1	0	-3
Sofia	4	3	2	5	-2	2
Stara Zagora	2	1	4	1	2	0
Targovishte	2	2	1	5	-1	3
Haskovo	3	2	4	4	1	2
Shumen	2	4	4	5	2	1
Yambol	1	3	3	4	2	1

Source: Institute for Market Economics (2012), "Regional profiles: indicators for development", Sofia, available at: http://www.regionalprofiles.bg/var/docs/Editions/Regional_Profiles_2012_BG.pdf

Institute for Market Economics (2014), "Regional profiles: indicators for development", Sofia, available at: http://www.regionalprofiles.bg/var/docs/Editions/Regional_Profiles_2014.pdf

It would be interesting to make an overall comparison between the clusterisation of the regions according to the IME, and the positions of the regions in terms of their activity under OPRD – the values of the projects implemented, the number of completed and ongoing projects and the amount of support per 1 inhabitant.

Table 53: Comparison between the district clusterization and the support under OPRD

District	Cluster level	Values of the projects (grants, million BGN)	Number of projects	Population	Grants (BGN) / inhabitant
Sofia - city	1	536	42	1 305 975	411
Varna	2	236	45	473 745	498
Plovdiv	2	213	74	678 528	313
Bourgas	2	212	58	414 320	512
Blagoevgrad	2	131	67	319 135	412
Stara Zagora	3	103	34	328 968	314
Veliko Tarnovo	4	119	49	252 353	473
Rousse	4	92	21	230 682	399
Dobrich	4	82	36	185 562	444
Haskovo	4	72	35	240 494	300
Shumen	4	63	36	178 437	354
Pernik	4	53	19	129 468	408
Pleven	5	114	38	261 166	438
Smolyan	5	86	38	117 485	736
Gabrovo	5	56	28	119 121	474
Yambol	5	56	22	127 913	439
Vidin	5	42	21	96 506	436
Kardzhali	6	72	29	150 973	478
Vratsa	6	65	30	179 985	359
Kyustendil	6	41	24	131 557	314
Pazardzhik	7	97	50	270 504	360
Sofia district	7	76	58	242 066	314
Sliven	7	36	17	194 635	187
Lovech	8	92	38	136 649	676
Targovishte	8	71	22	118 253	599
Montana	8	62	31	142 629	437
Razgrad	8	45	17	121 380	368
Silistra	8	39	21	116 626	336

Source: own calculations.

As evident from the table above, the regions at the top of the IME's ranking are also those on the territory of which projects receiving the greatest amount of funding under the Programme are implemented. There are several exceptions – Pleven, Pazardzhik and Lovech districts – which, due to their specific characteristics, are ranked below in the IME's ranking, although they received considerable support under the Programme. These exceptions do not change the general trend illustrated by the average values of the grants contracted under OPRD, grouped in clusters¹³³.

The number of the projects implemented is more immediately related to the capacity of the local administrations than to the socio-economic development, but it is interesting to track this correlation as well. As a whole, the regions ranked ahead are also the ones having greater number of completed/ongoing projects (with the exception of Sofia). Most notably, the number of projects implemented in Pazardzhik and Sofia districts, albeit being below in the ranking, is considerably higher (50 and 58 respectively) compared to the average number of projects (36), whereas hardly 21 projects are implemented in Rousse district. No important conclusions can be drawn on the amount of funds implemented per resident in the respective district.

More interesting comparisons and analysis could be made with respect to the categories of indicators, which are directly affected by the interventions under OPRD. These are characterised by opposing trends. 11 districts (or about 40%) obtained better ratings with respect to the condition of the existing infrastructure in 2014 than in 2012, which means that according to the IME's study, the condition of the infrastructure in the most part of the country is deteriorating (or is not improving). In contrast, the ratings of the majority of the districts under pillar "Environment" improve, and negative trend is observed in only 5 cases between 2012 and 2014. The number of districts in which the levels of the indicators under both pillars increase is relatively small – 7. It is noteworthy that no district with deteriorating performance under both pillars has been reported.

Due to the large number of indicators used in the IME's analysis, only the indicators which appear to have a stronger relation to the investments under OPRD have been selected in this evaluation. These indicators are as follows:

- Share of the road surface in good condition, since a link with the road rehabilitation investments under PA2 of OPRD can be established
- Emission of harmful substances in the atmosphere per t/m², since, although to a limited extent, a link with the energy efficiency investments under PA1 and PA4 of OPRD can be established

The indicator "Road network density" has not been included, as during the period under consideration there were no completed investments in new roads under OPRD. The indicator "Citizens' evaluation of environmental quality" has not been included due to the large number of factors beyond OPRD, which have impact on the citizens' perceptions of the quality of environment.

The results regarding the share of the road surface in good condition are presented below.

¹³³ Cluster level 1 – 536 mill. of grants on average; Cluster level 2 – 198 mill. of grants on average; Cluster level 3 – 103 mill. of grants on average; Cluster level 4 – 80 mill. of grants on average; Cluster level 5 – 71 mill. of grants on average; Cluster level 6 – 60 mill. of grants on average; Cluster level 7 – 70 mill. of grants on average; Cluster level 8 – 62 mill. of grants on average

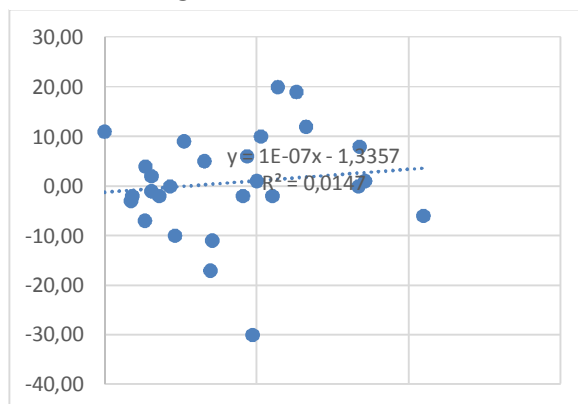
Table 54: Share of the road surface in good condition

	2010	2011	2012	2013	Divergence - 2013-2010
Blagoevgrad	39,03	56,57	55,00	51,88	12,85
Burgas	21,81	22,09	29,00	27,14	5,33
Varna	23,10	36,71	39,00	42,58	19,48
Veliko Tarnovo	55,74	30,24	23,58	25,69	-30,04
Vidin	43,43	29,97	29,43	32,30	-11,13
Vratsa	28,60	29,27	26,68	17,93	-10,67
Gabrovo	24,56	31,43	32,00	36,41	11,85
Dobrich	47,89	45,15	46,00	45,77	-2,13
Kardzhali	23,76	24,61	27,00	25,52	1,76
Kyustendil	49,11	49,82	50,00	46,41	-2,70
Lovech	36,08	40,09	43,00	44,79	8,71
Montana	24,75	25,84	22,00	29,08	4,32
Pazardzhik	43,37	42,97	44,00	52,63	9,26
Pernik	48,71	41,72	52,00	48,91	0,20
Pleven	28,53	29,20	31,00	38,85	10,31
Plovdiv	49,81	47,54	48,00	43,66	-6,15
Razgrad	34,94	34,63	32,00	34,49	-0,46
Rousse	30,57	23,92	26,00	29,02	-1,56
Silistra	24,80	40,04	39,00	44,81	20,02
Sliven	82,50	82,00	82,00	79,35	-3,15
Smolyan	43,78	42,67	41,00	45,29	1,51
Sofia (capital)	0,00	0,00	0,00	0,00	0,00
Sofia	30,74	36,23	36,00	28,64	-2,10
Stara Zagora	60,44	59,35	59,00	53,43	-7,01
Targovishte	55,00	54,20	58,00	52,03	-2,97
Haskovo	51,47	41,95	44,00	33,58	-17,90
Shumen	30,12	18,90	19,00	36,32	6,21
Yambol	48,01	54,63	54,00	50,26	2,25
Bulgaria	30,88	33,39	40,28	39,58	8,70

Source: Institute for Market Economics (2012) based on the information from RIA

As evident from the data in the table, the share of the road surface in good condition at national level increased during the period 2010-2013, which is a positive trend. This general trend does not cover all districts and in practice, the road surface has been deteriorating in half of them (13). It should be also taken into account that no longstanding trends can be noted at regional level according to the statistical data.

Figure 23: Statistical correlation between the project implementation under OPRD and the share of the road surface in good condition



Interesting is the question to what extent a link can be established between the road rehabilitation funds paid up under OPRD and

the share of road surface in good condition. As evident from the graphics to the left, displaying the districts depending on the funds received under PA2 (schemes 2.1.01 and 2.1.02) and the divergence in the share of road surface in good quality for the period 2010-2013, such link cannot be estimated. For instance, in one of the districts, where funds under PA2 (Plovdiv) were invested according to the data provided by RIA, the share of the road surface in good condition has slightly decreased.

These unexpected results stem mainly from the very definition of the indicator "Share of roads the condition of which is assessed by RIA as "good", since such definition leaves room for many interpretations.

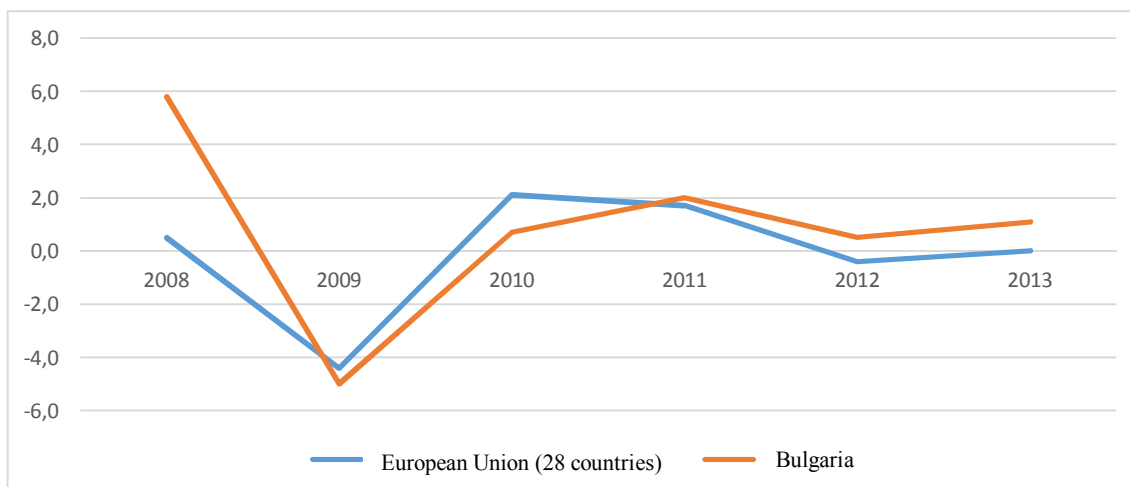
In view of the relative irrelevance of the indexes and indicators used in the studies reviewed above, the team of evaluators has analysed selected key macroeconomic indicators for the period 2008-2013, as well as the contribution of OPRD to these indicators. The overview presented below covers indicators, the dynamics of which serves to outline a general picture of the macroeconomic environment in which the interventions under Operational Programme Regional Development 2007-2013 take place. It is noteworthy that the specifics of the environment constitute not only a basis for the realization of the Programme but also, to some extent, a function of its temporal scope. That is why a quantitative assessment of the contribution resulting from the implementation of OPRD to the values achieved of the indicators in consideration will be included in this overview, based on the results produced through the macroeconomic simulation model SIBILA.

Gross domestic product

Generally, the GDP growth in Bulgaria is higher than the EU average during the period under consideration. In 2009 and 2010 alone, lower values than the EU average were reported in the country. In 2009 when the effects of the world economic crisis were most tangible, all EU countries experienced considerable negative growth, with exception of Poland, where the GDP volume marked a steady growth of 2,6%. Bulgaria saw significantly sharp drop (10,8 p.p.), because of the significantly higher preliminary rates maintained in the country during the years preceding the crisis. Similar is the case with the other Eastern and South-eastern EU Member States, such as Lithuania (17,4 p.p.), Latvia (13 p.p.) and Romania (15,6 p.p.). In 2010 the majority of the Member States, including Bulgaria, achieved growth, albeit more limited than the EU average. In 2011, 2012 and 2013 the GDP growth of the country continuously exceeded the EU average. It should be noted that the interventions under OPRD has played a key role in overcoming the sharp drop from 2009, the estimates indicating that for the period 2010-2015 the Programme has contributed, on average, up to 10,2% to the realized GDP growth. The net impact

is most tangible in the "Construction" and "Services" sectors where the accumulated effect of the OPRD on the real GDP as of 2014 is 7,7% and 0,2% respectively.

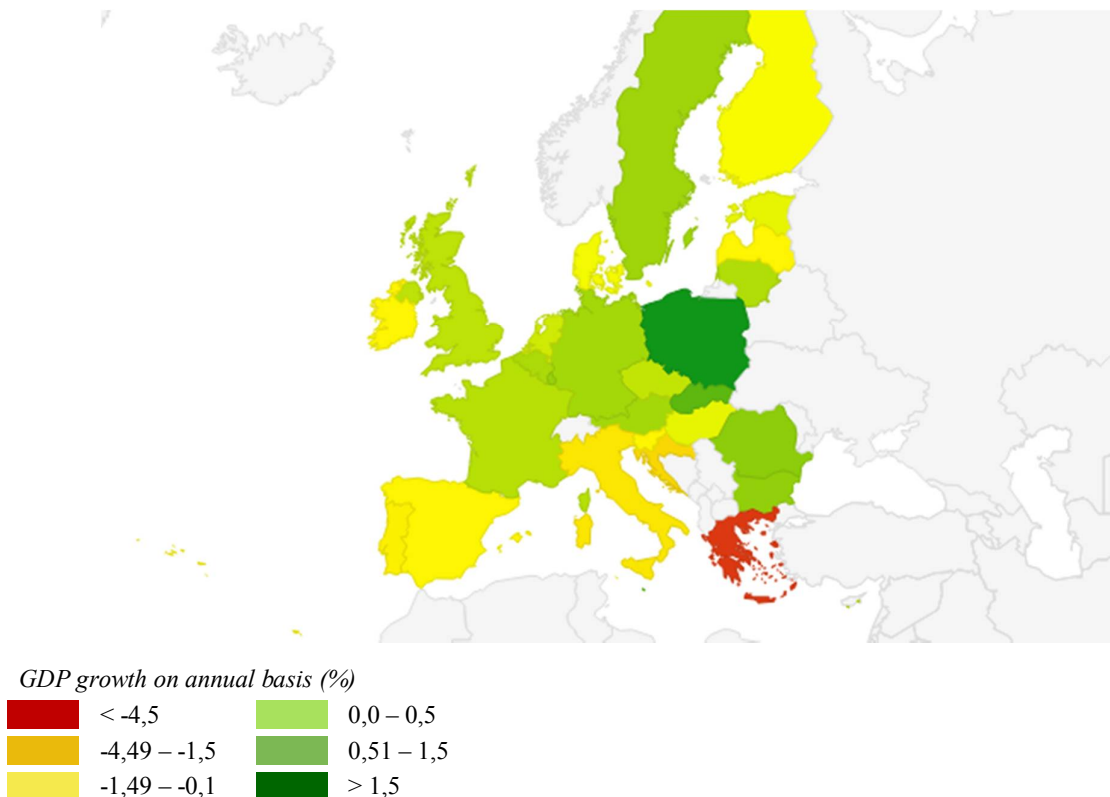
Figure 24: Growth of GDP by current prices for EU and Bulgaria in the period 2008-2013 (in %)



Graphics: ECORYS; Source: Eurostat

Bulgaria ranks at one of the top places, if the average GDP growth rate during the period under consideration is taken into account. With an average growth of 0,9%, our country is outpaced under this indicator only by: Poland (3,1%), Malta (1,9%), Slovakia (1,8%) and Romania (1%). The EU average is 0,15%, Greece being the country ranked at the bottom with respect to this indicator with an average (negative) growth of -4,9%. The advanced growth demonstrated by Bulgaria is typical for the catching-up stage and may be observed in most of the other countries from the last EU extension wave, with exception of Hungary (-0,5%), Latvia (-1,1%), Estonia (-0,5%) and Croatia (-1,7%), which did not manage to achieve positive average growth during this period.

Figure 25: Growth of GDP by current prices in EU (average values for 2008-2013)

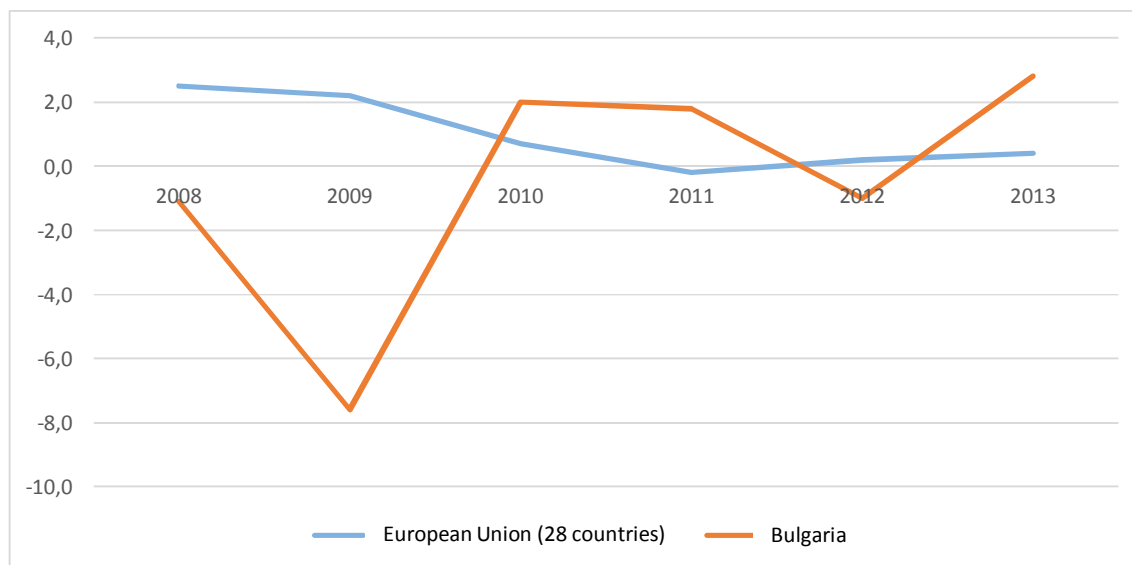


Graphics: ECORYS; Source of data: Eurostat

Final consumption (public and private)

The world economic crisis have had a significant impact on the public final consumption in the country. In 2009, the reported 7,6% drop under this indicator compared to the rates from the previous year is the second major drop throughout the EU, only surpassed by that in Latvia, which constitutes 10,7% of the results achieved in 2008. Although in 2010 the amount of public end use in Bulgaria increased, it is only in 2013 that its volume approximated the 2008 pre-crisis levels (if the inflation is taken into account). According to the SIBILA estimates, provided that OPRD were not implemented, the outcomes would have been even more unfavourable, since following the implementation of the Programme the public use has increased by 0,2% by the end of 2013, when the essential growth were reported.

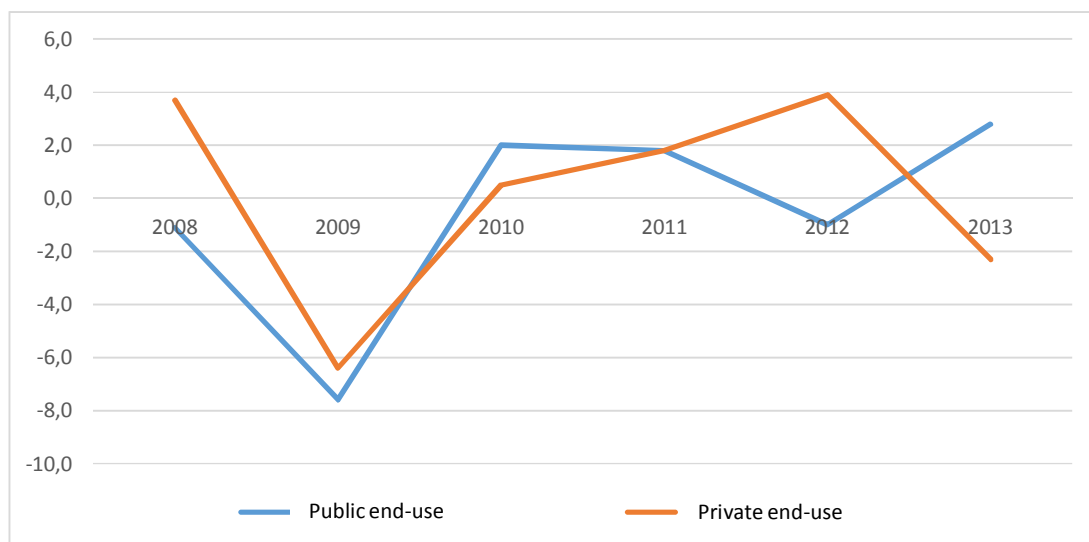
Figure 26: Growth rates of the public final consumption in Bulgaria for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

Similar general trends are reported with respect to the private end-use during the period discussed. After the collapse in 2009 (-6,4%) positive growth rates have been observed in 2010, 2011 and 2012 (0,5%, 1,8% and 3,9% respectively), before resuming to negative rates in 2013. The graphics below compares the growth trends in public and private end-use during the period 2008-2013. The contribution of the implementation of OPRD to the private end-use is close to that reported for the public end-use. It has contributed to up to 0,3% higher rates against the zero option.

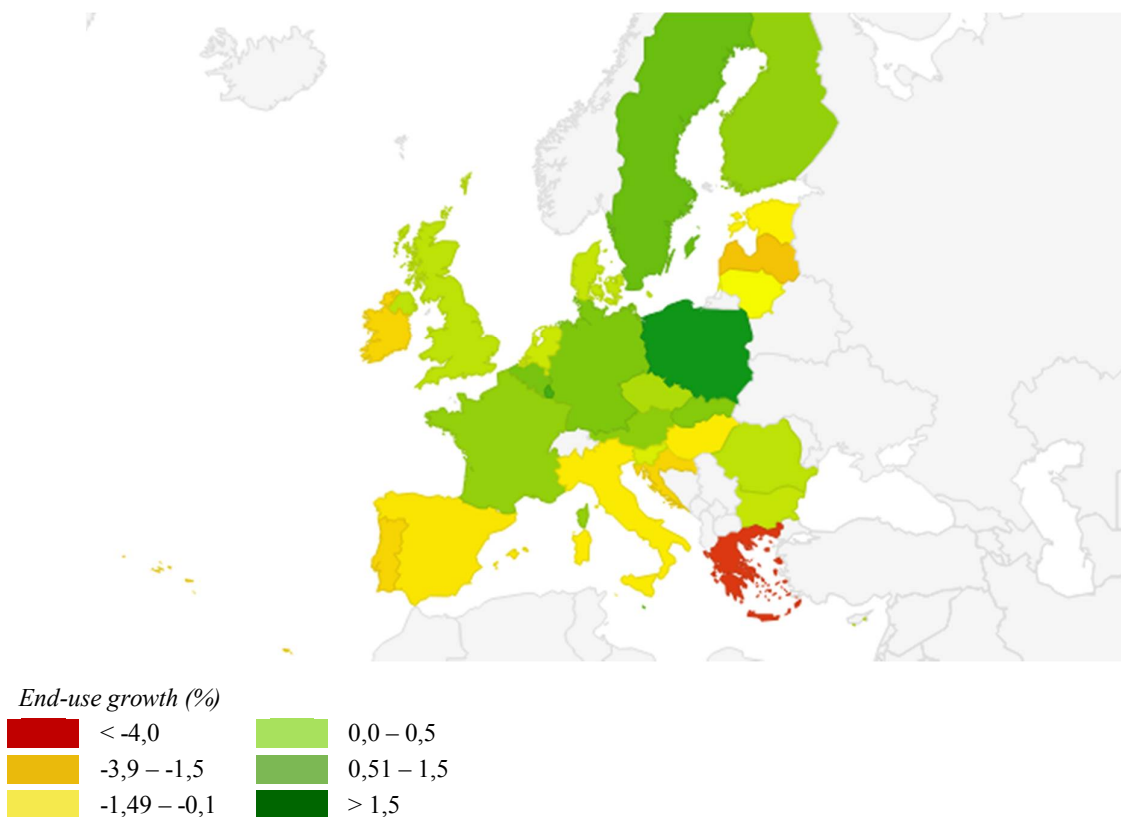
Figure 27: Growth rates of the public and private final consumption in Bulgaria for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

Overall, it can be concluded that the results of Bulgaria approximate the EU average, taking into account the fact that our country falls neither under the group of the Member States with longstanding negative trends in end-use (Greece, Latvia, Portugal and Ireland), nor under the group of the countries, where the levels of end-use stayed positive and relatively high throughout the period considered (Poland, Luxembourg, Germany and Sweden).

Figure 28: Average growth rates of the public final consumption in EU (2008-2013)



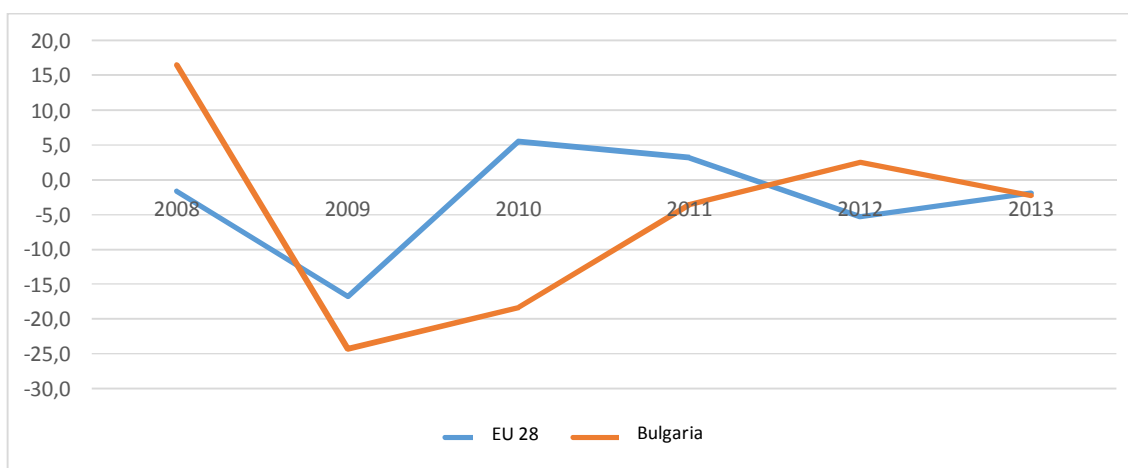
Graphics: ECORYS; Source of data: Eurostat

Investments

The investment volume in Bulgaria shrank heavily in 2009 and the negative growth rates remained up to 2011 (see the graph below). The drop in investment growth reported between 2008 and 2009 is the second major EU drop (40,9 p.p.), with Lithuania being the only country to have experienced greater change (57,6 p.p.). In addition, the annual slump of investment rates experienced by Bulgaria in 2010 is the most significant one in the whole EU and amounts to 18,3%, with Ireland being the only country displaying similar rates (-16%). Having regard to the foregoing considerations, a conclusion may be drawn that Bulgaria is among the most adversely affected EU countries by the global economic crisis in terms of decrease in the amount of investments. Nevertheless, it should be noted that in 2012 our country was one of the few countries (together with Estonia, Ireland, Latvia and the United Kingdom), which displayed

positive investment growth, reaching up to 2,5% against the values reported in the previous year. With respect to domestic investments, it should be noted that the implementation of projects under OPRD has contributed significantly to avoiding alternative more negative scenarios, taking into account the fact that the public investments by the end of 2013 exceeded by 15,6% the zero option which excludes the absorption of funds under OPRD. Following the implementation of OPRD, albeit not to the same extent, the amount of private investment has increased by 2,5% against the alternative option which excludes the implementation of any interventions under the Programme.

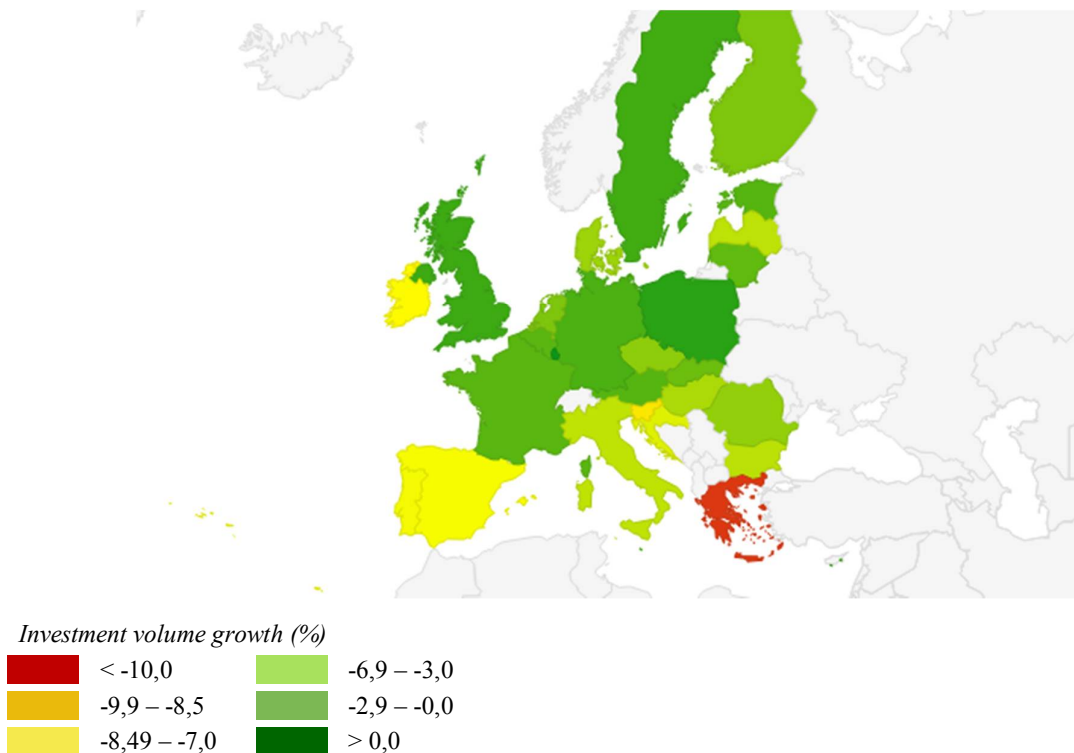
Figure 29: Investment growth in Bulgaria and EU for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

The figure below presents a comparative picture of the average investment growth rates in the EU for the period 2008-2013. The different colours correspond to the relative values of each Member State, with Luxembourg having achieved the highest result (1,6%), and Greece – the lowest one (-16,6). Only the economy of Poland, except that of Luxembourg, shows positive value changes in investment volume. The performance of Bulgaria (-4,9%) is close to the EU average and is similar to that of countries such as Italy (-5,1%), Latvia (5%) and Hungary (-4,3%), yet they fall under the average rate (-3,8%).

Figure 30: Average growth rates of the investment volume in EU (2008-2013)

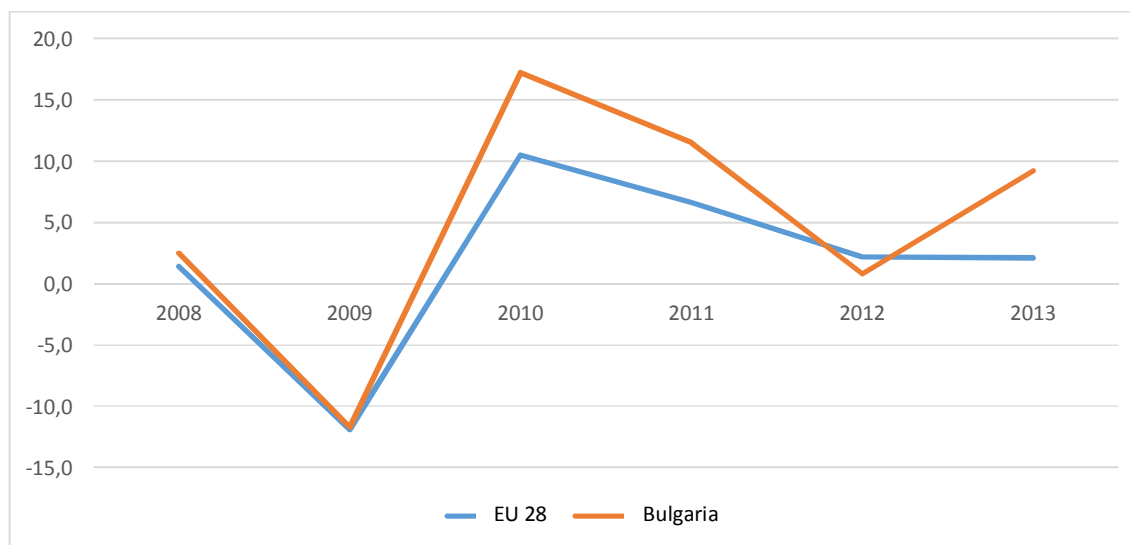


Graphics: ECORYS; Source of data: Eurostat

Export of goods and services

In 2009 the volume of exports of goods and services significantly decreased throughout the EU and Bulgaria was not exception in this respect, as its export rates decreased by 11,7% at an EU average of 11,8%. Subsequently, the export growth of goods and services from the country became a key factor for the recovery of the economy from the negative impacts of the global economic crisis, and Bulgaria achieved levels of development largely exceeding the EU average. In 2010, only the rates of Estonia (24%) and Lithuania (18,9%) were higher than those of Bulgaria (17,2%). Throughout the post-crisis period Bulgaria achieved high growth rates of the volume of exported goods and services, highly exceeding the EU average, with exception of 2012 alone when the growth rate was close to zero. In 2013 the Bulgarian economy turned back to accelerated export growth rate, unlike the general EU trend of maintaining the status quo. The results produced using SIBILA indicate that the implementation of OPRD has contributed to this indicator as well, which represents 0,2% of the values achieved by the end of 2013.

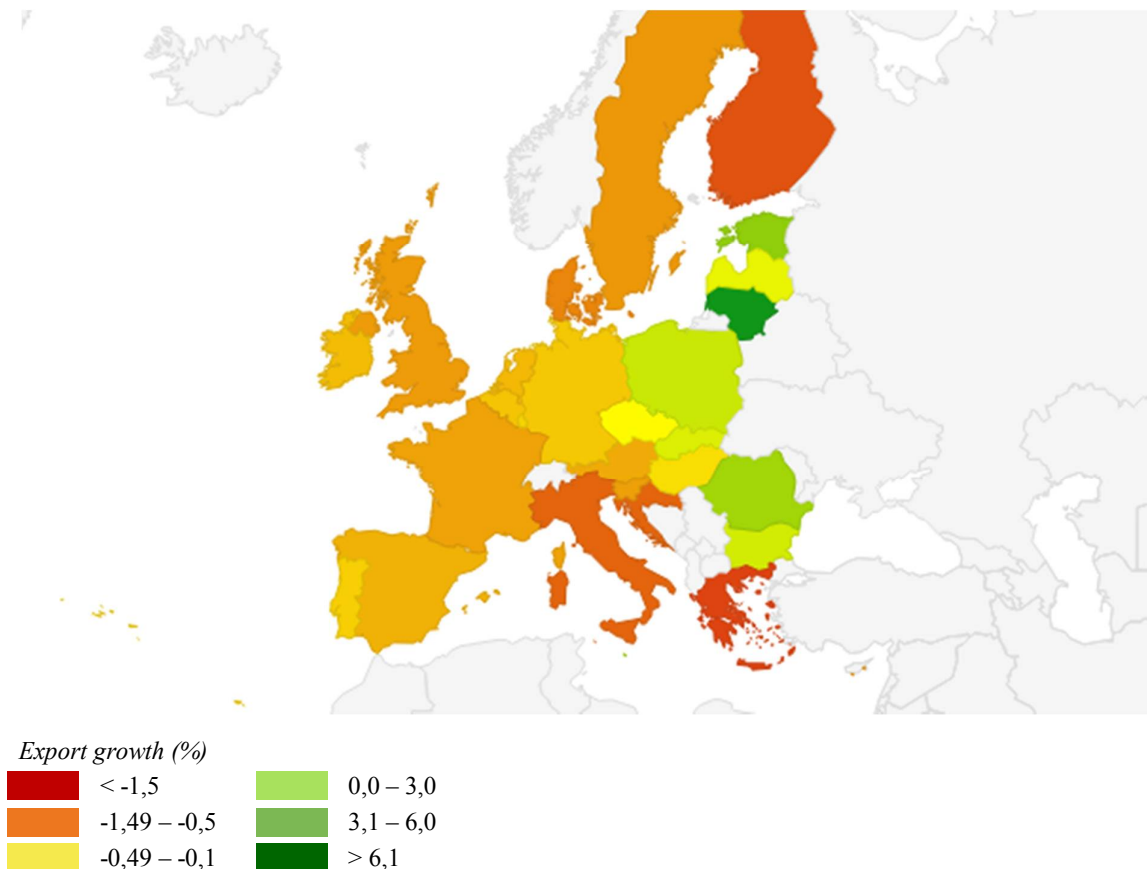
Figure 31: Growth in the export volume of goods and services in Bulgaria and EU for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

The average values for the period in which the OPRD was in its most active phase indicate that the Bulgarian export growth has been among the highest in the EU, along with the increases of this indicator observed in the eastern EU Member States. The ranking is led by Lithuania (9,3%), followed by Estonia (6,4%) and Romania (6%), and Bulgaria is ranked sixth with 4,9%. The figure presented below shows that the old EU Member States reported slower growth rates of export volumes under this indicator. Almost all EU Member States achieved positive average export growth rate during the period under consideration, and only 5 Member States experienced a decrease in this respect (Greece, Croatia, Italy, Cyprus and Finland).

Figure 32: Average growth rates of exports of goods and services in EU (2008-2013)



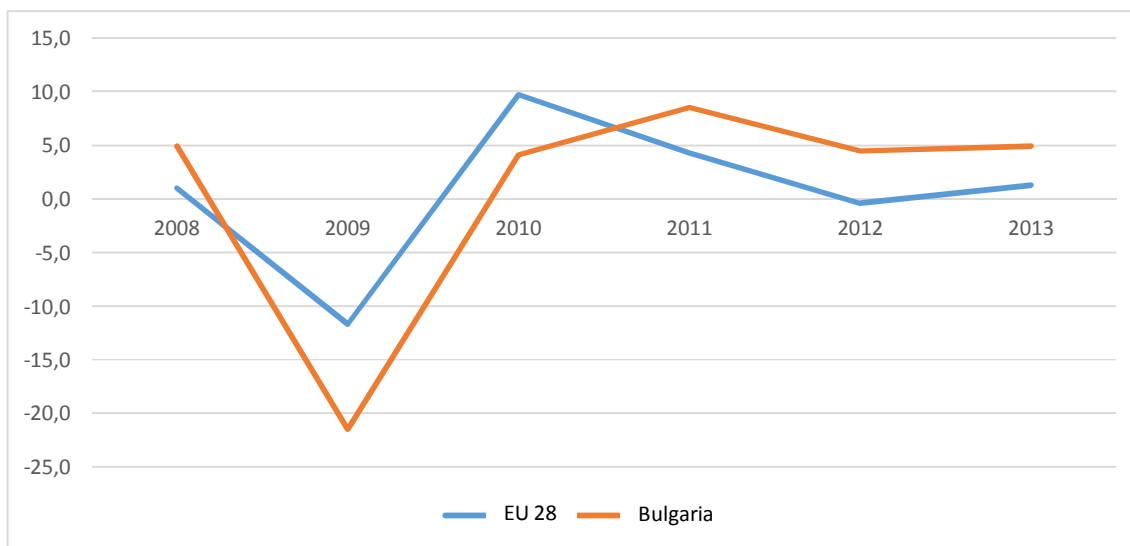
Graphics: ECORYS; Source of data: Eurostat

Import of goods and services

Like the other macroeconomic indicators considered above, the import of goods and services also decreased significantly in 2009 throughout the EU. The slump in Bulgaria was particularly spectacular, since the stable annual growth of 4,9% in 2008 saw a sharp slump of -21,5% in 2009, surpassed only by the results reported in the Baltic states: Latvia (-31,7%), Estonia (-30,6%) and Lithuania (-28%). The considerable decrease in the volume of imported goods and services corresponds directly to the drop reported in the public and private end-use, as already described. The graphics below shows that the accelerated import volume growth rates in Bulgaria are unstable compared to the pre-crisis EU average values, and turn into a deeper slump as soon as the crisis arises. The average import growth rates of the Bulgarian economy remained lower than the average in 2010, before resuming to advanced growth trend in 2011. Only in 2013 the import rates resumed to the levels reached in 2008, provided that the inflation is taken into account. The import volume growth trend in Bulgaria follows more or less the same path as the export growth trend: particularly high pre-crisis levels collapsed in 2009 to resume to higher than the EU average growth rates after 2011. The entry of OPRD in its active phase of implementation has to some extent helped in remedying the collapse from 2009, taking into account that it has

contributed 1,7% against the zero option excluding the implementation of any interventions under the Programme.

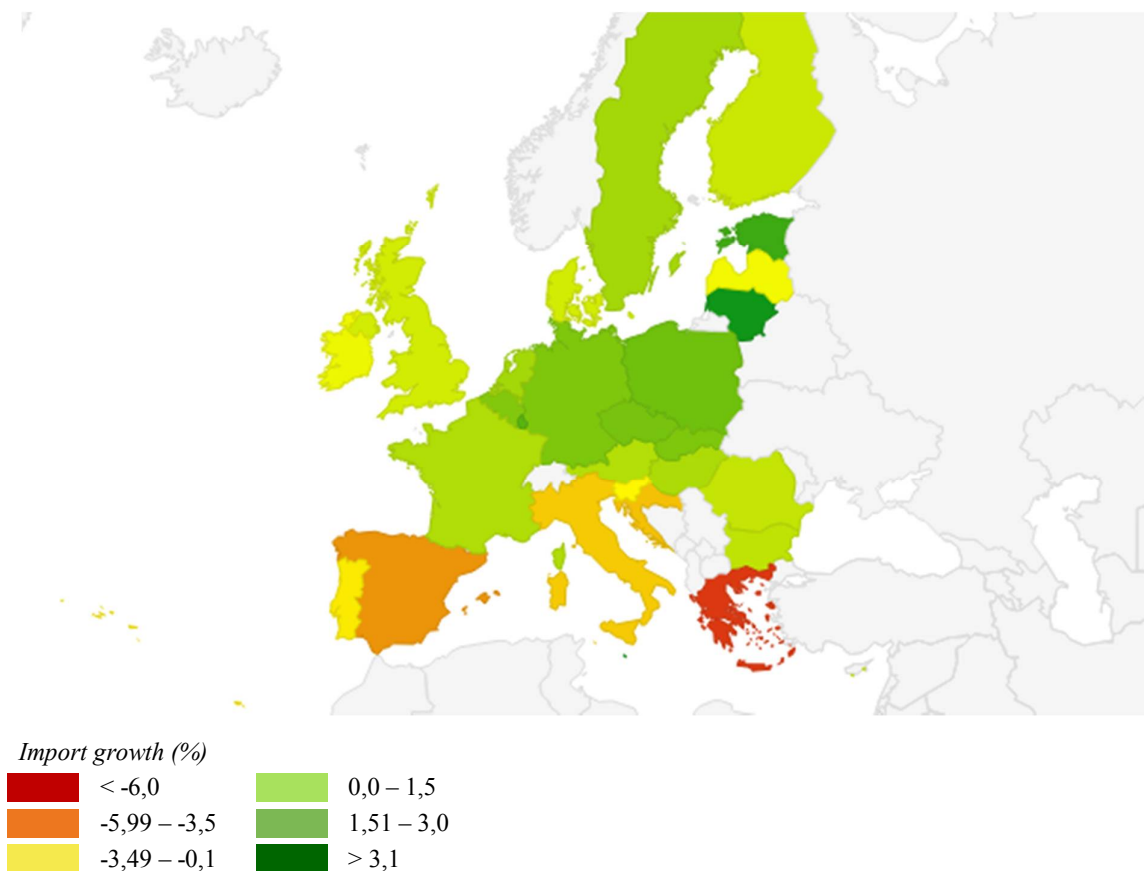
Figure 33: Growth of import volume of goods and services in Bulgaria and EU for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

In the period 2008-2013 the average growth rate of import volume of goods and services in Bulgaria (0,9%) slightly exceeded the EU average rate (0,7%). The figure below outlines some key trends at EU level. The southern EU Member States – Greece, Spain, Croatia, Cyprus and Italy – display particularly poor results, varying between -7% annual drop in Greece and a -2,4% annual drop in Italy. Stable annual growth rates of about 2-3% are reported in Benelux, Germany and the Czech Republic and the most rapid growth rates are observed in Lithuania (5,5%) and Estonia (4,3%). In contrast to the statistical data on exports, nearly twice as many countries reported negative average growth rate of import of goods and services during the period considered. This consideration allows to conclude that the pre-crisis import levels within the EU recover at a slower pace than the export levels.

Figure 34: Average growth rates of imports of goods and services in EU (2008-2013)



Graphics: ECORYS; Source of data: Eurostat

The average annual growth rates of the macroeconomic indicators considered above for the period 2008-2013 in Bulgaria and EU are summarized in the table below. The table shows that the annual growth rates in Bulgaria with respect to the indicators considered are, as a whole, higher than the EU average. The only exception is the average value change in investment volume experienced by the Bulgarian economy, which, in addition to being negative, is also more pronounced than the EU average. Nevertheless, the slump in Bulgaria remains far from the minimum value reported in Greece during this period. In contrast to the performances of this indicator, the average annual growth of import of goods and services is among the highest in the EU, exceeding almost twice the average rate.

Table 55: Average annual growth values by key indicators for the period 2008-2013(%)

Indicator	Bulgaria	EU 28	Max.	Min.
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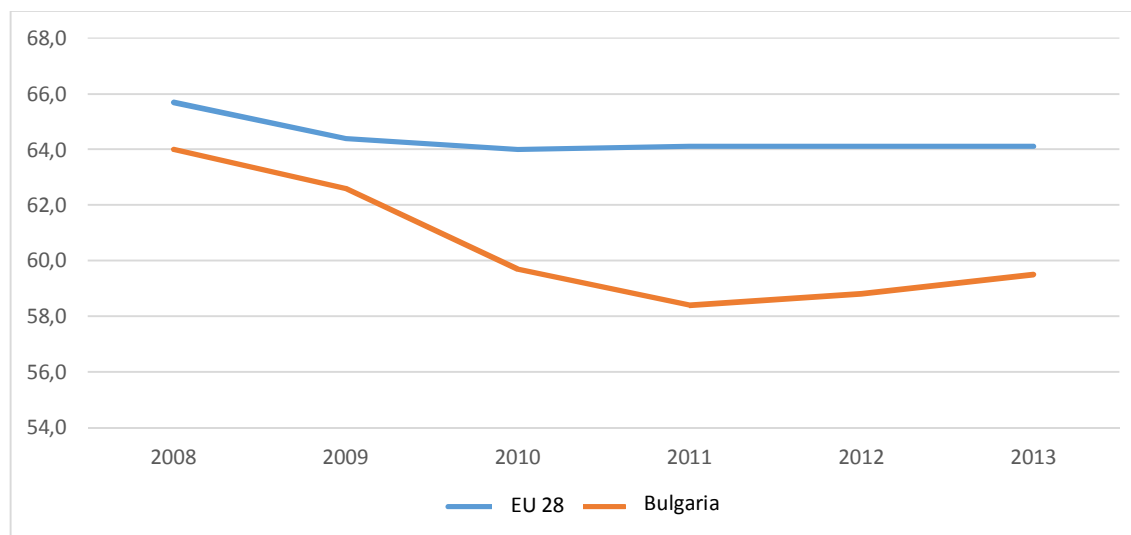
			value	value
GDP	0,9	-0,2	3,1	-4,9
Final consumption	0,1	-0,1	2,7	-4,2
Investments	-4,9	-3,8	1,6	-16,6
Export	4,9	2,6	9,3	-1,5
Import	0,9	0,7	5,5	-7

Source: Eurostat

Employment

In a trend which is, to a relative extent, inversely proportional to the dynamics of the standard unemployment rate, the employment rate in the EU fell in the period after 2008. The employment rates in Bulgaria also decreased and this change was more tangible than that recorded at EU level. Unlike the picture described with regard to the unemployment rates, in this case our economy showed continuous poor performance throughout the period considered, and its relative position considerably deteriorated after 2009. It is only in 2013 that it approximated the average EU values. However, a divergence of nearly 5 p.p. stayed. It should be noted that, generally, the EU is lagging behind with respect to the targeted employment rate of 75% set in "Europe 2020 Strategy". Nevertheless, 8 countries increased, although only slightly in some cases, their employment rates between 2008 and 2013. The largest increase took place in Malta (5,3 p.p.) and Germany (3,4 p.p.). Although Bulgaria lags behind the countries with the best indicators in this respect, the share of the working-age employed individuals would have been even smaller, if the interventions under OPRD were not implemented. According to the results produced using SIBILA, the OPRD interventions contributed to an increase of 0,1% in the employment rates by the end of 2013, the contribution being very significant in specific sectors such as "Construction" (8,3%).

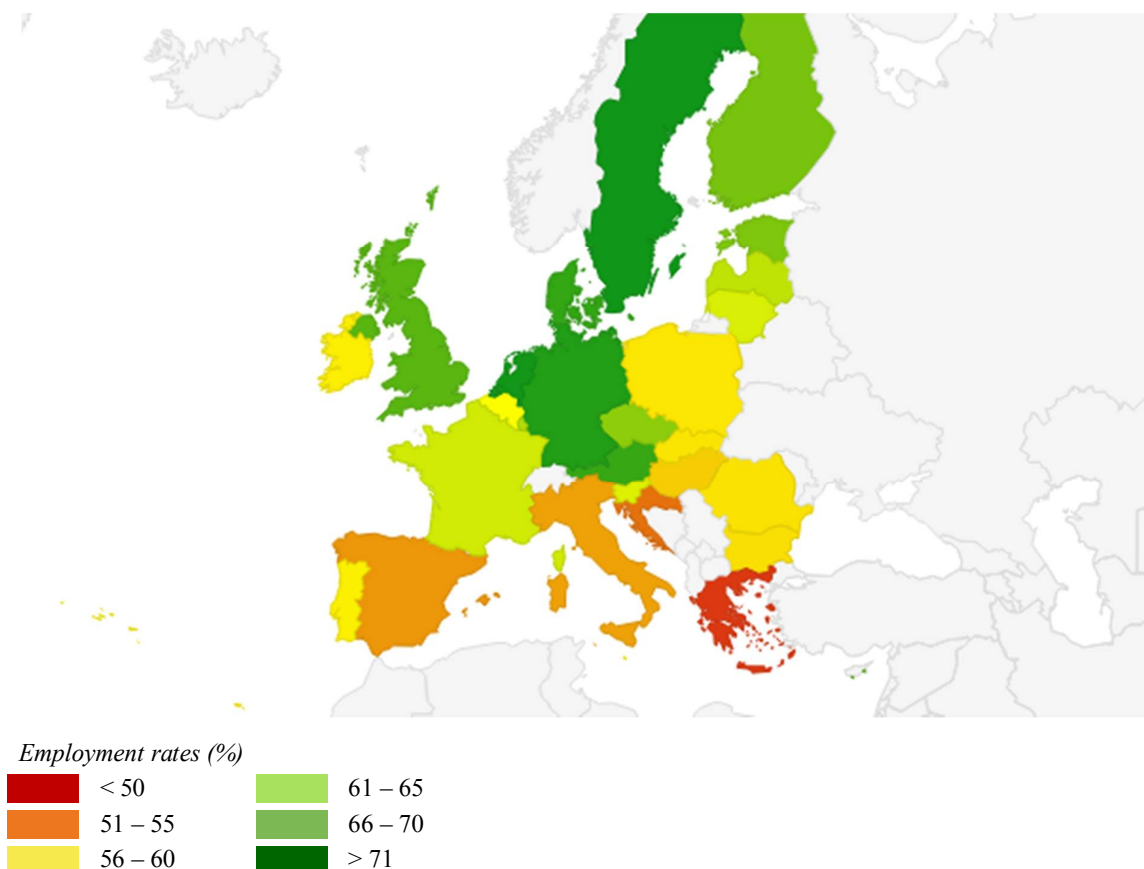
Figure 35: Employment rates in Bulgaria and EU for the period 2008-2013 (%)



Graphics: ECORYS; Source of data: Eurostat

According to the most recent data, the employment rate in Bulgaria (59,5%) is lower than the EU average (64,1%), but it is still far from the poorest performances: Greece (48,8%) and Croatia (52,5%). The highest rates have been achieved by Sweden (74,4%), Netherlands (74,3%) and Germany (73,5%), which almost approximate the target value set in "Europe 2020 Strategy". Some countries have more or less the same results as Bulgaria: Romania (59,7%), Slovakia (59,9%) and Ireland (60,5%).

Figure 36: EU employment rate for 2013



Graphics: ECORYS; Source of data: Eurostat

The table below presents a comparative summary of the values of some key indicators related to the labour market in Bulgaria and the EU in 2013, as well as the minimum and the maximum values in the EU. The data clearly show that Bulgaria lags behind the EU average with respect to each of the indicators at issue. Particularly significant is the lag in the share of the employed individuals, which is far behind the target rate of 75% set in Europe 2020 Strategy, despite the reported contribution of the OPRD. It should be, however, noticed that Bulgaria keeps a relatively secure distance from the poorest performances, identified in the EU throughout the period considered.

Table 56: Values by key indicators for the labour market in Bulgaria and EU for 2013 (%)

Indicator	Bulgaria	EU 28	Max. value	Min. value
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Labour force	68,4	71,9	81,1	63,5
Standard unemployment rate	13	11	27,7	5
Employment	59,5	64,1	74,4	48,8

Source: Eurostat

? Is there difference between the groups of territories and population in receipt of support and those not in receipt of support (counterfactual analysis)?

Rationale and description of the selected method – “difference-in-differences”

The counterfactual analysis is mainly aimed at answering the question what part of the results obtained after the end of an intervention are due to the intervention. It tries to explain whether the results produced are due to the public investment itself or this change would have occurred anyway. That is to say, the counterfactual analysis deals with a purely hypothetical situation, which can never be directly observed. It aims to reconstruct what would have happened in the absence of the intervention. If there are sufficient data comparing the real situation to the hypothetical one, conclusions may be made on the effects of an intervention.

In the context of the impact assessment of interventions funded under the SCF, the counterfactual analysis is used mostly in the assessment of labour market measures, financial support granted to the SMEs and rarely, in the assessment of infrastructure measures. This is mostly due to the lack of big sample of observations, the specifics of each infrastructure and the difficulties in setting up treatment and control groups.

The EVALSED Sourcebook¹³⁴ describes four main non-experimental methods for conducting counterfactual analysis – difference-in-differences, propensity score matching, discontinuity design and instrumental values. The advantages, limitations and applicability of each method have been described in Section 2.1. of this report. Following the careful review of each method, available data on OPRD 2007-2013 and relevant counterfactual studies, the difference-in-differences method has been identified as the most applicable one to this evaluation.

As described in the EVALSED Sourcebook, the “difference-in-differences” method allows assessment of the impact of a policy by means of analysis of the policy outcomes in two aspects – temporal aspect (before and after receipt of financial support under the Programme) and in terms of treatment (by comparing homogenous groups of beneficiaries and non-beneficiaries). Accordingly, to enable the application of this method, the data need to provide information on comparable groups of beneficiaries and non-beneficiaries under the Programme before its beginning and after its end.

An essential element in applying the very method is to define a control group – non-beneficiaries, whose features are similar to those of the group of beneficiaries (first difference). The available data on both groups are compared before and after the intervention (second difference). Thus, the

¹³⁴ Evalsed Sourcebook: Method and techniques

method produces impact evaluations, which are more reliable than the ones resulting only from comparisons between two groups only (beneficiaries-non-beneficiaries) or between two periods (before and after the intervention).

The main assumption of this type of studies is that the reported differences in the achieved values of the indicators underlying the comparison are entirely due to the intervention performed. Indeed, the results may be often due not only to the intervention, but also to other external factors and changes which may occur during the period considered. Another important assumption is that the differences between beneficiaries and non-beneficiaries (or the so called selection bias¹³⁵) are constant during the period considered.

Review of relevant counterfactual studies

The economic literature provides numerous impact assessment studies, which use counter-factual methods to measure the effects of the implementation of the programmes and measures analysed. Such studies are Pokorski (2011)¹³⁶ and ASVAPP (2011)¹³⁷. These studies, however, focus on the financial support granted to the SMEs and its impact on the increase of employment, productivity and the financial results. The counterfactual methods used in these studies are the propensity score methods. These methods are applicable mostly to a large number of similar units, such as SMEs, whereas their applicability to beneficiaries such as municipalities is rather limited.

That is why the main counterfactual studies, covering interventions similar to the interventions under OPRD 2007-2013 and examined in detail by our expert team, are as follows:

- Ex-post evaluation of the cohesion initiative URBAN II-neighbourhoods in crisis ("Ex-Post Evaluation of Cohesion Policy programmes 2000-06: The URBAN Community Initiative", carried out by ECOTEC (currently ECORYS UK)¹³⁸
- Evaluation of the impact of Structural Funds in Sweden ("Evaluation of the impact of Structural Funds in Sweden during the period 1995 - 1999")¹³⁹

The objectives of these studies and the conclusions and recommendations drawn, taken in consideration by our team in assessing the impact of the interventions under OPRD 2007-2013, are presented below.

The ex-post evaluation of the URBAN II initiative¹⁴⁰ is based on a sample of 70 programmes

¹³⁵ For more details on selection bias, see EVALSED.

¹³⁶ Pokorski, Jacek. Towards innovative economy - effects of grants to enterprises in Poland. 2011 (<http://www.parp.gov.pl/files/74/81/469/12635.pdf>)

¹³⁷ ASVAPP. Counterfactual impact evaluation of cohesion policy-impact and cost-effectiveness of investment subsidies in Italy. Final Report to DG Regional Policy. June 2012. (http://ec.europa.eu/regional_policy/information/evaluations/pdf/impact/ciewp_final.docx)

¹³⁸ Ecotec. Ex-Post Evaluation of The URBAN Community Initiative 2001-2006. Final report prepared for the European Commission. June 2010

(http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/urbanii/final_report.pdf) and Interim report. November 2009 (

http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/expo_urban_interim.pdf)

¹³⁹ ITPS. The EC Regional Structural Funds impact in Sweden 1995-1999. Abridged version of A2004:009 (<http://www.tillvaxtanalys.se/download/18.56ef093c139bf3ef890273e/1349863396404/the-ec-regional-structural-funds-impact-in-sweden-1995-1999-abridged-version-of-a-2004-2009-04.pdf>)

financed by the European Regional Development Fund (ERDF) among 14 EU Member States. The main aim of the counterfactual analysis used in this study is to draw conclusions about the average statistical impact of the interventions under URBAN II, by comparing the results achieved in agglomeration areas/residential complexes, funded under URBAN II with those achieved in agglomeration areas/residential complexes, not funded under the URBAN II programme. Three parameters deemed relevant in the regional policy area have been analysed for the needs of this study – unemployment rate, long-term unemployment rate, and population. Only the unemployment rate has been subsequently used because of a lack of exhaustive data on the two other parameters.

The study compares the differences in the unemployment rate before and after the interventions under URBAN II programme and between the different groups (agglomeration areas / residential complexes – beneficiaries under the Programme and agglomeration areas / residential complexes – non-beneficiaries). The method applied in this study is the **“difference-in-differences” method**.

One of the findings of the ex-post evaluation is the limited applicability of the counterfactual analysis due mostly to a lack of sufficient data. In particular, within this study data have been available for only 37 out of a total of 70 programmes, which makes it impossible to draw statistically valid conclusions about the impact of the URBAN II initiative. That is why one of the recommendations made in this study is that data should be gathered in a timely manner, “before” and “after” the interventions. The selection of impact assessment indicator is essential – only the unemployment rate is used in the impact assessment of URBAN II. This indicator does not allow for impact assessment of all aspects of the programme impact, as the URBAN II initiative has also other objectives and is not limited only to the decrease of the unemployment rate.

Another important finding of this study is the very short period for assessing the effects of this programme (one year after the completion of the programme) and the lack of data on the general trends prior to the beginning of the Programme (trends of reducing or enhancing the economic or social differences between the regions). According to the experts who took part in the study, the effect of programmes such as URBAN II may appear at a later stage, once the programming period has been completed. Therefore, it is essential that the assessment of the interventions be carried out at a later stage (for instance, two or three years after the investment period), not immediately after the end of the programming period.

The *evaluation of the impact of Structural Funds in Sweden during the period 1995-1999*, analyses the contribution of the projects funded by the Structural Funds in Sweden to improving the economic and social development of the least developed regions in Sweden.

The study compares the results of two groups of municipalities – recipients of Structural Funds and non-recipients of Structural Funds during two periods (1990-1995) and (1995-1999). For the needs of this study three parameters, identified as appropriate (income per capita, employment rate and population), are analysed. This study also applies the **“difference-in-differences” method**.

Initially, the classical “difference-in-differences” method is applied, comparing the differences

¹⁴⁰ The main focus of the URBAN II programme are the measures concerning the urban areas regeneration or regions in need and the promotion of sustainable urban development

between the three parameters only with respect to the municipalities in receipt of Structural Funds and those not in receipt of Structural Funds. At a second stage, in order to take account of the differences between the achieved values of impact indicators, resulting from structural changes, two other explanatory variables are added – percentage change in the share of population working in the private sector and percentage change in the share of population aged 25-64 on the territory of the respective municipalities.

This extended model enables the study of the impact of Structural Funds in Sweden with respect to three additional groups – one third of the municipalities that received the most Structural Funds, one third of the municipalities that received the least Structural Funds and all municipalities-beneficiaries. The results of these groups are compared with those of the group of municipalities-non-beneficiaries.

One of the conclusions drawn in the study is that it is not possible to establish a relation between the SCF funds invested in the regions and the regional economic growth. According to the results of the study during the programming period the regional gaps have widened instead of narrowing. Furthermore, the study claims that the municipalities in receipt of the most Structural Funds were as successful as the ones in receipt of the least funds. However, the study emphasizes the fact that the Structural Funds constitute less than 1 % of all public investments in capital and intangible goods in Sweden throughout the programming period. Therefore, it would be wrong to make definite conclusions on the impact of Structural Funds in Sweden.

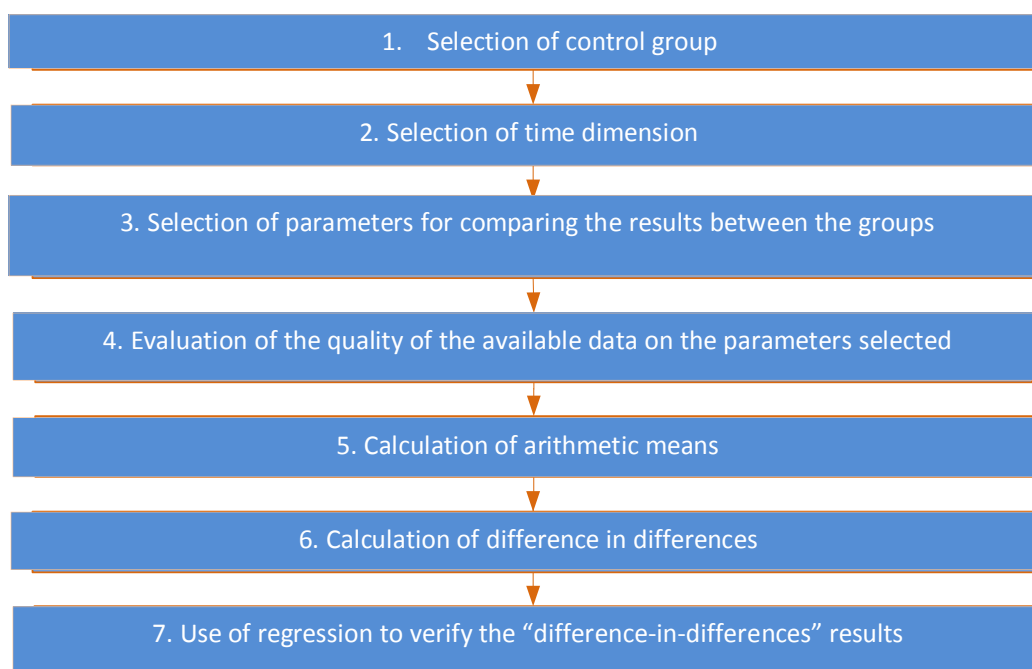
Impact assessment of the interventions under OPRD 2007-2013 – applying the “difference-in-differences” method

On one hand, the “difference-in-differences” method has been selected for this evaluation because of the types of interventions analysed and the scope of OPRD 2007-2013, and on the other hand, because of the availability of data and the (im)possibility to identify groups of municipalities beneficiaries and non-beneficiaries under OPRD having similar characteristics.

After having selected the counterfactual method for conducting the quantitative assessment of the contribution of OPRD to the regional development, we have applied the following steps, as described in the EVALSED Sourcebook¹⁴¹:

Figure 37: Stages of “Difference-in-differences” method

¹⁴¹ DG REGIO. EVALSED Sourcebook: Methods and Techniques.



Graphics: ECORYS; Source: EVALSED

Stage 1. A crucial stage in applying the counterfactual analysis **is the definition of beneficiary and non-beneficiary group** (control group), the characteristics of which will be compared with a view to analysing the hypothetical situation what would have happened with the selected parameters in the absence of interventions. As regards the OPRD 2007-2013, a comparison has been made between regions (NUTS 2), districts (NUTS 3) or municipalities in receipt of funding under OPRD and the ones not in receipt of any funding. Since all NUTS 2 regions and districts received financial support under OPRD, the analysis will be performed at the level of the 264 municipalities in Bulgaria.

Even at this low level of detail, the counterfactual analysis of the impact of OPRD 2007-2013 is potentially problematic, because the municipalities which have not received funding under the OPRD 2007-2013 are only 35 (see Appendix 5) and thus, they are too few to be taken as a control group. In addition, the majority of these municipalities might have received funding under other programs, such as Rural Development Programme for the period 2007-2013.

To overcome this potential source of problems, another approach has been applied to the interpreting of the results of the studies carried out, similar to that mentioned in the impact evaluation of Structural Funds in Sweden during the period 1995-1999. To this end, all payments under OPRD per capita of the respective municipalities as of the end of 2014 were calculated. Thus, the distribution of municipalities obtained was divided into four groups, each including equal number of municipalities (quartiles). The municipalities in the first quartile (having the lowest payments or no payments per capita) were taken as control group, and the ones in the fourth quartile (having the highest payments per capita) – as treatment group.

Stage 2. The selection of time dimension has been made once again given the limited data and the period of implementation of OPRD 2007-2013.

On one hand, if measured by the payments made, the implementation of OPRD 2007-2013 actually started after 2010, and only 2%¹⁴² of the programme budget was paid out during the period 2007-2009. On the other hand, the impact of the OPRD should be measured at least 2 years after the completion of the respective interventions.

Taking into account all these limitations, our team decided, as a compromise solution, to assess the impact of OPRD 2007-2013 during the period 2010-2013. It should be, however, taken into account that such assessment of the impact of OPRD is of limited scope. Firstly, 56% of the programme budget was paid up by end-2013 and secondly, part of the interventions under the OPRD finance activities which are supposed to have a positive effect on impact indicators over a longer period. Such is the case of investments in educational infrastructure or those supporting the deinstitutionalisation process.

Stage 3. and 4. The selection of the level of detail of the regional breakdown for the purposes of the counterfactual analysis resulted in both positive effects and limitations. On one hand, this has significantly increased the sample of observations. On the other hand, the limited data at local level in Bulgaria has considerably narrowed the **selection of impact indicators** underlying the assessment of the contribution of OPRD 2007-2013.

The series "Regions, districts and municipalities in the Republic of Bulgaria" published by the NIS provides the following data at local level for the period 2010-2013:

- Territorial balance of the Republic of Bulgaria as of 31.12.2000 by type of territory
- Territorial balance of the Republic of Bulgaria as of 31.12.2000 by territory fund
- Surface area, population density and settlements
- Population under, in and above working age by gender
- Marriages, divorces, live-births, deaths and natural population growth by gender
- Age ratios
- Mechanical population growth by gender
- Unemployed persons registered at the labour offices and unemployment rate
- Useful floor space in dwellings
- Residential buildings by type of exterior wall materials
- Residential buildings by type of property
- Dwellings by number of rooms
- Residential buildings, dwellings and useful floor space in dwellings
- Accommodation establishments
- Hotels
- Healthcare facilities
- Medical staff
- Assisted living facilities for children
- Day nurseries
- Early childhood centres by type, teachers and children
- Early childhood centres in villages, nursery school teachers and children
- Educational institutions
- Teaching staff by type of educational institution

¹⁴² According to information from UMIS.

- Students by level in the International standard classification of education
- Students by type of educational institution
- Crimes with penalty inflicted by place of crime commitment
- Persons convicted by place of crime commitment, number of crimes, number of crimes
- Persons convicted by place of crime commitment, sex, age
- Community cultural centres by type of settlement

Following the review and analysis of the quality and the applicability of each indicator, our team has selected two indicators, which should measure the general impact of the OPRD interventions over relatively short period. These indicators are as follows: rate of registered **unemployment** by municipalities and **mechanical population growth** by municipalities.

In parallel with the review of the available data by municipalities provided by the NSI, our team has evaluated the quality and the applicability of the available information on output and impact indicators under OPRD 2007-2013. Theoretically, some of the output and/or impact indicators, set in the Programme's indicator system, are more suitable to this kind of analysis.

The main problem identified in the analysis of the possibility of applying these indicators is related to the lack of data on the indicators with regard to the control group of municipalities. In addition, the following findings have been made on the applicability of the programme indicators to the priority axes:

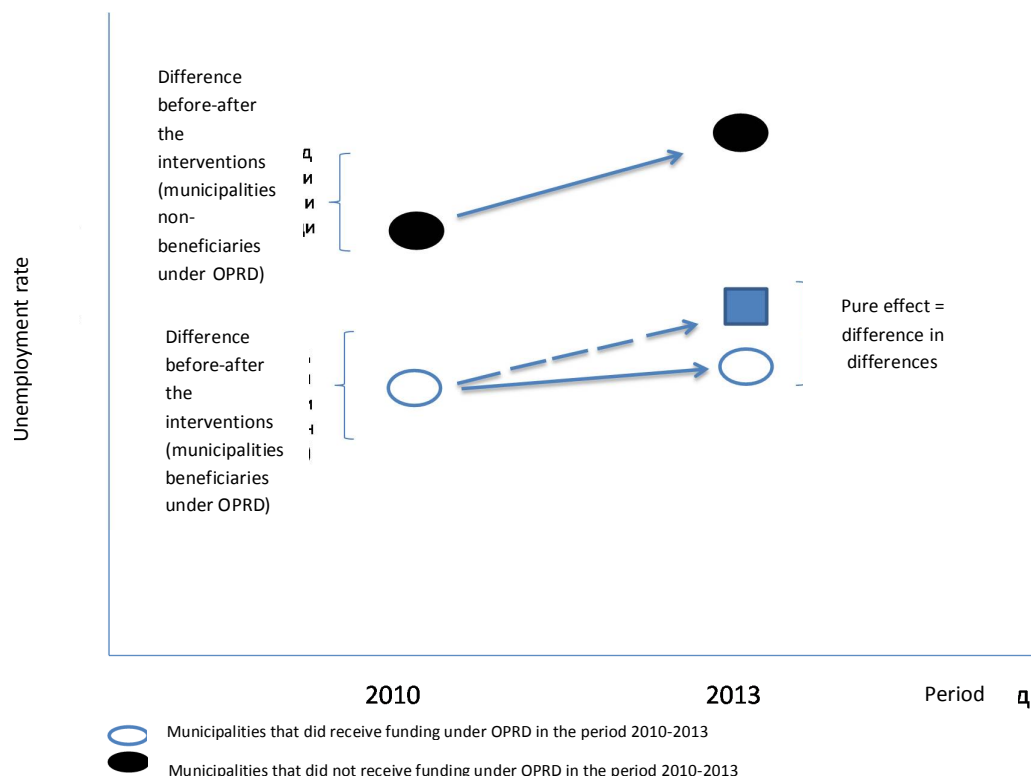
- *Priority axis 1.* The indicators defined as "population benefiting from..." are not suitable since this part of the population is difficult to be outlined given the vague nature of the term "benefiting". Energy savings is not a suitable indicator either, because the buildings are too diverse to be able to set up a control group. There are no reliable data on greenhouse gas emissions at micro level.
- *Priority axis 2.* There is no unique methodology for "Time savings" and "Increased traffic" indicators and respectively, their values are not comparable. The additional population covered by a broadband access is not measurable yet, since the project "Development of high-speed broadband access in Bulgaria through building critical, secure, safe and reliable public ICT infrastructure" has not been completed yet.
- *Priority axis 3.* The annual number of visitors of attractions in receipt of support could be compared to the number of those not in receipt of support, but there is no sufficient data for such comparison. Furthermore, the items are relatively few in number and too diverse. The indicator "Net annual revenues from international tourism" is not suitable because of the lack of data at local level.
- *Priority axis 4.* As set out above, the indicators defined as "population benefiting from..." are not suitable since this part of the population is difficult to be outlined given the vague nature of the term "benefiting". The difficulties are even greater when the indicator "Innovative practices exchanged and applied on the basis of interregional cooperation" should be put to use.

For all the foregoing reasons, it is not possible to perform a counterfactual study which to use the result and impact indicators included in the Programme. Instead, the team of evaluators have decided to use the indicators "registered **unemployment**" by municipalities and "**mechanical population growth**" by municipalities.

Stages 5. and 6. Following the EVALSED methodology, once the indicators and time dimension of the impact assessment were defined, the arithmetic means for 2010 (before the interventions under OPRD) and 2013 (after the interventions under OPRD) were calculated. When calculating the arithmetic means, the data on the individual municipalities have been weighted with the population of each municipality. The calculation of the difference in differences and the “pure” effect of the interventions produced is showed in the graph below¹⁴³.

Graphically, the difference in differences can be presented by using the assumption of parallelism.

Figure 38: Graphical presentation of the “Difference-in-differences” method



Graphics: ECORYS

The results of the direct application of the “difference-in-differences” method are presented in the table below. They show a strong positive effect on the municipalities-beneficiaries both in terms of decrease of unemployment and improvement of the mechanical population growth. A change is observed with respect to the latter – the negative growth trend turned into a positive one. The positive effects are more tangible when the supported municipalities under OPRD 2007-2013 and

¹⁴³ The assumption of parallelism is a graphical representation, which measures the difference in differences and shows what would have happened in the absence of interventions. The dotted line parallel of the beneficiaries follows the same trend as that of the non-beneficiaries between the two periods (Source: Evalsed Sourcebook: Method and techniques)

the non-supported ones are compared using the classical comparison method than the quartiles method.

Table 57: Results from the direct application of difference-in-differences method

	Unemployment level (%)		Difference between the two periods	Mechanical growth (number)		Difference between the two periods
	2010	2013		2010	2013	
Municipalities beneficiaries under OPRD	8.2	11.9	3.7	-250	91	340
Municipalities non-beneficiaries under OPRD	14.7	28.6	13.9	-118	-40	79
Difference between the two groups	-6.5	-16.7	-10.2	-131	131	262
Fourth quartile in the distribution of the municipalities according to OPRD payments per capita (25 % of all municipalities in receipt of the highest payments)	8.9	11.7	11.9	-268	-106	162
Second and third quartile in the distribution of the municipalities according to OPRD payment per capita (50% of all municipalities in receipt of medium-level payments)	7.4	10.6	28.6	-252	181	434
First quartile in the distribution of municipalities according to OPRD payments per capita (25% of all municipalities in receipt of the lowest payments)	14.3	27.1	-16.7	-131	-46	86
Difference between the fourth and the first quartile	-5.5	-15.4	-10.0	-137	-61	76

Source: NIS, UMIS, Ecorys

It is evident that the unemployment rate tends to increase in all municipalities during the period considered. The data obtained through the "difference-in-differences" method show that the unemployment increases significantly slower in the municipalities in receipt of support under OPRD than in those not in receipt of support or in receipt of less support under the Programme. The results produced using this method lead to the conclusion that the unemployment rate in

municipalities that have received the most funding under OPRD per capita has been about 10 p.p. lower than that in municipalities in receipt of the least funding per capita under OPRD.

The results regarding the mechanical population growth show that during the period considered the negative trend has significantly regressed in the municipalities having the most funding under OPRD. The difference between the mechanical population growth rate of the municipalities having the most funding under OPRD and that of municipalities having the least (or no) funding under the Programme is 76 persons in favour of the supported municipalities.

However, when analysing the estimates presented in the table above, two important limitations should be taken into account:

1. An evaluation of the statistical significance should be carried out.
2. Other factors having impact on the selected impact indicators have not been taken into account in reporting the results. For instance, the economic activity, earnings and demographic features of the municipalities have impact on the unemployment rate, whereas these estimates imply that the differences in the unemployment rates of the municipalities are entirely due to the different payments under OPRD.

These two limitations impose conducting Stage 7, as described below.

Stage 7. Using regression to replicate the difference-in-differences results

In addition to the results produced directly through the "difference-in-differences" method, we have also studied the regression between the funds received under OPRD and the indicators measuring the regional development. To this end, the regression between the unemployment rate and the participation in the OPRD was studied, and again the municipalities were grouped by two alternative criteria:

1. Beneficiary municipalities and non-beneficiary municipalities under OPRD (classical "difference-in-differences" method)
2. A group of 25% of all beneficiary municipalities with highest OPRD funding per capita and 25% of all municipalities that did not receive funding or received the least funding under the Programme.

Different approaches were used in the regressions described above, but what they have in common is that the municipalities are divided in two categories – beneficiaries under the Programme (or receiving the highest payments per capita), conditionally indexed to 1, and those that did not receive (or received the lowest) funding per capita under OPRD 2007-2013, indexed to 0. Furthermore, the regression between the funding per capita and the selected result indicators was studied by means of continuous regression instead of regression with discrete values for participation or non-participation in the OPRD interventions. That is to say, the amounts of funding under the OPRD per capita were used as explanatory variable in a regression for impact indicators and thus, whereby the quantity and the significance of the relationship between these indicators has been estimated.

The results from the regressions are presented below:

Table 58: Results from the regressions of the difference in differences

	Classical regression "difference-in- differences"	25% with highest payments = 1, 25% with lowest payments = 0, Regression with discrete values	Regression of unemployment rate with the payments per capita
Free dimension	15.34 (**)	20.29 (**)	-5907.74 (**)
Indicator measuring the participation in OPRD /the amount of funding received under OPRD/	-1.87 (.)	-5.19 (.)	-0.0184 (**)
Time	14.26 (**)	22.93 (**)	2.95 (**)
Indicator measuring the amount of funding received under OPRD*Time	-5.92 (.)	-9.28 (.)	H/Π
Adjusted R ²	0.1613	0.4086	0.1787
Probability, related to the F-statistics	< 2.2e-16	< 2.2e-16	< 2.2e-16

Codes indicating the level of significance of the produced estimates: *** 0.001, ** 0.01, * 0.05, 0.1

In the table above the assessment of the impact of OPRD on the standard unemployment rate by municipalities is estimated as being produced by the correlation between the indicator measuring the participation in the OPRD (or higher payments received per capita) and a fictional (dummy) time variable, which is indexed to 0 in 2010 and to 1 in 2013. It seems that the effect of the OPRD interventions is statistically significant in all the three regressions. The first one estimates that the unemployment rate in municipalities in receipt of funding under OPRD 2007-2013 has been 5.92 p.p. lower than that recorded in municipalities not in receipt of funding. The second one shows that the standard unemployment rate in the municipalities that have received the most funding under OPRD per capita has been over 9 p.p. lower than that of the municipalities that have received less or have not received any funding per capita. The third one displays a weak, but significant negative correlation between the standard unemployment rate and the payments under OPRD.

Expectedly, the adjusted R² in the three regressions is low, as the regressions do not include a number of other explanatory variables on unemployment. Moreover, the first two regressions show that the unemployment has continuously increased between 2010 and 2013 due to the deteriorated economic conditions throughout the country. It emerges also that the municipalities in receipt of more funding under OPRD per capita experience lower unemployment rates.

The relation between the unemployment rate and the payments under OPRD 2007-2013 is statistically significant, but the latter explain only small part of the variation of unemployment rates, which is evident by the low values of the adjusted R² coefficient of determination. That is why, with a view to estimating whether the explanation of a larger part of the variation in unemployment rate would result in a change of the quantity and significance of the payments, we

have added certain additional explanatory variables on unemployment rate by municipalities to the foregoing regressions. These indicators are aimed at measuring the structural differences between the municipalities. Given the limited data at local level, we have selected the following indicators: population density/m2, share of working-age population, share of agricultural land, share of urbanised areas, share of mineral extraction land and share of land for transport and infrastructure in the total territory of the municipalities. The results from the regressions are presented in the table below.

Table 59: Results from the regressions of the difference in differences with additional explanatory variables

	Classical regression difference-in- differences	25% in receipt of the highest payments = 1, 25% in receipt of the lowest payments = 0, Regression with discrete values	Regression of unemployment rate on payments per capita
Free dimension	34.43 (**)	21.01 (**)	-5817.67 (**)
Indicator measuring the participation in OPRD /the amount of funding received under the OPRD /	1.79 (0)	-4.12 (*)	-0.0136 (**)
Time	14.06 (**)	22.93 (**)	2.91 (**)
Indicator measuring the amount of funding received under OPRD*Time	-5.88 (*)	-9.30 (**)	H/Π
Share of working-age population	-30.57 (**)		-25.4 (**)
Share of urbanised areas in the total territory of the municipality	-43.47 (**)		-41.05 (**)
Share of mineral extraction land in the total territory of the municipality	-106.93 (**)	-104.01 (**)	-100.79 (**)
Adjusted R ²	0.264	0.4431	0.2683
Probability, related to F- statistics	< 2.2e-16	< 2.2e-16	< 2.2e-16

Codes indicating the level of significance of the produced estimates: *** 0.001, ** 0.01, * 0.05, . 0.1

As evident from the table above, some of the selected indicators displayed significant relations with the unemployment rate and accordingly, they have led to a slight increase of the respective determination coefficients of the regressions. However, they did not result in a change of the estimated effect of the interventions under OPRD 2007-2013 and its significance.

Following the approach selected for counterfactual analysis, the impact of OPRD 2007-2013 on the mechanical growth of the population by municipalities has been also subject to regression analysis. However, the analysis did not produce statistically significant results and therefore, the results thereof were not included in this evaluation.

In conclusion, the replication of the “difference-in-differences” results confirms the finding that the unemployment rate in municipalities in receipt of the most funding under OPRD is lower than that in municipalities not in receipt or in receipt of the least funding per capita. As regards the effect of the other impact indicator selected – the mechanical population growth – it is also estimated positive, but not statistically significant.

2.2.3. Administrative capacity impact evaluation

? What is the impact of the interventions under PA Technical Assistance on the administrative capacity of the beneficiaries and the MA? What is the impact of the training courses on the administrative capacity of the beneficiaries? What is the impact of the training courses on the administrative capacity of the MA?

A key element of the successful implementation and management of the operational programme is the sufficient administrative capacity both at the level of MA and the beneficiaries of the Programme.

The MA of OPRD started activities related to administrative capacity building as early as the preparation of the operational programme, making use of the funds from the pre-accession PHARE programme and, following the approval of the Programme, resources from the Priority Axis Technical Assistance. The funds from Priority Axis Technical Assistance aimed at ensuring the smooth implementation, monitoring, evaluation, publicity and control of the Programme should also be used to build and enhance the administrative capacity of the programme-implementing structures. Administrative capacity building is a continuous process and a major part of it concerns the improvement of qualifications and knowledge of both the MA's employees and the beneficiaries of the Programme.

The funds allocated to Priority Axis Technical Assistance amount to **EUR 54 123 087** (BGN 105 855 557), of which **EUR 46 004 624** are European financing. The total amount for this priority makes up **3,38%** of the Programme's budget. The total budget of this priority axis were updated in compliance with the decisions of the MC in 2012 and 2013, the resource allocated to this priority amounting to **EUR 54 093 389** as of 2013 (BGN 105 797 473).

According to the information in UMIS, 137 projects were funded under this priority as of December 2014. The projects are grouped around three strands:

- Support for the MA and specific beneficiaries – state institutions – 71 projects;
- Support for enhancing the capacity of beneficiaries – municipalities – 35 projects;
- Support for integrated plans for urban regeneration and development for beneficiaries – municipalities – 31 projects.

For the purposes of the administrative capacity analysis, the financed projects have been grouped in several major categories:

- Projects related to the material-technical stock for the Programme
- Projects on reducing the staff turnover and the incentives to the employees

- Projects related to the training of the MA and the beneficiaries
- Projects related to the public awareness related to the Programme
- Projects related to the hiring of external expertise
- Projects related to the provision of consultancy support (technical assistance, researches, evaluations and analysis)
- Projects for supporting specific beneficiaries – state institutions
- Projects to support the strengthening of the capacity of beneficiaries – municipalities
- Projects for supporting the preparation of integrated plans for urban regeneration and development for beneficiaries

A list of the projects financed under Priority Axis Technical Assistance classified in these categories, is presented below.

Table 60: Projects funded under Priority Axis Technical Assistance

Category	Number of projects	Status of projects	Total budget in BGN	Total of funds paid up in BGN
Projects related to the material-technical stock for the Programme	11	6 completed 4 in progress 1 suspended	6 508 328	4 098 997
Projects on reducing the staff turnover and the incentives to the employee	11	7 completed 3 in progress 1 suspended	23 849 750	17 857 606
Projects related to the training of the MA and the beneficiaries	8	3 completed 4 in progress 1 suspended	4 771 334	3 993 089
Projects related to the public awareness related to the Programme	8	3 completed 3 in progress 2 suspended	8 055 698	4 727 513
Projects related to the hiring of external expertise	8	2 completed 4 in progress	7 736 541	3 868 875
Projects related to the provision of consultancy support (technical assistance, researches, evaluations and analysis)	17	9 completed 3 in progress 5 suspended	9 291 730	7 779 560
Projects for supporting specific beneficiaries – state institutions	8	7 in progress 1 temporary	8 331 570	6 466 173

		suspended		
Projects to support the strengthening of the capacity of beneficiaries – municipalities	35	35 in progress	25366022	9116526
Projects for supporting the preparation of integrate plans for urban regeneration and development for beneficiaries	31	30 in progress 1 suspended	6710039	2421551
Total	136		100 621 012	60 329 890

Source: UMIS

The total budget of the financed projects amounts to BGN 100 621 012¹⁴⁴ and the funds paid up as of December 2014 are BGN 60 329 890, i.e. 95% of the funds under Priority Axis Technical Assistance have been contracted and 57% have been paid up.

Given the effective absorption of the funds, the majority of the indicators set under this priority have been successfully achieved. According to the information in the Annual Report on the Implementation of OPRD 2007-2013 the target indicators values set for 2013 have been achieved, except in respect to the indicator "Evaluations performed", the target value of which has been set to 6 evaluations, whereas only 4 evaluations of OPRD 2007-2013 have been performed so far. Similarly, 15 550 items are targeted under indicator "Technical assistance, consultancy, etc", whereas only 1444 have been achieved. It should be noted, however, that both indicators are open to interpretation. This evaluation, for instance, contains a large number of sub-evaluations, which can be considered in isolation. This applies also to the number of consultations performed by virtue of a contract for technical assistance or in the form of assistance provided by external experts. The very term "Technical assistance" is difficult to be measured. The values of certain indicators such as "Trained employees of the MA (incl. its regional units) and beneficiaries" and "Information campaigns and public events held in accordance with the Communication Plan" have been overachieved with respect to the targeted ones. We attach a table with the achieved indicators below.

Table 61: Achieved indicator values under PA5

¹⁴⁴ This amount does not include the funds under the project BG161PO001-5.3.01-0031-C0001 amounting to BGN 105 369, for which no project proposal has been submitted.

Indicators		2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Result											
Level of public awareness of the programme	Achieved	HPI	HPI	0	0	0	0	0	77.8 %		77.8 %
	Target value	HPI	HPI	15%	HPI	HPI	HPI	HPI	HPI	40%	40%
	Baseline value	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI
Output											
Technical assistance, consultancy, etc.	Achieved	HPI	360	360	416	1328	1328	1444			1444
	Target value	HPI	1000	5500	HPI	HPI	HPI	HPI	HPI	15500	15500
	Baseline value	1500	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI
Trained employees of the MA (incl. the regional units)	Achieved	1084	3978	4442	5307	6448	7005	7145			7145
	Target value	HPI	450	1500	HPI	HPI	HPI	HPI	HPI	4500	4500
	Baseline value	600	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI
Meetings of the Monitoring Committee held	Achieved	1	3	6	8	10	12	14			14
	Target value	1	HPI	6	HPI	HPI	HPI	HPI	HPI	14	14
	Baseline value	0	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI
Information campaigns and public events held in compliance with the Communication Plan	Achieved	7	74	95	134	184	226	271			271
	Target value	HPI	6	20	HPI	HPI	HPI	HPI	HPI	60	60
	Baseline value	6	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI	HPI
Evaluations performed	Achieved	HPI	HPI	1	1	2	2	4			4

Source: Annual reports of the MA and own calculations

The analysis of the impact of the interventions under PA Technical Assistance on the administrative capacity of the beneficiaries follows three key elements¹⁴⁵:

- Structure – existence of specific structures for management and implementation of the Programme with clearly defined responsibilities and duties;
- Human resources – existence of sufficiently qualified and motivated staff;
- Systems and procedures – existence of systems, tools, guidelines, handbooks, procedures ensuring the efficient and proper implementation of the Programme.

According to the information and data collected to date, the interventions under Priority Axis Technical Assistance have a positive impact on the administrative capacity building and strengthening both of the MA and of the beneficiaries of OPRD. The interventions under this priority cover the implementation of activities on all the three elements of administrative capacity – structure, human resources development and existence of systems and procedures.

Structures

Directorate General Programming of Regional Development at the Ministry of Regional Development and Public Works, which is part of the specialized administration of the MRDPW, has been designated as Managing Authority of the OPRD 2007-2013 pursuant to Decision of the Council of Ministers no. 965 of 16 December 2005 on the establishment of Central Coordination Unit, Audit Authority for the operational programs, Management Information System, managing authorities of the operational programs and intermediate bodies managing the funds of the EU Structural Funds in the Republic of Bulgaria and its subsequent amendments (DCM no. 747/2006, DCM no. 886/2007 and DCM no. 113/2008). In its capacity as MA, the DG PRD is responsible mainly for the establishment of efficient structure and effective management and control system compliant with the requirements of the European regulations.

The table below displays the changes to the structure of the Directorate which took place between 2007 and 2013 and are aimed at streamlining the working processes and at strict segregation of responsibilities.

¹⁴⁵ Key indicators for Candidate Countries to Effectively Manage the Structural Funds, NEI, 2002

Table 62: Structural changes to the MA

Year	Analysis / Weakness identified	Steps undertaken
2007	Analysis of the functional competencies, staff number of the units directly responsible for the management and implementation of the OPRD.	The number of the experts responsible for the monitoring and financial management of the Programme has been increased.
2008	Shortage of premises for record offices and meetings of the evaluation commissions	New premises have been built in the close of the MRDPW building, newly furnished and equipped, which ensures the necessary facilities.
2008	Evaluation of the MA's capacity status at central and regional level.	The staff number of the OPRD has been increased by 40 new staff positions. A new structure of the MA of OPRD has been established, thus ensuring more efficient management of the Programme.
2009	Delays in the conformity assessment procedure for the management and control systems of OP Regional Development	Improvements in efficiency of the procedures for implementation and management of OPRD. The Programme has been positively assessed by the MCS.
2009	The analysis of the administrative capacity of the MA of OPRD	A new structure has been established within the DG PRD in December 2009, with a total of 133 staff positions. New staff job descriptions have been prepared in compliance with the newly established structure.
2010	Need for further enhancement of the MA's administrative capacity	The staff number of the DG PRD has been increased from 133 to 153 positions. New staff positions (for assistants in the field of the management of European projects and programmes) have been created with a view to assisting the functioning of the MA. Monthly trainings have been organized on occasion to the launch of new grant schemes under OPRD for the regional units.
2011	Need for further enhancement of the MA's administrative capacity	The staff number of DG PRD has been increased from 153 to 162 staff positions. The MA's structure has been changed and a separate "Irregularities" unit has been established within the "LRAI" department; the "Organisational development, information and publicity" department has

2012	Enhancement of the MA's administrative capacity	<p>A new structure of the MA of OPRD and new staff number of 162 positions have been established, in particular, for "Legislation, risk evaluation and irregularities" department – 16 staff positions, with two units: "Irregularities" – 8 staff positions and "Public procurement control" – 7 staff positions. The establishment of "Irregularities" and "Public procurement" units within the "LREI" department contributed to the full segregation of the functions and responsibilities with regard to the reporting of irregularities related to the physical implementation of the projects.</p> <p>All in all 67 trainings have been held both in Bulgaria and in other EU Member States. A workshop-training has been carried out in relation to the practical implementation of Version 8 of the Manual for Management and Implementation of OPRD.</p>
2013	Enhancement of the MA's administrative capacity	<p>The staff number of DG PRD has been reduced from 162 to 157 positions. The "Programming" and "Evaluation" units within "Programming, evaluation, information and publicity" department merged into "Programming and evaluation" unit and two of the employees in this unit are responsible for the organization of the evaluation process.</p> <p>All employees of DG PRD participated in a training related to the update of the Manual for Management and Implementation of the OPRD and the acceleration of verification processes within the MA of OPRD.</p>
2014	Enhancement of the MA's administrative capacity. Optimization of the structure and reducing the number of managerial staff.	<p>The total number of staff positions approved for PRD DG is 160. The sectors "Irregularities" and "Public Procurement Control" merged into "Legislation, Risk Evaluation and Irregularities" department with 10 staff positions. The sectors</p>

"Information and Publicity" and "Programming and Evaluation" were transformed in "Programming, evaluation, information and publicity" department with 10 staff positions. Within the "Financial management and control" department the following 3 sectors were differentiated: "Financial Control and Payments", "Financial Planning and Accounting" and "Bad Credits". The number of staff in department "Monitoring" was reduced from 22 to 18 staff members and in department "IPA" from 18 to 15. Departments "Solidarity" with 3 positions and "Ex-post control" with 9 positions were created. The number of positions for regional departments was increased with one: NWR, NCR, NER, SER, SWR, and SCR with two.

Source: Annual reports of the MA and interviews with MA.

According to the information in the annual reports, an analysis of the MA's administrative capacity was made as early as 2007, and based on the recommendations made, the structure of DG PRD /Directorate General "Programming of Regional Development"/ has been streamlined so as to ensure the proper and full management of the Programme. During the period 2009-2012, there are changes to the structure of the MA every year so as to take into account the workload related to the implementation of OPRD, as well as the new functions and responsibilities. In line with the structural changes, there is an increase in the number of people employed at the Directorate and ensuring the necessary number of experts in order to achieve efficiency in the work duties and in order to meet the requirements of the national and European legislation on the distribution of functions, the four-eyes principle, ex-ante and ex-post control, etc.

In the period 2007 - 2013 there are several structural changes in DG PRD. One major change is the separation of Programme management for territorial and cross-border cooperation in a separate directorate. The second change is the restructuring of department "Legislation, Risk Evaluation and Irregularities" within two sectors: "Irregularities" and "Public Procurement Control." The next major change was in 2014 when two new departments were created: "Ex-post control" and "Solidarity" also "Bad Credits" under "Financial Management and Control." Department "Ex-post control" is established to implement the audit recommendations made by the European Commission. Department "Solidarity" was created after MA of OPRD was designated as coordinating body, responsible for the management and control of the activities funded under the EU "Solidarity" fund. Sector "Bad Credits" in „FMC“ was created because of the large number of signals for irregularities under the Programme, whose review involves considerable human resources and is also a good solution with respect to capacity and responsibilities distribution within the department. Departments "Implementation of Program Priorities", "Monitoring" as well as regional departments have not undergone substantial structural changes. During the interviews, the MA employees explained that communication and separation of functions between departments is adequate, but further efforts must be made toward the improvement of communication between the headquarters in Sofia and the regional departments.

The human resources are the most important element for the successful implementation of each project and of the operational programme as a whole. That is why the training and motivation both of the MA's employees and of the OPRD beneficiaries have a key role to play for the full and proper absorption of the European funds.

It should be noted that part of the funds under Priority Axis Technical Assistance (23%) are used as incentives to the MA's employees, for reducing the staff turnover and retaining the expert potential which has positive impact on the overall administrative capacity of the structures working on the implementation of the OPRD.

Building on the experience and qualifications of employees and beneficiaries is crucial for the successful implementation of the Programme and the absorption of allocated funds. Therefore, training is viewed not as a cost but as an investment. In this relation, part of the funds under priority "Technical assistance" is used for ongoing and specialized training of employees of the MA and beneficiaries.

Approximately 8% of the funds contracted under Priority Axis Technical Assistance are provided for financing of interventions related to improving the qualifications of the MA's staff and of the beneficiaries of the Programme.

The evaluation of conducted trainings in terms of knowledge, transfer of practices and impact on the organization includes a number of factors. The basic structure of the training assessment model of Donald Kirkpatrick¹⁴⁶ covers four stages:

Stage 1 - Reaction	How participants react to the programme?
Stage 2 - Training	To what extent participants improve their knowledge and skills as a result of the training?
Stage 3 - Behavior	The extent to which participants change their behavior back in the workplace as a result of the training?
Stage 4 - Result	What are the organizational benefits as a result of the training?

The assessment of stage 1 is done immediately after the training. The remaining three stages of evaluation are applied after a certain period following the training where the effects and long-term learning outcomes are being measured. Both the results of the online surveys and the answers of the MA and beneficiaries during the interviews showed that after the trainings there has been a positive change on their capacity and qualifications. All respondents answered that they have used the lessons learned during the implementation of their duties and responsibilities, which also helped them to fulfill their responsibilities related to the management and absorption of EU funds more effectively.

The information on the trainings of the MA's staff according to the annual implementation reports is summarized in the table below.

¹⁴⁶ The training assessment model of Donald Kirkpatrick is one of the best known and used models. Kirkpatrick developed his model at the end of 1950. Since then the model has been adapted and modified by a number of researchers.

Table 63: Trainings of the MA's employees

Year	Steps undertaken
2008	The following have been developed under priority "Technical Assistance": <ul style="list-style-type: none"> • Analysis of the administrative capacity of the MA of OPRD • Analysis of the training needs among the employees of MA of OPRD • Training programme for employees of OPRD
2009	72 trainings of 119 employees in total have been carried out
2010	In accordance with the approved training programme, a total of 47 trainings of 107 employees have been carried out in the country and abroad.
2011	25 trainings of MA's employees have been carried out
2012	A total of 67 trainings have been carried out both in Bulgaria and in other EU Member States A workshop-training has been held in relation to the practical implementation of Version 8 of the Manual for Management and Implementation of OPRD
2013	Trainings of 73 employees have been carried out in the country 67 employees have completed specialized trainings abroad The MA of OPRD have periodically organized work meetings for exchange of good practices and experience between the experts from the regional units and central units with a view to improving the public procurement control expertise

Source: Annual reports of the MA

In October 2009, the project "Strengthening the administrative capacity of the Managing Authority of OP Regional Development 2007-2013 for management and implementation of the OPRD through the development of a training programme" was completed, whereby an analysis was made of the needs for training of employees of the MA working on the OPRD and, based on its outcome, a two-year training programme for the employees of the MA working on the OPRD was prepared. The main objective of the programme is to respond to the training needs, to address the specific training needs related to the work in the respective departments as well as to enable the acquisition of knowledge and skills from the practice of other Member States of the Community which have more experience in the management of programmes in the field of regional development. The implementation of the programme started in 2010, with 47 trainings of 107 employees carried out both in Bulgaria and in other EU Member States.

The questionnaire study among the employees who took part in the trainings shows that the programme has met their needs and the set objectives for enhancement of the MA's capacity have been achieved.

Since 2011 the MA have introduced the practice of preparation of plans for training of the employees for each calendar year, whereby the recommendations made in audit and evaluation reports are taken into account as well as the needs stemming from the modifications of the legal framework and newly introduced duties and responsibilities. The MA also enables the employees to take part in additional trainings, besides the ones set in the plan. These practices should be retained also in the measures for enhancement of the MA's administrative capacity in the next programming period 2014-2020. During the conducted interviews, the employees said that there

is need for trainings that would bring together the MA team so that each department become more familiar of the work and responsibilities of their colleagues. This can be achieved by organizing horizontal trainings such as teamwork, stress management, team building, etc.

Two projects under PA Technical assistance provide funds for participation and organization of trainings of the MA - BG161PO001-5.3.01-0051-C0001 "Enhancing the capacity of the Managing Authority of OPRD through exchange of good practices and experience with managing authorities, certification bodies, regional and local authorities of EU Member States, related to the implementation of the regional policies of the Community" and BG161PO001-5.3.01-0032-C0001 "Ensuring the business travels of the employees of the MA in the country, directly related to the fulfilment of their main duties".

The results of the online survey among employees of the MA showed that 43% of the employees interviewed were to a great extent able to participate in the trainings provided in their annual training plans. It should be noted that some departments ("LREL," "Ex-ante Control", "Programming, evaluation, information and publicity") were not able to participate in the planned trainings due to their workload. According to 53% of employees the provided training met their training needs and qualification.

MA staff were involved mainly in short-term trainings (1-2 days) in the country and abroad, due to workload, which prevents them being absent for long time. They also stated that short-term trainings and trainings abroad were the most useful ones and have met their qualification needs. The quality of the trainings in most cases was assessed as good (49%) or excellent (21%). Most of the employees did not like the limited number of training themes, what they need are more specialized trainings on specific problems and issues.

As a positive factor should be noted the GD PRD practice to present the results of the training and transfer knowledge to other colleagues in the department where the employee who has participated in the training prepares a report and sends the information via email to other staff members, indicating where the training program and materials could be found.

The employees who took part in the online survey are almost unanimous on the use of knowledge and skills acquired during the training in the performance of their duties, and that they have achieved better and effective workflow. It may be concluded that the conducted trainings have affected the performance of the MA in a positive direction and have had a strong impact on work productivity, Programme implementation and employees satisfaction.

Enhancement of the capacity of the beneficiaries

In 2007 the MA analysed in detail the beneficiaries' capacity for development of projects and absorption of funds under the OPRD operations. The results of the analysis show that the problems experienced by the beneficiaries in the beginning of the programming period are related mostly to the quality of the projects as follows:

- Prioritization of the needs and especially development tools
- Formulation of strategic and integrated operational projects
- Identification and argumentation of the project – especially with regard to the economic and social outcomes of the project proposal
- Lack of preliminary preparation of the projects which have impact on the quality of the project

- Respect of the principle of complementarity with national strategic documents

Furthermore, in the beginning of 2008 a sociological survey was conducted which provided illustration of the beneficiaries' capacity at the time and analysis of their needs for training. This analysis, as well as that made in 2007, show the areas on which the MA should focus its efforts for building capacity as well as the topics of the trainings that should be organized.

The capacity building of the beneficiaries started as early as the pre-accession period with a project funded under the PHARE programme – Phase 1 BG2004/016-711.11.02./ Year 2004 "Supporting the preparation of quality strategic documents, promoting partnership, cooperation and capacity building assistance for development of projects" – part A – Identification of projects and Part B – Development of projects.

Following the launch of OPRD 2007-2013, the MA has been carrying out the trainings of beneficiaries under several intervention lines funded by Priority Axis Technical Assistance:

- Projects related to trainings for beneficiaries
- Public awareness raising days concerning the grant schemes
- Joint working meetings with beneficiaries when updating the rules on the implementation of the projects
- Working and coordination meetings for exchange of experience

In 2009, the project under PA Technical Assistance BG161PO001/5-01/2008/014- "Strengthening the OPRD beneficiaries' capacity for successful participation in the implementation of OPRD and absorption of funds granted by the Structural Funds through the implementation of the training plan" was approved. In the framework of this project the following contract has been concluded: "Development of specific training on operations for beneficiaries and consulting on OPRD project development and implementation" with a view to enhancing the beneficiaries' capacity for development of project proposals, management and implementation of concluded contracts under grant schemes of OP Regional Development.

Within the contract were conducted 109 trainings under 18 schemes, providing grant funding and were trained 1425 representatives of the beneficiaries. Also, 28 study visits to Member States were organized for the exchange of good practices and lessons learned, in which took part 333 participants. According to the information in the annual reports on the implementation of OPRD 2007-2013, when the implementation of projects under OPRD entered its most active phase, the beneficiaries have encountered the following problems:

- Public procurement procedures
- Limited municipal budgets in the context of severe financial and economic crisis
- Poor performance of CAW contractors

Moreover, audits and evaluations performed suggested that further activities are needed to enhance the capacity of the beneficiaries under OPRD. The MA has undertaken the following measures in order to enhance the capacity of the administrative structures – specific beneficiaries under OPRD:

- Participation of the beneficiaries in specialized trainings in the field of EU Structural Funds, including exchange of experience

- Financial incentives to the MFIP management and implementation team
- Development of ready (mature) projects at the full level of project readiness (draft projects in full volume, coordination, approvals, authorizations, etc.) that the beneficiaries can use when applying for funding under OP Regional Development during the next programming period 2014-2020
- Development and introduction of monitoring and evaluation systems for the implementation of MFIP/projects
- Ensuring technical equipment for implementation of MFIP/projects of beneficiaries
- Organizing meetings for coordination of the management and implementation process of MFIP/OPRD projects
- Provision of information and publicity to the beneficiaries on MFIP

At present, beneficiaries under OPRD 2007-2013, especially municipalities, have gained significant capacity in preparation, management and implementation of projects. 82.8% of the respondents to the online survey indicated that their organization has over 5 years experience in the use of EU funds. The beneficiaries assess the capacity of their organizations as largely adequate, and fully adequate in terms of number of employees and experience, knowledge and skills related to work processes.

The results of the analysis show that beneficiaries have actively participated in organized trainings, where most have attended trainings for implementation of projects, followed by information days and trainings on project preparation. The trainings were short-term (1-2 days) conducted in the country, where the beneficiaries had the opportunity to participate in up to 5 and more than 5 trainings. The beneficiaries also had the opportunity to participate in trainings conducted abroad mainly short-term (1-3 days) where they got familiar with successful projects, best practices and lessons learned in different sectors supported by the Programme such as energy efficiency, conservation and promotion of cultural attractions, combating floods and others.

The beneficiaries were satisfied with the quality of trainings noting that in most cases (87%) the quality of the training was good or excellent. The data was confirmed during meetings with beneficiaries, who noted that the trainings organized by the MA were very helpful and supported the successful implementation of projects, the building and strengthening of knowledge and skills of the employees. As an additional effect of the trainings, was noted the creation of contacts and relations between the beneficiaries, which later on enabled them to discuss cases and difficulties encountered during the project implementation, especially when projects were of one and the same grant scheme. Also as very useful, the beneficiaries highlighted the given opportunities to discuss issues with the respective lecturers and other participants in the training.

The main areas of training which beneficiaries participated are:

- knowledge and skills in financial management and control;
- knowledge and skills in the management and reporting of projects;
- knowledge and skills in organizing and conducting public procurement tenders.

The training participants believe that they have changed their behavior at their workplaces as a result of the lessons learned and that the completed trainings helped them to manage and

implement their projects in a better way and improve the financial management. As a consequence, sustainable results for the organization (level 4) were achieved as the trainings have significantly strengthened the capacity of the organizations, which has led to the preparation of more projects and better absorption of EU funds.

The beneficiaries believe that MA should continue the practice of conducting training to beneficiaries during the current programming period. The beneficiaries believe the following main topics are necessary: organisation and conduct of public procurement tenders, financial reporting and financial corrections. As beneficiaries have already accumulated considerable experience, they believe that trainings during 2014-2020 period should be practically oriented to specific practices, cases and precedents.

Most beneficiaries (90%) reported that the MA provided positive support under the "Technical Assistance" priority.

Considering these recommendations as part of the preparation for the programming period 2014-2020 the Managing Authority has developed a project on technical assistance with the following subject matter: *"Elaboration of action plans to strengthen the administrative capacity of the OPRD beneficiaries"*. It covers a study of the beneficiaries, which, in turns, includes analysis and evaluation of the administrative, technical and financial capacity of the beneficiaries under OP Regional Development. Under the "Technical assistance" priority are provided funds for strengthening the capacity of direct beneficiaries and municipalities amounting to 33 697 592 leva or 33.4% of the total budget under this priority.

The last element of the administrative capacity concerns the existence of **systems and work procedures as well as material-technical facilities** for implementation of the Programme.

In accordance with the requirements of the European regulations, the Procedure Manual and the Description of the management and control systems of OPRD have been positively evaluated in terms of the compliance of the management and control systems by the Bulgarian Auditing Authority, and subsequently by the EC. In the 2009-2012 period, the Procedure Manual and the adjacent check-lists and templates needed urgent changes to take into account the improvements of the management and control systems of the Programme, the small adjustments to rules and procedures, the supplement to the activities of control and making the checklists more detailed as well as the preparation of new methodological guidelines to improve the quality of the project management. The existing best practices and lessons learned indicate that the purpose of the procedures is to assist the proper implementation and to outline in detail the roles of the participants in the processes of communication, coordination and management of the Programme, not to make the system cumbersome and bureaucratic.

UMIS is the information system used to manage all operational programmes during the programming period 2007-2013. The terms, procedures and operational mechanisms of UMIS are laid down in DCM no. 322 of 19.12.2008. It will be used during the next programming period, whereby significant changes and improvements are envisaged to be made aimed at using the system as a functional tool and decreasing the bureaucracy.

Funds under Priority Axis Technical Assistance have been also used for the full range of material and technical stock necessary for the employees of the MA, whereby the following improvements have been made:

- Provision of the necessary IT equipment and software;

- Ensuring the printing and preparation of documents;
- Provision of transport vehicles needed for the efficient and effective work of the MA;
- Ensuring the conditions for the evaluation of the project proposals and successful implementation of the contracts concluded under OPRD
- Streamlining the archive of documents on the implementation of the OP
- Ensuring the proper working conditions for the MA of OPRD by renting building outside the MRDPW.

In general, the MA experts are satisfied with the technical means at their disposal for the implementation of their daily duties.

Implementation of recommendations of previous Programme evaluations related to the strengthening of administrative capacity

The administrative capacity of MA and the beneficiaries has been the subject of several evaluations during the previous programming period¹⁴⁷.

As a whole, the conclusions of the evaluators were that the MA operates according to the requirements of EU and national legislation and only minor adjustments to the system are necessary. MA was able to implement the recommendations of the evaluators by using the funds under priority "Technical assistance."

On the following pages we look at the implemented recommendations made by these reports.

Analysis of the administrative capacity of MA of OPRD 2007-2013 conducted in 2009

1.	"Fine-tuning" rather than radical change: the Managing Authority operates well despite the presence of problems. No need to make significant changes where things work well.	The recommendation is implemented. The MA maintains its structure. The main changes related to the numbers of employees. For the strict separation of functions to be ensured, some departments were divided.
2.	Simplification and streamline of processes, documents, requirements and the overall activity. All decisions about changes should be assessed against the potential simplification and streamline of work.	The Manual for Management and Implementation of OPRD 2007-2013 has been amended often, as the latest version №10 is from January 2015. The final amendments seek to alleviate the lengthy procedures and to reduce the administrative burden for the MA and the beneficiaries.
3.	Increasing the effectiveness of planning and work distribution, including the effective delegation of responsibilities for the execution of	The functions of the departments are clear. The MA has delegated all its first level control functions to the regional departments.

¹⁴⁷ Analysis of the administrative capacity of OPRD 2007-2013 MA, year 2009; Mid-term evaluation of OPRD 2007-2013, year 2011

	tasks.	
4.	Maintaining and increasing the motivation and responsibility of the employees, especially by improving their recognition and incentives.	MA used funds under priority "Technical assistance" to motivate and stimulate their employees.
5.	Establishing effective working relations with the MRDPW general administration as a precondition for solving a significant part of the problems, including simplification, employee motivation, creating normal work environment and others.	A separate building to accommodate the MA has been rented with funds under priority "Technical Assistance". The new material and technical basis has provided normal working environment for employees.
6.	Training of employees and management staff: in a consistent way, tailored to the specific needs, economically and efficiently.	The funds under the "Technical Assistance" priority ensure the annual organisation and conduct of trainings for employees of the MA.
7.	Consistent and timely actions to strengthen the capacity of the beneficiaries: many of the present problems and "bottlenecks" in the work of the MA are due to the low capacity of the beneficiaries. Strengthening the capacity of the beneficiaries will help reduce the weaknesses and gaps in implementation and the burden on MA staff. The MA staff should participate actively in the strengthening of the capacity of the beneficiaries, but to do so, it needs both specific knowledge and skills, but also responsiveness and understanding of the needs and problems of various beneficiaries.	MA has made significant efforts to strengthen the capacity of beneficiaries. The funds under priority "Technical Assistance" provided for the conduct of numerous trainings, including study visits abroad for exchange of good practices. Under the priority "Technical Assistance" an analysis of the capacity of municipalities was made and Summary Action Plan was prepared to strengthen the administrative capacity of 36 municipalities - beneficiaries under OPRD and current programming period, funds for capacity building of the municipalities were allocated. Also Summary Action Plan for strengthening the administrative capacity of the direct beneficiaries under OPRD was developed and funds to strengthen the capacity of direct beneficiaries were provided.

Mid-term evaluation of OPRD 2007-2013, conducted in 2011

1.	For the next programming period, the MA should consider creating IBs to do routine, administrative work. The Consultant recommends the management and administrative functions to be divided into two or more organizations, i.e. MA would	The results of the online survey during the ex-ante evaluation of the OP "Regions in Growth" 2014-2020 showed that 46% of the respondents - representatives of the working group / beneficiaries and 53% of the MA representatives do not find that IB is necessary. The conclusion is that the establishment of
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	be responsible for the political issues, and Intermediate Bodies for the administrative functions and project management.	Intermediate Bodies would create more structural and functional bottlenecks than improvements in the work process
2.	External, technical expertise under priority "Technical Assistance" for assessment of quality of physical implementation during on the spot checks should be used.	Funds under the "Technical assistance" priority were used to engage an external company with technical expertise to monitor the physical implementation of the activities under funded contracts.
3.	To develop the technical capabilities of regional departments with trainings in the field of public procurement, financial control and monitoring procedures, use of UMIS and legal requirements related to the implementation of construction works.	The MA develops the capacity of its regional departments, they are having annual training. Also steps have been taken to increase the number of employees in these departments.

It can be concluded that the MA has accumulated sufficient administrative capacity and experience during the previous programming period 2007 - 2013. The employees of the department have considerable experience in the management of EU funds (pre-accession and structural), 50% have experience over 5 years of experience, while 28% from 3 to 5 years. In terms of work - 38% of the employees have worked in MA for over 5 years, and 35% from 3 to 5 years. These figures indicate that there is no high turnover in the department, which guarantees the preservation of qualified personnel and accumulated institutional experience. Rather, attention should be paid to the following the turnover is different in different departments – in "Implementation of the program priorities," "Monitoring," "Financial Management and Control" and the regional departments, there is almost no loss of employees, while in "LRAI" the turnover is relatively high (1 person per year), which reflects the work, as the department has a small number of people.

The employees rate highly the capacity of the directorate as MA and believe the number of employees (69%), knowledge (83%), skills (78%) and experience (80%) related to work duties, the rules and working procedures (77 %) workspace (84%), specialized software (73%) are adequate or to a large extent adequate to the responsibilities and functions related to Programme management.

The interventions financed under priority "Technical assistance" had a strong impact on the administrative capacity of MA as most influence had the technical and material provision of the Programme (65%) and the reduction of turnover and incentives for the MA employees (57%).

The following table illustrates the view of the MA departments on the interventions under Priority "Technical Assistance" of OPRD 2007-2013 which had the greatest impact on the MA administrative capacity placed in order of importance according to each department:

Departments	Interventions under priority "Technical
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	Assistance" of OPRD 2007-2013 with the greatest impact on the administrative capacity of MA
Department "Financial Management and Control"	<ul style="list-style-type: none"> • Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Limiting staff turnover; • Training of beneficiaries;
"Monitoring" Department	<ul style="list-style-type: none"> • Material and technical base; • Limiting staff turnover; • Information and publicity;
"Implementation of Programme Priorities" Department	<ul style="list-style-type: none"> • Training of MA experts; • Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Business trips, participation in working groups, EU meetings and others;
"Programming, Evaluation, Information and Publicity"	<ul style="list-style-type: none"> • Information and publicity; • Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Limiting staff turnover and providing incentives to MA employees;
"Legislation, Risk Assessment and Irregularities"	<ul style="list-style-type: none"> • Limiting staff turnover and providing incentives to MA employees; • Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Training MA experts; • Training of potential beneficiaries and the beneficiaries under OPRD 2007-2013;
"Ex-post Control" Department	<ul style="list-style-type: none"> • Limiting staff turnover and providing incentives to MA employees; • Training of MA experts; • Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Information and publicity;
"Northeastern Region" Department	<ul style="list-style-type: none"> • Material and technical provision of the Programme (equipment, building rental, cars, etc.);
"Southeastern Region" Department	<ul style="list-style-type: none"> • Limiting staff turnover and providing incentives to MA employees; • Information and publicity;
"South Central Region" Department	<ul style="list-style-type: none"> • Information and publicity; • Training of potential beneficiaries and the beneficiaries under OPRD 2007-2013; • Limiting staff turnover and providing incentives to MA employees;
"North Central Region: Department	<ul style="list-style-type: none"> • Limiting staff turnover and providing incentives to MA employees; • Technical assistance to MA in the form of

	analysis, evaluations, research, etc.; • Information and publicity; • Training of MA experts; • Training of potential beneficiaries and the beneficiaries under OPRD 2007-2013;
"Northwestern Region" Department	• Limiting staff turnover and providing incentives to MA employees; • Training of MA experts;
"Southwestern Region" Department	• Material and technical provision of the Programme (equipment, building rental, cars, etc.); • Information and publicity; • Limiting staff turnover and providing incentives to MA employees; • Training of MA experts;
Department "Solidarity"	• All;

The main areas where the capacity of DG PRD should be further improved in relation to its functions as OPRD MA for the period 2014-2020, according to the MA employees are:

- Increasing the number of employees ("IPP" Department – 2 positions, "Monitoring" Department – there is need of engineers and technical experts, "FMC" Department – 5 positions, "LRAI" Department – 9 to 10 positions, "EPC" Department – 5 positions, "PEIP" Department – 3 positions);
- Skills and knowledge with respect to working duties;
- Experience with respect to working duties;
- Rules and procedures of work;
- Workspace;
- Technical means;
- Specific specialized rooms/halls;
- Specialized software;

Areas of further capacity development by MA departments:

Departments	Need with respect the increase of GD PRR capacity regarding its functions as MA of OPRD
Department "Financial Management and Control"	• Number of employees;
"Monitoring" Department	• No need;
"Implementation of Programme Priorities" Department	• Skills with respect to working duties; • Technical means; • Specific specialized rooms/halls;
"Programming, Evaluation, Information and Publicity"	• Number of employees; • Rules and procedures of work;
"Legislation, Risk Assessment and	• Skills with respect to working duties;

Irregularities"	<ul style="list-style-type: none"> • Number of employees; • Knowledge with respect to working duties; • Experience with respect to working duties; • Rules and procedures of work;
"Ex-post Control" Department	<ul style="list-style-type: none"> • Number of employees; • Workspace; • Technical means;
"Northeastern Region" Department	<ul style="list-style-type: none"> • No need;
"Southeastern Region" Department	<ul style="list-style-type: none"> • No need;
"South Central Region" Department	<ul style="list-style-type: none"> • Specific specialized rooms/halls; • Technical means; • Specialized software;
"North Central Region" Department	<ul style="list-style-type: none"> • Technical means; • Specialized software;
"Northwestern Region" Department	<ul style="list-style-type: none"> • Technical means;
"Southwestern Region" Department	<ul style="list-style-type: none"> • Skills with respect to working duties; • Knowledge with respect to working duties; • Rules and procedures of work;
Department "Solidarity"	<ul style="list-style-type: none"> • Experience with respect to working duties;

? What steps have been taken to reduce the administrative burden on the beneficiaries and the MA?

The significant administrative burden on the beneficiaries in implementing the operational programmes funded from the Structural and Cohesion Fund is a key problem for the effective absorption of the funds and achievement of the targeted results. Therefore, the reduction of the administrative burden on beneficiaries has been laid down as a horizontal principle in the draft general principles on the provision of funds during the new programming period 2014-2020 (see COM (2011) 615).

Following on the information in the annual reports on the implementation of the OPRD 2007-2013, the following cases of administrative burden have been reported:

- **Delay in the procedure of beneficiaries' requests for payment due to the complex process of concluding annexes in the MA of OPRD.** In this case the MA has changed the procedures laid down in the Manual for Implementation of OPRD, whereby the cases in which the beneficiaries are required to conclude an annex to a signed grant contract have been limited. Thus, the procedures of approval and conclusion of annexes have been reduced, allowing for a timely verification of the payment requests. The expenditure verification procedures have been also improved by reduction of the number of copies of documents required upon payment, reduction of the correspondence with the beneficiaries, shortening of the period for preparation and submission of verification

report, and shortening of the period of "layover" per payment request at the MA.

- **Unclear and onerous criteria for application.** A preliminary publication of the application guidelines has been launched for the purpose of enabling the beneficiaries to discuss and comment on the requirements set out in the guidelines, the objectives, activities and results envisaged.
- **There is a delay in the implementation of part of the projects which, in turns, results in changes of the schedule planned under the respective contract.** The delay is mainly due to the public procurement procedures. In such cases the MA undertakes measures to temporarily suspend the grant contracts or specific activities therein as a result of objective circumstances pursuant to Art. 10.1 of the General Terms and Conditions of the grant contracts, which would hinder the timely implementation of part of the activities set in the project, until decision on the appealed procedures have been issued. However, this is only an interim solution of the problem, as the MA have decided, at the end of the time period for completion of the Programme, not to approve beneficiaries' requests for temporary suspension submitted after 01.12.2013, in the event of appeal of contractor selection procedure. Furthermore, joint meetings have been organized with the beneficiaries whose projects have been estimated as risky and the possible scenarios for achievement of the objectives and results set in the Programme have been discussed. This will contribute to the achievement of the Programme's objectives. The MA regularly monitors the implementation of the risky projects.
- **Introducing full electronic application procedures in the UMIS electronic service module.** The Guidelines for Application include detailed description of the procedures for submission of project proposals in digital form. Municipalities-applicants have been trained to work with the electronic services module of UMIS by a representative of Directorate "Information and systems for management of the EU funds". The Managing Authority has ensured a permanent contact person to receive all incoming signals and inquiries related to the operation of the system and to provide solutions to ongoing problems and cases.

The results of the online survey among the MA employees show that according to 59%, MA has taken enough measures to reduce the administrative burden of the beneficiaries (26% are of the opinion that not enough adequate steps have been taken in this direction). The following had the greatest effectiveness in facilitating the beneficiaries:

- Unification of the project implementation rules (83%);
- Publication of the guidelines for applicants in advance, so they could be discussed with the beneficiaries before their official announcement/approval (78%);
- Electronic submission of project proposals (77%);
- Simplification of the procedures related to payments under grant contract (77%).

On the other hand, the majority of beneficiaries (53%) are of the opinion that the MA has not taken sufficient measures to reduce the administrative requirements (27% are of the opinion that the measures are sufficient). According to them, the following measures had the greatest effectiveness in facilitating their work:

- Publication of the guidelines for applicants in advance, so they could be discussed with the beneficiaries before their official announcement/approval (89%);

- Typified application forms (87%);
- Unification of the project implementation rules (83%);
- Electronic submission of project proposals (71%);

As evident from the responses of the MA and the beneficiaries, the greatest impact in reducing the administrative burden had the unification of the project implementation rules and the publication of the guidelines for applicants in advance, so they could be discussed with the beneficiaries before their official announcement/approval;

During the conducted interviews, the beneficiaries explained that the main alleviation for them was:

- The possibility of submitting project reporting documents and requests for payments electronically, not in three hardcopies;
- Constant support from the MA regional department.

The MA took steps to reduce the administrative burden of the beneficiaries, but should continue its efforts in this direction. The 2007-2013 programming period is the first one for the MA and to a certain extent the existence of more complicated rules and an attempt for over control of the processes for the preparation and implementation of projects funded under the Programme is justified. The capacity and skills of the MA employees and the beneficiaries developed and built on during the first programming period, which means that for the 2014-2020 period, part of the checks and controls could be reduced or removed such as the 100% ex- ante public procurement control and the 100% on the spot checks of projects in implementation. A risk assessment of the projects should be made and a complete ex-ante and ex-post control should be done only to projects in risk.

The main recommendations of the beneficiaries to reduce the administrative burdens are:

- In case the manual and its annexes are changed there should be clear indications as to where the changes have been made. According to some beneficiaries the changes to the rules and the corresponding templates are frequent and in some case where the report and request for payment were ready a large part of the documents should have been changed due to alternation in the templates.
- Change of the regulatory framework associated with the payment to the municipal employees who work on projects. On the one hand, fixed rates are too low and do not encourage employees to actively participate in the project work. On the other hand, the report of time worked is too complicated and requires considerable effort on the part of the beneficiaries.
- Dropping out the ex-ante control of procedures for selection of contractor. The ex-ante review of procedures for selection of contractor has not facilitated the work of the beneficiaries, due to delay in the approval of the documentation, and later on regardless of the control made by the MA, still financial corrections were imposed.
- Change of the regulatory framework related to appeals. The appeals of procedures for selection of contractor create major difficulties for beneficiaries, as they slow the implementation of projects with 5 to 12 months, jeopardizing the successful implementation of the projects. The beneficiaries are of the opinion that some companies

appeal only to create difficulties with the implementation of the project.

- Compliance with the deadlines for obtaining an opinion from the National Institute of Immovable Cultural Heritage (NIICH). The beneficiaries have experienced great difficulty in obtaining opinions related to the reconstruction and renovation of NIICH monuments. The coordination procedures have taken long time, which also brought risks to the completion of projects and necessitated the temporary suspension of project activities.
- Another difficulty, which the municipalities encounter during the implementation of projects under OPRD 2007-2013 is the issue relating to sites/facilities with shared ownership - municipal and state. The beneficiaries - municipalities have the opportunity to renovate, reconstruct or modernize only part of the facilities, the one that is municipal property. This affects the overall concept of project development, as in such cases the projects may not be implemented in their entirety which in turn affects the sustainability of the results.

It should be noted that in coping with the abovementioned difficulties, the MA has supported the beneficiaries by allowing them to temporarily suspend activities or to extend the time to implement the grant contract, which enabled the successful project completion.

2.3. Environmental impact evaluation – preparation of the Second Triennial Report on monitoring and control of the implementation of the Programme

The environmental impact evaluation of the OPRD interventions, including the preparation of a Second Triennial Report, is based on the main evaluation issues of the Terms of Reference. As set out above, the triennial report has been approved by the MEW and this report only presents the main conclusions.

- ? What is the adequateness of the measures updated in the First Triennial Report, concerning the prevention, reduction or the highest possible elimination of the assumed unfavourable effects on the environment from the implementation of the OPRD and the monitoring and control indicators for the implementation of the OPRD?

All of the measures updated in the First Triennial Report are still relevant, although two of the measures do not seem to be directly implemented, namely:

- *Measure 2: Give priority to projects which provide for: the implementation of low-waste and no-waste technologies, measures for compliance with the waste management hierarchy, know-how and other water-, energy- and material-saving technologies*
- *Measure 5: Give priority to eco-friendly tourism and other alternative types of tourism.*

Most of the monitoring and control indicators updated in the First Triennial Report are adequate. Two of the indicators have not been considered to be suitable since they do not lead to added value in the analyses on the environmental impact evaluation. They are:

- *Restored and renovated historic and cultural monuments located in the cities and towns (number)*
- *Natural, cultural and historic attractions developed – number*

The indicator "affecting natural habitats" (m2) is not suitable for operation 2.3.

- ? Are the measures, updated in the First Triennial Report, on the prevention, reduction and highest possible elimination of assumed adverse effects on the environment from the implementation of the OPRD in the grant schemes and the application guidelines/ requirements published in the period 01 January 2011 – 31 December 2013 being implemented and to what extent are they reported?

Are the measures regarding the Decision of the Minister of Environment and Water on considering the need for environmental assessment of the amendments to the OP Regional Development 2007-2013 (Decision no. EO-24/2013 and Decision no. EO-4/201) being implemented?

The measures updated in the First Triennial Report are being implemented. The review of the schemes and application requirements/guidelines do not provide information on the direct reporting of two of the measures (Measure 2 and Measure 5 mentioned above), respectively on their application. The measures included in Decision no. EO-24/2013 and Decision no. EO-4/2012 on considering the need for environmental assessment of the amended OPRD 2007-2013 are being strictly implemented.

- ? Are the measures implemented when approving the project proposals? Are the projects requiring an EIA/EA approved only after a positive decision/ opinion?

With respect to all the schemes, where relevant, the application guidelines require the submission of documents proving that there is an EIA/EA or that there is no need for such evaluations.

It is only with respect to scheme BG161PO001-1.1.08 – *Support for the reconstruction, renovation and equipment of state hospitals and health facilities in urban agglomerations* that the guidelines for application do not require the submission of a decision on the EIA, which should have been required given the nature of the support.

- ? Has biodiversity protection been taken into account?

Have projects requiring conformity evaluation procedure been approved only following a positive resolution/opinion?

Biodiversity protection has been taken into account for all schemes, which are expected to have potential impact on natural habitats. The application guidelines of such schemes have set a requirement for an evaluation under Art. 31 of the BA (Biodiversity Act), stating that for plans, programmes, projects and investment proposals that are not immediately related to or required for the management of the protected areas and which individually or in interaction with other plans, programmes, projects or investment proposals may have significant adverse impact on the protected areas, are subjected to an evaluation of their conformity with the subject matter and objectives for the protection of the respective protected area and accordingly, for presentation of a resolution under Art. 18 or Art. 20 and under Art. 28 of the Ordinance on the Terms and Procedure for Conducting an Evaluation of the Compatibility of Plans, Programmes, Projects and Development Proposals with the Subject Matter and the Objectives of the Protected Areas.

? Have the borders of the monuments of culture and their adjacent areas been taken into account in accordance with the relevant laws dealing with their protection?

The application guidelines of the schemes under Priority Axis 3, which is related to tourism and monuments of culture do not set any explicit requirements to the borders of the monuments of culture and their adjacent areas. Nevertheless, the application guidelines set out requirements for coordination of the projects with the National Institute for the Cultural Monuments and compliance with the provisions of the Law on the Monuments of Culture, Spatial Planning Law, Ordinance No. 4 on the Scope and Content of Investment Projects and Ordinance No. 8 on the Scope and Content of the Zoning Schemes and Plans. Therefore, it may be accepted that the borders of the monuments of culture and their adjacent areas have been taken into account in the implementation of the projects.

? Have measures to limit the emissions of dust, noise, and vibrations during the construction-repair works under the projects been taken?

Have measures to manage the wastes generated in the course of the construction – repair works been taken?

The reports provided by the beneficiary's evidence the involvement of construction, author and investment supervision which guarantees that the legal requirements have been observed, including with regard to the limitation of the emission in the environment and management of the wastes generated in the course of the construction-repair works.

? To what extent the measures have been implemented in the final technical reports on the completed projects and the updated environmental indicators have been reported?

The measures intended to prevent and reduce harmful impacts stemming from the implementation of OPRD on the environment are being generally applied, although this is not directly visible and is being done indirectly for some of them.

Many of the environmental indicators underlying OPRD 2007 – 2013 EA opinion are set under the support schemes and this has ensured their reporting by the beneficiaries. At the same time certain environmental indicators are not set under the schemes and have not been reported by the beneficiaries respectively. These indicators are as follows:

- *Energy generation from alternative and renewable sources (% of the total energy consumption);*
- *Consumption of energy generated from alternative and renewable sources (% of the total energy consumption);*
- *Restored and renewed historical and cultural monuments located in the towns (number);*
- *Impact on natural habitats (m2);*
- *Built-up areas (ha);*
- *Impact on forest areas (m2);*
- *Areas with planted vegetation (ha);*
- *Environment-related training courses and seminars held.*

Some of them are not particularly important to measure the impact on the environment, such as: *"Restored and renewed historical and cultural monuments located in the towns (number)"*. Information for others has been received by the RIEW and RHI (see Activity 1, described in this report).

Indicators have been set under certain schemes, which, although not included as ecological indicators set out in the EA opinion, could be used to measure the environmental impact of the interventions under the Programme. These indicators have been already reported on by some beneficiaries. They are as follows:

- *area of strengthened landslides (m²);*
- *length of cleared river beds and ravines (m);*
- *length of coastline protection facilities built (m);*
- *length of protected or recovered river-banks (m);*

? What is the environmental impact of the projects completed in the period 01 January 2011 – 31 December 2013 and the OPRD interventions respectively?

The analysis provided in the Second Triennial Report indicates that the updated measures to prevent, reduce and remedy to the fullest extent possible the harmful impact on the environment are being implemented as a whole. A significant number of the projects completed as at 31 December 2013 have a particularly positive effect due to the nature of the support – e.g., energy savings, planting of vegetation, road rehabilitation, construction of pedestrian zones and recreation areas.

? Do the revisions of OPRD in the period 01 January 2011 – 31 December 2013 have advantages with respect to the environmental impact as compared to the activities that have been cancelled?

A large number of the amendments made to OPRD in the period 1 January 2011 – 31 December 2013 have an advantage with respect to their environmental impact compared to the activities that have been cancelled. Many of the amendments are neutral with respect to their environmental impact. Two of the amendments could result in potential adverse environmental effects: the decision to reallocate unmanaged resources to the project for construction of the North Speed Tangent and the extension of the scope of operation 2 by adding a new activity related to the construction of first-class roads outside the Trans-European Transport Network. The North Speed Tangent has been subjected to EIO, whereby Decision no. 6-3/2011 concludes that no significant environmental impact is expected.

? To what extent have the recommendations from the First Triennial Report been implemented?

The First Triennial Report has made the following recommendations¹⁴⁸:

¹⁴⁸ KPMG, 2010

1. *For the schemes opened and already closed where the monitoring and control indicators relevant to the respective scheme have not been set, the MA should require and collect the data related to them and should summarise them in the next environmental impact monitoring and control report.*

The recommendation is still valid and is implemented by means of this evaluation. For the purpose of this evaluation, additional information has been collected by the beneficiaries regarding indicators set under the schemes for which no data has been provided in the beneficiaries' final reports and regarding indicators which have not been set under the schemes and for which no data has been collected.

2. *In the process of planning the amendments to OPRD an enquiry should be drawn up to the MEW as to whether a procedure for consideration of the need for environmental assessment should be carried out.*

This recommendation is still valid and has been implemented in practice. Both amendments to OPRD 2007-2013 have been subjected to procedure for consideration of the need for environmental assessment. The dates of the approvals of the Programme by the EC are 10 February 2011 and 17 August 2012, respectively. The procedure for the consideration of the need for EA for the first amendment was carried out following approval by the EC – the decision of the MEW is dated 13 February 2012.

The third amendment of the Programme, approved by the EC on 1 April 2014 (beyond the period reviewed in the second report) has also passed a procedure for consideration during the period under consideration – the decision of the MEW is dated 26 July 2013.

3. *For the purpose of compliance with the environmental legislation and the EA opinion issued (in accordance with the changes in the indicators in the opinion proposed in the First Triennial Report) the relevant environmental indicators should be envisaged and reported during the second half of the programming period.*

This recommendation is still valid but has not been fully implemented. The application guidelines do not envisage (and include) all relevant environmental indicators during the second half of the programming period (for example, the indicator "Impact on natural habitats (m2)". Furthermore, not all indicators have been reported by the beneficiaries and therefore their implementation has not been reported.

4. *For the purpose of reporting on the environmental indicators during the remaining part of the programming period an amendment to the monitoring and control indicators is proposed. It is recommended that all indicators, applicable to be set under the respective scheme, should be required for inclusion as values reported in the projects' technical reports whereby the data should be summarised / summed for each calendar year.*

The first part of the recommendation is adopted – the amendments to the system of indicators proposed have been adopted. The second part of the recommendation is applied in the practice for some of the indicators. No mandatory reporting by the beneficiaries on all applicable indicators has been set with respect to some of the schemes.

5. *During the drafting of the application guidelines for each individual scheme the impact on the environment should be analysed and the measures, conditions and monitoring and control indicators from EA opinion No 4-3/2007 assessed as adequate should be taken into account by everybody, whereby the updated indicators should be used as such.*

This recommendation is made in principle and has been implemented partially – only with respect to the use of the updated indicators. With respect to the analysis of the environmental impact during the drafting of the application guidelines for each individual scheme – this is not required as each of the schemes within OPRD is subject to evaluation for its environmental impact during the preparation of the Report on the Environmental Evaluation of OPRD and the respective measures and indicators have been proposed based on the expected impact. In case of amendments to the OPRD the latter are subject to procedure for consideration of the need for environmental evaluation.

6. *For the implementation of the above recommendation the team drawing up the guidelines should include the respective specialists – ecologists having the relevant knowledge depending on the specific scheme.*

This recommendation is made in principle. According to the information provided by the MA it has not been implemented so far, as the application guidelines are drawn up by in-house experts of the MA amongst whom there are no ecologists. The recommendation remains relevant for more specific schemes, which are envisaged to be developed with the assistance of external experts. In such case it could be implemented and the teams drafting the guidelines might include experts having the relevant knowledge.

A conclusion can be drawn on the basis of the above-said that the recommendations from the First Triennial Report are still valid and relevant and the majority of them have been duly implemented.

- ? *Has the tourism development project/activity taken into account the recreation-related burden norms and the status of the respective territory?*

The review of the relevant documentation of the schemes under Priority Axis 3 "Sustainable Tourism Development" (the guidelines for application) shows that the recreation-related burden forms are taken into account, and this is fulfilled through the condition that each single project should be compliant with the requirements of the Environmental Protection Law, the Law on Bio Diversity, the Protected Areas Law and the Spatial Planning Law. In certain cases there is a requirement that the proposals should take into account the Protected Areas Management Plans, for the areas in which they are implemented. This is a guarantee that the proposals meet the requirements of the legal framework related to the protection of the environment, including with respect to the recreation-related burden and the distant and cumulative effect from the development of the tourism.

- ? *Have local wastewater treatment facilities been envisaged for the sites under Priority Axis 3, are they efficient and do they take into account the specific needs?*

According to information from the Contracting Authority, for the tourist sites supported under OPRD no such facilities are required. Nevertheless, however, in view of the fact that the application guidelines set out the requirement to carry out an EIA procedure and CA for each investment proposal under PA3, this a priori means that the treatment of wastewaters generated by the operation of the sites under PA3 and their treatment have been taken into account upon the application, development and implementation of the projects.

Following the visits on site made in the framework of the evaluation¹⁴⁹, it have been found that the household wastewater facilities are sufficient and take into account the tourist flow.

? *Have waste management systems been developed for the sites under Priority Axis 3 and do they correspond to the municipal waste management programme projections?*

The technical reports of the beneficiaries do not provide information as to whether waste management programmes have been developed for the projects implemented. It was found during the development of this report, including through visits on site, that the sites located in urban environments are included in the municipal waste management systems. For the sites located outside populated areas the respective collection containers have been envisaged (in most cases these are changeable containers – polyethylene bags) and subsequent treatment of the wastes generated.

2.4. Main outputs and results realized under Activity 2

Table 64. Main outputs and results realized under Activity 2

Outputs	Fulfilment
Desk study of the main old (for the period 2007-2013) and new (for the period 2014-2020) documents containing requirements related to the socio-economic development evaluation methods	✓
Table illustrating the effectiveness of the Programme with regard to the achievement of the target values set for the output and impact indicators	✓
Unit (output) costs evaluation	✓

¹⁴⁹ Project BG161PO001/3.1-01/2008/001-007 "Socialisation of National Historical-Archaeological Reserve Nikopolis ad Istrum" and project BG161PO001/3.1-03/2010/044 "Development of Tourist Attraction "Tectonic Ridge Kaletu"

Visits on site	✓
Interviews with beneficiaries	✓
Interviews with the MA	✓
Online questionnaire	✓
Descriptive statistics	✓
Counterfactual analysis	✓
Results	Fulfilment
Analysis of the traditional and new impact evaluation methods recommended by the EC and proposals on the most objective impact measurement methods	✓
Environmental impact assessment – Second Triennial Report on monitoring and control of the implementation of the Programme	✓
Socio-economic impact evaluation	✓
Territorial impact evaluation	✓
Administrative capacity impact evaluation	✓

3. Activity 3: Evaluation of the contribution of the interventions under OPRD 2007-2013 to the implementation of the EU horizontal principles

3.1. Analysis of the continued relevance of the horizontal issues addressed in OPRD to the European and national documents defining the EU horizontal principles in the area of equal opportunities, equal access, non-discrimination, sustainable development, partnership, etc., by reviewing the EU horizontal principles, issues and policies and identifying those the implementation of which is relevant to the OPRD

? Which are the EU horizontal policies set out? What is the difference between horizontal principles, issues and policies? Which are the EU horizontal policies

relevant to the OPRD 2007-2013?

One of the main difficulties related to the application of the E horizontal principles is that they are not explicitly defined in one document. Therefore, this section briefly overviews the development of these principles over the years.

The preamble of the Treaty on European Union explicitly states two of the generally accepted horizontal principles – the equality principle and the sustainable development principle¹⁵⁰. Art. 11 of the Treaty on the Functioning of the European Union (TFEU) states that “environmental protection requirements must be integrated into the definition and implementation of the Union’s policies and activities, in particular with a view to promoting sustainable development”. Another provision having general application (Art. 8), which is included in Title 1 – Principles of the TFEU is that the Union shall “aim to eliminate inequalities, and to promote equality, between men and women”. Furthermore, “in defining and implementing its policies and activities, the Union shall aim to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation” (Art. 10 of TFEU). Other principles which are referred to include: subsidiarity, proportionality, openness in both Treaties all of these principles are not defined as “horizontal principles”.

As can be expected, these principles are reflected in the Structural Funds Regulations. Regulation 2081/93 of July 1993, which sets out the tasks of the Structural Funds and their efficiency as principles and at the same time the following objectives are formulated:

- Equal opportunities for men and women to which the Union’s structural measures should contribute
- Sustainable development

The description of the general principles of the Commission in the Regulation laying down general provisions on the Structural Funds (Regulation 1260/1999) states that in compliance with the main objectives of the EU assistance for the period 2000-2006, the Funds should “contribute to the harmonious, balanced and sustainable development of economic activities, the development of employment and human resources, the protection and improvement of the environment, and the elimination of inequalities, and the promotion of equality between men and women”. In addition to these principles, the very Preamble of Regulation 1260/1999 states that the Funds should be used to combat discrimination based on race, ethnic origin, disability or age.

Although not explicitly referred to as horizontal principles, the principles underlying the assistance in the period 2007-2013 are set out in Chapter IV of Council Regulation (EC) 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999. These principles are as follows:

1. Complementarity, consistency, coordination and compliance (Art.9)
2. Multiannual programming (Art.10)
3. Partnership (Art.11)

¹⁵⁰ Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. 2010/C 83/01

4. Territorial level of implementation (Art.12)
5. Proportional intervention (Art.13)
6. Shared management (Art.14)
7. Additionality (Art.15)
8. Equality between men and women and non-discrimination (Art.16)
9. Sustainable development (Art.17)

More specifically, with respect to regional development, the horizontal principles in the implementation of the Fund's measures are not mentioned in the Regulation on the ERDF for the period 2007-2013¹⁵¹. At the same time the Preamble of the Regulation explicitly states that:

- Efficient and effective implementation of actions supported by the ERDF depends on good governance and partnership among all the relevant territorial and socio-economic partners, and in particular regional and local authorities, as well as any other appropriate body during the various stages of implementation of the operational programmes co-financed by the ERDF – this in its essence is the partnership principle;
- The Member States and the Commission should ensure that there is no discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation during the various stages of implementation of the operational programmes co-financed by the ERDF – the principle of equality and non-discrimination.

The Preamble also mentions the sustainable urban development and the sustainable development of specific regions, such as border regions, whereby sustainable development is one of the objectives defined in Art. 2 of Regulation 1080/2006.

The horizontal principles are explicitly stated and referred to as such in the Regulations for the period 2014-2020. They are defined in Title 1 "Principles of the Union Support for the European Structural and Investment Funds" of Regulation (EC) No. 1303/2013 of the European Parliament and of the Council:

- Partnership and multi-level governance (Art.5)
- Promotion of equality between men and women and non-discrimination (Art.7)
- Sustainable development (Art.8)

It can be concluded that the main principles which have always been part of the Regulations stipulating issues related to Structural Funds, are the principles of equal opportunities and sustainable development.

To a large extent, "objective" and "principle" have been used in the process of definition of the horizontal principles as terms of identical meaning. The horizontal principles are not explicitly referred to in the Lisbon Strategy, but as it is well known two of the priorities of Europe 2020 Strategy¹⁵² are "sustainable development" and "inclusive growth". Both priorities contain elements of the horizontal principles for sustainable development, equality, non-discrimination

¹⁵¹ Regulation (EC) No 1080/2006 of the European Parliament and of the Council of 5 July 2006 on the European Regional Development Fund and repealing Regulation (EC) No 1783/1999

¹⁵² Europe 2020. A European strategy for smart, sustainable and inclusive growth

and partnership. In this respect, a conclusion can be drawn that the horizontal principles are principles which should be present in all policies (to the extent the specific horizontal principle is applicable).

The horizontal principles and issues can be distinguished at national level. The National Strategic Reference Framework for the period 2007-2013 defines the following horizontal issues:

- Public procurement – actions related to the application of the Public Procurement Act aimed at transparent and efficient administration
- State aid – the aid under all programmes should correspond to the procedures and material rules on state aid, applicable upon the award of the grants

In this sense, the term “horizontal issues” refers to activities, which must be carried out upon the implementation of all measures under the operational programmes.

In addition to the two issues mentioned above, the National Development Plan of the Republic of Bulgaria in the period 2007 – 2013 includes also the following horizontal issues:

- promotion of equality between men and women
- protection of environment

The mixing of the terms horizontal “issues” and “principles” is also obvious in the texts of the operational programmes, and this is mainly due to the guidelines on the horizontal principles mentioned in Decree of the Council of Ministers No. 182 of 21 July 2006 on the establishment of the MC of the NSRF and the Operational Programmes co-financed by the EU’s SCF, where the following horizontal policies are set out: sustainable development (including environment); equal opportunities; competition (including state aid) and public procurement.

The text of OPRD 2007-2013 meets the requirements of these guidelines by including the following issues/principles:

- Public procurement and concessions
- State aid
- Partnership
- Sustainable development
- Equality between men and women and non-discrimination

As evident from the list above, the partnership principle is also included in OPRD 2007- 2013 in addition to the horizontal issues that are referred to in the guidelines of the Council of Ministers.

Several major conclusions can be drawn based on the analysis. At European level the horizontal principles have been explicitly defined only in the Regulations referring to the 2014-2020 period. Therefore, at national level there is mixing of terms such as horizontal “issues” and “principles”. The relevant horizontal issues and principles are embedded in OPRD 2007-2013 and they are duly described with references to the European and national legislation.

These observations are illustrated in the table below¹⁵³:

	Equality ¹⁵⁴	SD	Non-discrimination	Partnership	PP	SA
Treaty on EU	☑	☑				
Treaty on the Functioning of the EU	☑	☑	☑			
Regulation 2081/93 of July 1993	☑	☑				
Regulation 1260/1999	☑	☑	☑			
Regulation 1083/2006	☑	☑	☑	☑		
Regulation 1080/2006	☑	☑	☑	☑		
Regulation 1303/2013	☑☑	☑☑	☑☑	☑☑		
Lisbon Strategy						
Europe 2020 Strategy	☑	☑	☑	☑		
National Strategic Reference Framework					☑	☑
National Development Plan of the RoB (2007 – 2013)	☑	☑			☑	☑
DCM No. 182 of 21 July 2006	☑	☑			☑	☑
OPRD 2007-2013	☑	☑	☑	☑	☑	☑

The table above shows that the text of the OPRD 2007-2013 takes into account the horizontal principles and the horizontal issues raised by the national legal framework are also added.

? Are the horizontal issues considered in OPRD 2007-2013 still relevant?

As stated above, the horizontal principles/issues defined in OPRD 2007-2013 meet the requirements of the guidelines of the CM and the EU Regulations for the period 2007-2013. Furthermore, the horizontal issues/principles identified in OPRD are still relevant from the point of view of the horizontal principles set out in the Regulations for the period 2014-2020, namely: partnership, sustainable development, equality of men and women and non-discrimination.

With respect to the partnership principle, Regulation 1083/2006 states that it should be established with the following bodies and organisations:

- competent local, urban and other public authorities
- economic and social partners
- any other organisation representing civil society, environmental partners, non-governmental organisations, and bodies responsible for promoting equality between men and women

¹⁵³ The sign "☑" marks the principles which are set out in the specific documents, and the sign "☑☑" marks those principles which, in addition to being mentioned, are explicitly referred to as horizontal principles.

¹⁵⁴ Equality between men and women, SD – sustainable development, PP – public procurement, SA – state aid

Those are the bodies and organisations set out in Art. 5 of Regulation 1303/2013, which describes the principle of partnership. Such organisations are identified in the text of OPRD 2007-2013, and in this sense, the understanding of the principle is fully relevant to the understanding of the EC.

In practice, Art. 16 of Regulation 1083/2006 and Art. 7 of Regulation 1303/2013, which treat the promotion of equality between men and women and non-discrimination are identical. The text of OPRD 2007-2013 contains description of this principle, which complies with both Regulations, i.e. it is still relevant.

Art. 17 of Regulation 1083/2006 does not provide clarity as to the understanding of the EC regarding sustainable development, unlike Art. 8 of Regulation 1303/2013, which provides more detail, such as reference to the "polluter-pays" principle. The description of the principle in the text of OPRD 2007-2013 is identical, to a large extent, to the current understanding of this principle by the EC.

? [How the development of horizontal policies at national and European level impacts the OPRD?](#)

The changes in the development of the horizontal policies/issues at national and European level are covered also in the text of OPRD. For instance, changes regarding the public procurement regulated by the Public Procurement Act of 1/10/2004 have been taken into account in the last version of the OPRD from September 2013. The most significant changes reflected in the PPA cover two fundamental areas:

- Introduction of the requirements and provisions of Directive 2009/81/EC of the Council of 13 July 2009 on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting authorities or entities in the fields of defence and security, and amending Directives 2004/17/EC and 2004/18/EC.
- The structure of the legislation has been improved through the reduction of the number of regulations.

The development of the horizontal principles at European level has already been presented in the previous section. As set out above, the horizontal issues and principles relevant to the 2007-2013 programming period and the next programming period are embedded in OPRD.

? [What are the proposals of the Contractor on inclusion of additional horizontal issues to be monitored and controlled in the annual reports on the implementation of OPRD?](#)

The main horizontal issues covered in detail in the annual reports on the implementation of the OPRD are the principles of equality and partnership (see p.3.3.). The reports give good examples of schemes, in which these principles have been successfully applied. This way of reporting is recommended also with regard to the sustainable development principle, and schemes which included adequate environmental protection measures are given as examples.

The horizontal principles are explicitly stated and referred to as such in the regulations for the period 2014-2020. They are defined in Title 1 "Principles of Union Support for the ESI Funds" of Regulation (EU) No. 1303/2013 of the European Parliament and the Council:

- Partnership and multilevel governance (Art.5)

- Promotion of equality between men and women and non-discrimination (Art.7)
- Sustainable development (Art.8)

These principles have already been embedded in the Operational Programme Regional Development 2007-2013 and in this sense, there is no need of inclusion of additional horizontal principles to be monitored and reported during the next programming period.

3.2. Updating and building on the analysis of the mid-term evaluation of the OPRD with regard to the implementation of the EU horizontal principles in the evaluation of project proposals

? To what extent are the horizontal principles, issues and policies reflected in the guidelines/requirements for application of the schemes launched after 1 January 2011?

The review of the guidelines/requirements for application of the schemes launched after 1 January 2011 shows that the horizontal principles, issues and policies are adequately covered (for more details see Appendix 7).

The protection of environment principle is covered in section "Rules for application under the scheme", sub-section "Readiness/maturity of the project" in all schemes which provide for environmental protection-related measures. A positive Environmental Impact Assessment pursuant to Art. 81 of the Environmental Protection Act and assessment of the compatibility of the project with the objectives and aims of conserving protected areas according to Art. 31 of the Biodiversity Act may be required, when necessary. In the event that the assessments mentioned above are not applicable, the relevant competent institution - RIEW/MEW - should submit an Opinion that the activities in the project fiche are exempted from these assessments.

The horizontal principles of sustainable development, equality and non-discrimination are set out in that part of the application guidelines which deals with the evaluation methodology. More specifically, they are covered in sections "Eligibility evaluation", "Quality evaluation" and "Criteria for evaluation of project proposals".

Some application guidelines (for example, scheme BG161PO001/1.1-07/2009 – Support for providing appropriate and cost-efficient infrastructure to higher education institutions in urban agglomerations) include section "State aid scheme" in which the provisions and regulations applied to the state aid principle are explained. The conditions under which the beneficiaries may benefit from the "de minimis" aid rule are specified for some of the schemes.

The horizontal principle of partnership is reflected in the guidelines for application of schemes, in which the applicants can participate individually or in partnership. Section "Partnership and eligibility of partners" specifies the requirements that the eligible partners should meet.

During the interviews conducted by the Consultant, the MA representatives confirmed that with the submission of a project proposal, the applicants are expected to describe in detail how the project activities will affect the EU horizontal policies. The interviewed MA experts indicated that the most encountered horizontal principle in the application guidelines is the one of equal opportunities for people with disabilities.

Some of the interviewed MA experts agree that it is necessary to reduce the number of horizontal principles on which beneficiaries reported compliance, as some of them (such as the principle of

innovation and policy-making) are not relevant to the respective schemes. As the review of the development of horizontal principles at European level show, in practice the number of the principles has been reduced and in particular the innovation and policy making principles are not included in 2014-2020 the period.

? To what extent are the horizontal principles, issues and policies taken into account in the operation selection criteria, eligibility criteria, eligible activities, selection criteria?

Eligibility criteria

The application guidelines of almost all schemes under OPRD, with only few exceptions, set out as an eligibility criterion that the project proposals should comply with the EU's horizontal principles. This criterion is covered in sections "Eligibility criteria" and "Evaluation of administrative compliance and eligibility" and "Partnership and eligibility of partners" in the guidelines for application. The project proposals should conform to EU horizontal principles such as gender equality, social inclusion, sustainable development and protection of environment.

Eligible activities

The guidelines for application of each scheme under OPRD specify the activities which are eligible for funding. The most frequent horizontal principle, which is set in 22 out of 48 grant schemes, is the principle of equality and prevention of discrimination. It is taken into account in activity "Improvement of access for disabled people", and this is reflected for each grant scheme in the table below:

Scheme	Places where improvement of access for disabled people is envisaged
1.1.01; 4.1.01	Educational institutions
1.1.02	Public schools
1.1.03	Social assistance agencies
1.1.04	Public employment services
1.1.05	Cultural institutions
1.1.06; 1.1.08	Public healthcare facilities
1.1.07	Higher education institutions
1.1.11; 4.1.05	Municipal healthcare facilities
1.1.12	Sheltered housing and Family-type accommodation centers
1.2.02	Social housing
1.4.02; 1.4.05	Municipal administrative buildings
1.5.01; 1.5.02; 1.5.03	Bus stops

3.1.01	Monuments of culture
3.1.02; 3.1.03; 3.1.04	Natural, cultural and historical attractions

Selection criteria

The selection criteria of the schemes are specified in detail in the guidelines for application. The selection criteria are specified in different sections of the application guidelines, such as "Quality evaluation", "Criteria for evaluation of project proposals", "Evaluation and selection of project proposals". The selection criterion "Compliance with the horizontal policies of the EU" is set out explicitly as a criterion common to all horizontal principles. The applicants under schemes 1.1-02, 1.1-05, 2.1-01 and 3.1-01 may obtain up to 5 points, if:

- The project fiche contributes to the implementation of the principle of equality, prevention of discrimination and social inclusion
- The project fiche contributes to the implementation of the sustainable development principle
- The project fiche contributes to the improvement of environmental protection
- The project fiche contributes to the creation of added value and provides for innovative approaches, including exchange of good practices.

It should be noted that there is some lack of consistency with respect to the last criterion related to the innovative approaches. In addition to being a project proposal selection criterion, it also appears in the technical report form, in which the beneficiaries are required to report on the compliance of the project with the EU horizontal policies. In the technical report form this principle is laid down as "Innovations and policy-making". Nevertheless, it is not included in the horizontal issues identified in the Manual for Management and Implementation of OPRD and it is not clearly defined what is meant by "innovations" or "innovative approaches".

The highest possible mark under the "Compliance with the horizontal policies" criterion is 5 points (full compliance) and it is obtained when contribution has been made to all of the foregoing horizontal principles. Other possible mark is 3 points (partial compliance) when two of the horizontal principles have been implemented and 1 point (weak compliance) when only one of them has been implemented.

Some of the schemes include more specific selection criteria such as "Addressing the needs and problems of ethnic minorities, including Roma" (under schemes 1.1-09, 1.4-02 and 1.4-05) and "Addressing the needs for/provision of special equipment for disabled people" (under scheme 3.1-03).

Having regard to the foregoing, a conclusion can be drawn that the horizontal principles are covered as full as possible in the eligibility criteria, eligible activities and project selection criteria.

? [To what extent are the horizontal principles, issues and policies taken into account in the project evaluation methodology?](#)

The project evaluation methodology covers the following stages:

- Stage 1: Evaluation of administrative compliance
- Stage 2: Evaluation of eligibility
- Stage 3: Evaluation of quality (technical and financial assessment)

In the application guidelines of the majority of the schemes (see Appendix 7) the issues related to the evaluation of the implementation of/compliance with the horizontal principles fall under Stage 2: Evaluation of eligibility and Stage 3: Evaluation of quality. The evaluation criterion is "Compliance with the horizontal principles of the EC". The highest possible mark for projects under schemes 1.1-02, 1.1-03, 1.1-05, 2.1-01 and 3.1-01 is 5 points (full compliance) and it is obtained when contribution has been made to all of the listed horizontal principles. Other possible mark is 3 points (partial compliance) when two of the horizontal principles have been implemented and 1 (weak compliance) when only one of them has been implemented.

The project evaluation methodology explicitly specifies that the encouraged principles are equality and social inclusion, sustainable development and protection of environment.

3.3. Updating and building on the analysis of the mid-term evaluation of the OPRD regarding the reporting of the horizontal issues and the accounting of horizontal indicators

? How relevant and comprehensive is the reporting on the implementation of the EU horizontal principles, issues and policies in the annual reports on the implementation of OPRD?

Section "Qualitative analysis" of the annual reports on the implementation of OPRD specifies the number of completed projects under the grant schemes of each priority axis and the reported results, including with disabilities benefiting from the intervention", "Number of Roma /other ethnic minorities benefiting from the project results", "Number of representatives of social and ethnic groups involved in innovative cultural events" and "Children and adolescents with disabilities from institutions for children with disabilities using the improved social infrastructure".

The section in the Annual Report on the Implementation of the OPRD 2007-2013 for 2013 dealing with the qualitative analysis of the programme progress covers two major horizontal principles – equality and partnership.

The report specifies that in accordance with the principle of equality between men and women as well as equal opportunities, the application guidelines explicitly require that gender equality and non-discrimination be ensured. In addition, the grant schemes, aimed at supporting the renovation of buildings and urban environment as a whole, cover also the improvement of access for people with disabilities and access to build environments in the objects of intervention. These observations have been confirmed by the review of the application guidelines carried out by the Contractor.

With respect to the partnership principle, the 2013 Annual Report specifies that it is taken into account in the programming, implementation, monitoring and evaluation of the OPRD. It is argued that the Monitoring Committee of OPRD consists of members with the right to vote, including social and economic partners, and NGOs – representatives of the civil society. It is

noted that in 2013 the MA organized and conducted a number of events involving stakeholders and partners.

The projects for development of the regional tourist product and marketing of destinations are invoked as examples of successful implementation of the partnership principle. The very specifics of the grant schemes contributes to this end – the beneficiaries are required to participate in the scheme in a partnership with at least two other municipalities. The finding on the successful implementation of the partnership principle has been confirmed also by the review of the activities performed and results achieved reported in the final reports on the projects under the following scheme: “Development of regional tourist product: Haskovo-Dimitrovgrad-Stambolovo”, “Tonzos – the Magic of Tundzha” – marketing of tourist destination “Tundzha-Yambol-Straldzha-Bolyarovo” and “Support for development of regional integrated tourist product in Gabrovo, Tryavna and Sevlievo municipalities”.

The qualitative analysis of the progress achieved under the Programme in the annual reports on the implementation of the OPRD in 2012, 2011, 2010, 2009, 2008 and 2007 also follows up the two major horizontal principles of equality and partnership. Some of the reports reinvoke examples of schemes in which these principles have been successfully applied. The horizontal principles are covered also in section “Significant difficulties encountered and steps taken to solve them”, in particular, in the deficiencies/weaknesses identified when carrying out the public procurement procedures. The most commonly observed non-compliance with the PPA is the discrepancy between the established evaluation methodology and the principles of equality and non-discrimination affirmed in the PPA.

For as comprehensive as possible reporting of the horizontal principles, it is recommended that the annual reports should examine the contribution toward all horizontal principles, not only toward two of them (equality and partnership). Furthermore, it would be also appropriate that there be a separate section discussing the current values of the horizontal principles for all schemes, analyses, problems encountered by beneficiaries and deficiencies in reporting.

? Are the recommendations in the mid-term evaluation valid and to what extent are they implemented with respect to the reporting of horizontal principles and accounting of horizontal indicators?

The first recommendation of the mid-term evaluation with respect to the horizontal issues – for the next programming period the MA should consider the setting of horizontal objectives at OPRD¹⁵⁵ level. In this sense, it is not possible to track its implementation within this evaluation.

The mid-term evaluation of the OPRD recommends also that the MA should check whether the objectives of the new or updated schemes require the inclusion of horizontal selection criteria. A review of the guidelines and requirements for application shows that the specific objectives of the majority of the schemes cover horizontal principles such as: social inclusion and equal access for disadvantaged groups and disabled people; improving the access of underdeveloped regions to road, ICT and energy networks; achieving energy efficiency, etc. These horizontal principles are reflected in the schemes’ selection criteria, and the weight of the addressed horizontal issues is explicitly specified in the evaluation of the project proposals (see Appendix 7).

¹⁵⁵ Final report on the Mid-term Evaluation of the OPRD 2007-2013, KPMG

The third recommendation of the mid-term evaluation suggests that the horizontal indicators be measured at programme level. The analysis made in this evaluation shows that there are no horizontal indicators reported at OPRD level. Nevertheless, horizontal indicators have been used at priority axis level and at scheme level and they are applied in accordance with the specifics of the schemes. Such indicators are: "Number of people benefiting from the renovation of buildings/facilities – by sex, people with disabilities and minorities" (Scheme 1.1-03/2008), "Number of representatives of social and ethnic groups involved in innovative cultural events" (Scheme 1.1-10/2010), etc.

The mid-term evaluation recommends that the MA should introduce compulsory monitoring of the horizontal indicators upon on-the-spot checks. Following on the review of the Manual for Management and Implementation of the OPRD 2007-2013, Chapter 13 "Monitoring and reporting", the team of evaluators found that one of the elements which is compulsorily verified upon visits on site is the compliance with the EU horizontal policies – protection of environment, gender equality, etc. It is also envisaged the results to be reported in relation to the progress indicators/indicators set in the Grant Contract. Accordingly, as far as the horizontal indicators are provided for in the Contract and the application guidelines, they should be monitored during the visits on site. The recommendation of the mid-term evaluation may thus be considered as having been fulfilled.

The last recommendation from the mid-term evaluation is the current values of the horizontal indicators for all schemes be included in the Annual Report and the horizontal issues be discussed in a separate chapter of the Annual Report.

A template of Annual Report is attached to the Manual for Management and Implementation of OPRD2007-2013. However, a separate chapter for horizontal issues is not envisaged therein. They are mentioned in the quantitative analysis of the programme implementation and the effect of the implementation of the Programme in promoting equal gender opportunities and partnership is the only required information.

According to the template, the equality and the partnership principles are examined for each priority axis in section "Qualitative analysis" of the annual reports examines. The number of completed projects and the results reported under the schemes are stated, including the current indicator values: "Number of people with disabilities benefiting from the intervention", "Number of Roma/other minorities benefiting from the project results", "Number of representatives of social and ethnic groups involved in innovative cultural events", "Children and adolescents with disabilities from institutions for children with disabilities, benefiting from the improved social infrastructure", etc.

As set out above, it is recommended that the annual reports examine the contribution toward all horizontal principles, not only toward two of them, and their analysis should be presented in a separate chapter. In this sense, the recommendation of the mid-term evaluation is still relevant and it can be taken in consideration in the next programming period.

? To what extent does the indicator system under OPRD measure and cover the Programme's contribution to the implementation of the horizontal principles, issues and policies?

The analysis carried out in the mid-term evaluation of the OPRD identified several horizontal indicators – three at priority axis level (Priority Axis 1): “Use of urban public transport (including disabled)”, “Social housing / centres built / renovated as a result of the deinstitutionalization of children” and “Children benefiting from the deinstitutionalization process”; and three indicators at scheme level: “People benefiting from renovations – by sex, disabled people and minorities”, “Easier access for people with disabilities” and “Use of urban public transport (including disabled)”. In order to examine the horizontal principles embedded in the OPRD indicator system in more detail, the team of consultants extended the scope of the analysis by including additional indicators at project level in this evaluation.

The relation between the horizontal principles and the OPRD indicator system is presented in the table below:

Horizontal principle	Indicator	Comment
Sustainable development	Energy savings from renovation of buildings (MW/h)	The indicator is relevant and covers the contribution of the OPRD toward energy efficiency and protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Reduction of greenhouse gas emissions (t/g)	The indicator is relevant and covers the contribution of OPRD toward energy efficiency and protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Generation of energy from alternative and renewable sources (% of the total energy consumption)	The indicator is relevant and covers the contribution of OPRD toward energy efficiency and protection of environment. This indicator is not among the compulsorily measured indicators and no comprehensive information have been obtained by the beneficiaries when generating data by means of questionnaires in this evaluation.
	Energy savings from efficient street lighting (MW/h)	The indicator is relevant and covers the contribution of OPRD toward energy efficiency and protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Areas with newly planted plants (% of the total agglomeration area, m2 per inhabitant)	The indicator is relevant and covers the contribution of OPRD toward protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Excessive air emissions (number of threshold exceedances per 1 calendar year)	The indicator is relevant, directly related to the quality of air and covers the contribution of OPRD toward protection of environment. The data have been requested from the relevant RIEW.
	Built-up areas (ha)	The indicator is relevant and covers the contribution of OPRD toward protection of environment. The data at project level have

		been obtained from the FTR of the relevant beneficiaries.
	Forest areas affected (m2)	The indicator is relevant and covers the contribution of OPRD toward protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Natural habitats affected (m2)	The indicator is relevant and covers the contribution of OPRD toward protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Areas with planted vegetation (ha)	The indicator is relevant and covers the contribution of OPRD toward protection of environment. The data at project level have been obtained from the FTR of the relevant beneficiaries.
Equality and non-discrimination	Number of people benefiting from improved infrastructure (men/women/people with disabilities/minorities)	The indicator is relevant and covers the contribution of OPRD toward the principle of equality. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Easier access for disabled people	The indicator is relevant and covers the contribution of OPRD toward the principle of equality. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Number of representatives of social and ethnic groups involved in innovative cultural events	The indicator is relevant and covers the contribution of OPRD toward the principle of equality. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Children and adolescents with disabilities from institutions for children with disabilities benefiting from improved social infrastructure	The indicator is relevant and covers the contribution of OPRD toward the principle of equality. The data at project level have been obtained from the FTR of the relevant beneficiaries.
Partnership	Interregional events aimed at exchange of experience	The indicator is relevant and covers the contribution of OPRD toward the application of the partnership principle. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Regional/local policies and improved instruments in the field of cooperation, addressed by the project	The indicator is relevant and covers the contribution of OPRD toward the application of the partnership principle. The data at project level have been obtained from the FTR of the relevant beneficiaries.
	Innovative practices exchanged on the basis of interregional cooperation	The indicator is relevant and covers the contribution of OPRD toward the application of the partnership principle. The data at project level have been obtained from the FTR of the relevant beneficiaries.

Public procurement	No relevant indicators	The public procurement principle is embedded in the application guidelines, where the terms and procedures for application are examined in detail.
State aid	No relevant indicators	The state aid principle is embedded in the guidelines for application of the schemes to which it is applicable.

A conclusion can be drawn that the OPRD indicator system measures and covers the Programme's contribution toward the implementation of the horizontal principles of sustainable development and partnership. The principles governing the public procurement procedure and state aid are comprehensively examined in the guidelines for application of the grant schemes. It is only with respect to the equal opportunities principle that some schemes do not provide for indicators to measure the gender equality. Such indicator could be "Equal number of trained men and women" in the projects related to trainings under Priority Axis Technical Assistance. Despite the absence of such indicators, the annual technical reports on some of the projects specify that the following general principle has been met in their implementation: equal access of all employees and departments of the MA of OPRD to trainings relevant to them.

During the interviews conducted by the Consultant some of the MA experts expressed the opinion that horizontal indicators relating to sustainable development – "Energy savings from renovation of buildings (MW/h)" and "Reduction of greenhouse gas emissions (t/g)" are reported with values that beneficiaries prove with difficulty. This was confirmed by the team of evaluators in the course of Activity 1, as described above.

? Are the quantitative target values of the indicators set in the Programme and related to the EU horizontal policies realistic, taking account of the support provided by the ERDF?

This section examines the target values of the indicators related to the EU horizontal policies, set in OPRD 2007-2013:

- Reduction of greenhouse gas emissions (CO₂ and equivalents, kt)

The target values of this indicator for 2015 are: 56 kt under Priority Axis 1 and 39 kt under Priority Axis 2, respectively 95 kt for the whole operational programme. As set out in describing the results achieved under Activity 1, this indicator is not suitable for PA2. As of December 2014, the achieved value of the indicator is 42,6 kt (under PA1 and PA4). In view of the large number of projects that have not been yet completed, it can be expected that the value set under PA1 is achievable.

- Energy savings from renovation of buildings (MWh)

The target value of the indicator for 2015 is 245 000 MWh for the whole operational programme. The achieved value of the indicator as of December 2014 is 157 500. On the basis of the progress achieved so far, a conclusion may be drawn that the target value is achievable. However, all

methodological challenges described in Activity 1 should be taken into account when reporting the indicator, i.e. the achievability of the target value is very difficult to be estimated.

- Children benefiting from the deinstitutionalization process (number)

The target value of this indicator for 2015 is 800 children benefiting from the deinstitutionalization process. The achieved value reported in the 2013 Annual Report is significantly lower – 36 children, but the achievement of the target values of the indicator cannot be estimated yet, as according to the text of the OPRD, they will be reported after the Programme has been completed.

- Innovative practices exchanged and applied on the basis of interregional cooperation (number)

The target value of this indicator for 2015 is 80, whereas the achieved value stated in the 2013 Annual Report is 158. Therefore, a conclusion can be drawn that the set target value lacks ambition, as following the completion of the respective projects it has been exceeded almost twice.

The general conclusion that can be drawn about these indicators is that the projected values are, to a large extent, realistic, but their achievability depends on the implementation of the ongoing project in 2015 and on how the indicators are being reported.

? [How comprehensive and realistic are the reported values of the indicators related to the EU horizontal principles in the annual reports on the implementation of the OPRD?](#)

Section 2.1.4 “Assistance provided by target groups” of the annual reports on the implementation of the OPRD displays the achieved results regarding the impact of the grant projects completed in the respective year on target groups. There are values stated for the following horizontal indicators: “Number of Roma/other minorities, benefiting from the project results” and “Number of people with disabilities benefiting from the intervention.” The data illustrate the assistance granted at programme level and at priority axis level with respect to the horizontal principle of equality. Nevertheless, the reported values would have been fully comprehensive, if they were reported for all projects under which activities targeted at the relevant groups are financed.

The reported value of indicator “Reduction of greenhouse gas emissions (CO₂ and equivalents, kt)”, which is directly related to the sustainable development horizontal principle, is 0 according to the 2013 Annual Report. The value is 0, as the indicator will be measured in 2015 after the completion of the relevant projects under Priority Axis 1 and 2 and the assessment of their impact. At the same time the indicator has an interim value under PA1 and PA2 which obviously is not measurable.

The reported value of indicator “Energy savings from renovation of buildings (MWh)” which is also related to the sustainable development horizontal principle, is 98 305 MWh according the 2013 Annual Report. The results stemming from Activity 1 of this evaluation show that the

reported value of this indicator is realistic. As set out above, the reported value does not take account of the results achieved under PA4.

The reported value of indicator "Children benefiting from the deinstitutionalization process" which is related to the equality horizontal principle, is 36 according to the 2013 Annual Report. Given the limited number of completed projects on deinstitutionalization at the time of the preparation of the 2013 Annual Report, it can be concluded that the reported value is realistic. This value is expected to increase after the results of the projects completed in 2014 and 2015 have been reported.

The reported value of indicator "Innovative practices exchanged and applied on the basis of interregional cooperation", which is related to the partnership horizontal principle, is 158 according to the 2013 Annual Report. Taking into account the significant number of projects under scheme 4.2-01 completed in the relevant period, it can be concluded that the reported value is realistic.

3.4. Implementation of the horizontal principles in the management and implementation of OPRD

? [How are the horizontal principles, matters and policies reflected in the Manual for Management and Implementation of OPRD and other programme documents?](#)

The Manual for Management and Implementation of OPRD2007-2013 covers the following horizontal principles/issues:

- State aid
- Public procurement
- Sustainable development and protection of environment
- Equal opportunities

With respect to the **state aid**, the general provisions and the main objectives of the state aid scheme are described: provision of state aid which do not distort competition by putting some undertakings in a better position than others, as well as state aid measures which are justified in the light of the common interest – those that encourage the development of small and medium-sized enterprises, improve employment, professional qualification, innovations and contribute to the economic development of the individual regions.

The Manual specifies which bodies are responsible for the state aid scheme: the MA of OPRD – applies the existing European and national state aid law with respect to the activities financed under OPRD; the Ministry of Finances – the national body responsible for the monitoring, transparency and coordination of state aid. Taking into account the leading role of the MA of OPRD, the Manual details its main responsibility to apply the European and national state aid law.

With respect to the **public procurement**, the Manual duly states the rules which should be applied to public spending when selecting contractors to implement activities under Grant Contracts of OPRD. These rules include: Public Procurement Act (PPA), Regulations on Application of the PPA (RAPP) and DCM No. 69 of 11 March 2013. The Bulgarian law includes also the requirements of the European public procurement law, in particular: Directive 2004/18/EC, Directive 2004/17/EC, Directive 29/13/EEC and Directive 2009/81/EC.

The Manual sets out the principles to be followed in public procurement: publicity and transparency, free and loyal competition, equality and non-discrimination. The Manual points out also the possible subjects of public procurement contracts (supply of goods, provision of services, execution of works) as well as the possible grounds for appealing the decisions of the contracting authorities.

The **sustainable development** principle is pursued in all the three areas of intervention of OPRD – economic, social and ecological. The principles of sustainable development and protection of environment are reflected in the project selection criteria as well as in the guide for applicants. The Manual for Management and Implementation of OPRD specifies that the beneficiaries are obliged to follow all the principles and to meet all the requirements of the national law on protection of environment as well as to keep track of its possible amendments. If applicable to the individual project, the beneficiaries should submit an application form accompanied by the following documents:

- Effective Decision on Environmental Impact Assessment (EIA) regarding the approval of the investment proposal or decision stipulating that EIA is not needed to be carried out, when this is required by the EPL, or a statement from RIEW that the investment proposal is not subject to procedure under chapter six of the EPL.
- Opinion on the Environmental Assessment (EA) or decision stipulating that there is no need for an EA to be carried out with respect to plans and programs, when this is required by the EPL (if applicable to the specific grant scheme)
- Assessment of compatibility with aims of conservating the protected areas, included in the NATURA 2000 network
- Planning permission

The Manual contains summaries of the procedures underlying the environmental assessments.

The principle of **equal opportunities** is described in the Manual for Management and Implementation of OPRD as non-discrimination based on sex, race, ethnicity, religion, belief, personality, age or sexual orientation. It is specified that, in particular, the access for people with disabilities will be among the monitored criteria in co-financing the operations under OPRD and reporting the different stages of implementation.

The Manual specifies that the equal opportunities are taken into account in the programming and implementation of OP Regional Development. This principle is followed in developing the project selection criteria and is covered in the OPRD application packages.

However, the absence of description of the horizontal principle of **innovations** in this section of the Handbook may be deemed an omission. A template¹⁵⁶ of technical report is attached to Section 13 “Monitoring and Reporting” of the Manual, in which the beneficiaries are required to report on the compatibility with the EU horizontal policies, one of the policies listed being namely “Innovations and policy-making”. Therefore, having been set as a requirement to the beneficiaries, this principle needs to be defined and examined in detail in the Manual. One possible definition of “innovations” is:

¹⁵⁶ Appendix 13.5-12, Technical Report

- Innovations and policy-making – development and application of new approaches and good practices contributing to improvement of the results achieved in the process of project implementation.¹⁵⁷

Furthermore, the Manual should also describe in detail and illustrate how the beneficiaries should report the contribution of their projects toward the EU horizontal policies. This is done with respect to the equal opportunities – it is pointed out that in the final report the beneficiaries are expected to provide information on the level of involvement of minority groups, including Roma, and disabled people in the implementation of the project and as to what extent these marginal groups are benefiting from the implementation of the respective project. Similarly, it should be described how to report on the application of the sustainable development and protection of environment principles (each of them separately, not together), as well as of innovations principle, provided it remains part of the template.

? What mechanisms have been used to ensure compliance with the horizontal principles in the governance of OPRD?

- **State aid**

At programme level it is envisaged that the MA shall supervise the compliance of all projects under OPRD with the state aid rules. The MA informs the EC on the legality of the granted state aid, as the EC has exclusive competence to evaluate and control the state aid compliance with the principles of free competition. The European Commission should be informed in sufficient time so as to be able to submit its comments on any plans to grant or alter aid. If it considers that any such plan is not compatible with the common market having regard to Art. 107 of TFEU, it shall without delay initiate the procedure provided for in Art. 107, paragraph 2 of TFEU.

The Monitoring Committee is also a control mechanism which supervises the actions undertaken in regard to the implementation of the EU's state aid policy and is entitled to take decision in that regard.

Another mechanism ensuring the respect of the horizontal principles is the preparation of the Guidelines for Application – the requirements related to the state aid are incorporated in the rules governing the eligibility of beneficiaries, expenditures and activities under the projects.

The NPO applying for grants and/or their partners are required to declare whether they have been granted de minimis or state aid in any form so far. Before concluding a grant contract, the MA of OPRD requires that the applicant-beneficiary-NPOs (and/or his partners-NPO, if any) declare whether they carry out additional economic activity or not. If the applicant carries out such activity, the MA should verify through the Ministry of Finance, in addition to the declaration submitted, whether the applicant has been granted de minimis or state aid in the last three fiscal years.

When implementing the project, the beneficiary should follow the state aid rules, which is proved by the signing of declaration. If the beneficiary receives state or de minimis aid, regardless of its

¹⁵⁷ The definition is adapted after the text of OP Administrative Capacity and is adjusted to the specifics of OPRD 2007-2013.

form, purpose and source, he is obliged to inform the MA of OPRD in writing within 1 day. Additional control mechanism is the project implementation check, including the visits on site.

- **Public procurement**

The MA controls the public procurement procedure for selection of contractors of projects funded under OPRD in several ways: 1) by preliminary check of the tender documents; 2) by sending observers in the commissions examining, evaluating and designating the tenderers; and 3) through a follow-up check of the implemented public procurements. In addition to the documentary check, the MA relies also on whistleblowing allegations from both internal and external sources.

There is a separate administrative structure – the Public Procurement Agency which ensures the respect of the public procurement rules. A Public Procurement Register has been also created as a kind of control mechanism. It is public and contains the decisions to open and close public procurement procedures as well as those regarding the deadline extension for submission of tenders or requests for participation; calls selected for entry in the register; information on the implemented public procurement contracts as well as other information laid down in the Regulations on Application of the PPA.

Another control mechanism is the possibility of appealing the decisions of the contracting authorities before the Commission on Protection of Competition as regards their lawfulness, including discriminatory economic, financial, technical and qualification requirements contained in the calls, documentation or any other document related to the procedure. The decisions of the Commission on Protection of Competition may be subject to a right for appeal before a three-member panel of the Supreme Administrative Court.

- **Sustainable development and protection of environment**

The compliance with the environmental protection policy in preparing projects is ensured through submission of the necessary decisions, permissions and/or opinions in accordance with the environmental law. When applicable to the specific project, the beneficiary should submit the following documents: evaluation of the need for EIA; environmental assessment (EA); assessment of the compatibility with the aims of conserving protected areas, included in the NATURA 2000 network; planning permission. If the above-mentioned documents have not been submitted, the project proposal may be disqualified on the grounds of administrative ineligibility.

Another control mechanism for ongoing projects is the onsite check of the final request for payment. Upon visits on site the team checks the observance of the environmental protection principles by filling in the respective field in Check-list 13.5.4, which is integral part of Section 13 "Monitoring and Reporting" of the Manual.

In case of changes to the OP Regional Development, the procedure for assessing the need for EA should be applied, as described in p. 5.3.2.3., section 5 "Regional Development Programming" of the Manual.

- **Equal opportunities**

The Anti-discrimination Law introduces a mechanism for practical implementation of the equality and non-discrimination horizontal principles. Art. 4 of the AL governs the prohibition of all forms of direct or indirect discrimination based on sex, race, nationality, religion, or faith, education, beliefs, political affiliation, personal and social status, disability, sexual orientation, family status, property or any other grounds, specified in the laws and international treaties, to which the Republic of Bulgaria is a party.

During the preparatory phase of OPRD, the control on compliance with the equal opportunities principle is ensured through development of project selection criteria by operations as well as of OPRD application packages. As regards the implementation phase of the contract, the final report on the implementation of the respective project should provide information on the level of involvement of minority groups, including Roma, and disabled people in the project implementation and as to what extent these marginal groups are benefiting from the measure. Scheme 1.1-05 "Support for provision of adequate and effective state cultural infrastructure, contributing to development of sustainable urban areas" is a good illustration of how this requirement has been fulfilled. As regards the indicator "Number of visitors benefiting from renovated buildings within the state cultural infrastructure", the final reports on the projects under this scheme state also the number of disabled people and the number of representatives of minorities benefiting from this measure. Identically, the majority of the final reports on the schemes for improvement of the urban environment (1.4-02 and 1.4-05) account for "Easier access for disabled people". However, there are examples of non-fulfilment of the requirement – under scheme 1.1-01, which provides support for improvement of the educational, social and cultural infrastructure, the number of disabled people and minorities benefiting from the measure has not been accounted for.

The Manual for Management and Implementation of OPRD specifies that the Annual Report on Implementation of OPRD shall take account of the level of implementation of the equality and non-discrimination principle on annual basis, based on the reported results of the completed projects.

There are two other mechanisms ensuring the compliance with the equality principle – the Monitoring Committee of OPRD and the visits on site. Upon visits on site the team checks the observance of the equal opportunities principle by filling in the respective field in Check-list 13.5.4., which is integral part of Chapter 13 "Monitoring and Reporting" of the Manual.

During the conducted interviews with the MA representatives it became clear that the irregularities signals relating to horizontal principles are rare. In 2014 only one such signal was received - lack of access for people with disabilities to a facility, although it has been set in the project. Following a letter sent by the MA, the beneficiary has taken measures to remove the irregularity.

? To what extent have the horizontal principles, issues and policies been taken into account in the implementation of the projects? How the beneficiaries ensure the implementation of the horizontal principles, issues and policies?

The technical report form in the Manual for Management and Implementation of OPRD requires information on the compliance with the EU horizontal policies, in particular: equal opportunities, protection and impact of environment, sustainable development and innovations and policy-making.

The compliance with the horizontal policies is taken into account in the final reports on the projects under some of the schemes (e.g., 1.1-07, 1.1-09, 1.1-10, 4.1-03) and is examined separately for each policy. In the reports on other schemes (e.g., 1.1-01, 1.1-04, 1.4-02) there is no provision for taking account of the contribution of projects to the EU horizontal policies.

As regards **equal opportunities**, the information most frequently required is whether the target group benefiting from the project includes people from different social groups with different educational level, ethnic minorities, including Roma, and people with disabilities. For example, as specified in the project "Touched by Antiquity", implemented by the municipality of Kazanlak under scheme 1.1-10 (BG161PO001/1.1-10/2010/020), different places in the suburbs of the city have been used as a stage for cultural events and 100% of the participants in one of them were Roma. The venue itself was in immediate vicinity of a residential complex, populated by ethnic minorities. Another good example of ensuring equal opportunities is the creation of a specialized and digitalized place for reading for visually impaired people under a project for improving the infrastructure of the Medical University in Plovdiv (BG161PO001/1.1-07/2009/011).

The **environmental protection** policy is most often reflected by measures for energy efficiency of buildings. For example, the project "Integrated project for improvement of the educational infrastructure in the municipality of Sliven through energy efficiency measures" under scheme 1.1-09 (BG161PO001/1.1-09/2010/007) demonstrates how the implementation of a new boiler heater and gasification of two crèche places could contribute to the reduction of the CO₂ emissions and protection of environment, respectively. Another good example of activities contributing to the protection of environment is the project "Restoration and socialization of "Pliska" National Historical-Archeological Reserve" (BG161PO001/3.1-01/2008/001-003) – it is stated that the project has contributed to the renovation of tree canopy and landscaping with law bushes and lawns.

The **sustainable development** policy is accounted in the reports through different activities (depending on the thematic area of the project) focused on energy savings, human resources development, indirect increase of competition and employment. Given the wide scope of the term "sustainable development", for some projects this principle is reported only in general terms, not in detail. This is also the case with the reporting of the partnership with different stakeholders, benefiting directly from the achieved results, to ensure sustainability.¹⁵⁸

Innovations are well accounted in projects under the scheme "Support for creation and promotion of innovative cultural events" (scheme 1.1-10). A good example of reporting innovations is the project "The Valley of Tundzha – a palette of colours, music and dances" (BG161PO001/1.1-10/2010/024), under which new forms of art performance and new methods for inclusion of unconventional public have been reported as innovative. However, an explicit definition of the terms "innovations" and "innovative approaches" is contained neither in the Manual for Management and Implementation of OPRD, nor in the guidelines for application of the schemes. That is why in some projects this principle is reported inadequately, for example, it

¹⁵⁸ Under scheme 1.4-05.

is argued that the very fact that the implementation of the project activities run smoothly and without complications implies that innovative approaches were put in place.¹⁵⁹

It can be concluded that the reporting of the principles of equal opportunities and protection of environment is thorough and comprehensive, supported by quotations of specific activities, which is probably due to the fact that these principles are better understood by the beneficiaries. However, the principles of sustainable development and innovations are reported in general terms.

It is clear that the final technical reports on the recently completed projects (2013, 2014) contain a special section reporting on the compliance with the EU horizontal principles, whereas no such reporting is provided in regard to the earlier implemented projects. The introduction of such a section can be defined as a good practice and should be integrated in the technical report template, with a view to ensuring the comprehensive reporting of the compliance with the horizontal policies.

To assess the extent to which the horizontal principles were taken into account in the implementation of projects, the team of evaluators made a series of meetings with beneficiaries during the on the spot checks in April 2015. The results of the interviews show that in most projects, the most widespread and familiar principle is the one of equal opportunities. This finding coincides with the assertion of the interviewed MA employees that the principle of equal opportunities is a leading criterion for eligibility at the preparatory stage of submission and evaluation of proposals, as well as in the following stages of implementation.

In the online questionnaire sent to the OPRD beneficiaries, the results are slightly different. To the question "Which of these horizontal principles you familiar with?", The most frequently cited responses were: "Sustainable development" (91% of the respondents), "Protecting the environment" (78%) and only at the third place is – "Equal opportunities and combating discrimination" (60%).

During the on the spot checks it was observed that the principle of equality is present in different ways - in projects for cultural events where participants of different ethnic groups are included, and in particular of Roma ethnicity; in projects for ensuing basic social infrastructure services, the main service users are disadvantaged people; in projects for reconstruction of buildings access is made available to people with disabilities. During the on the spot checks there were premises, providing access to people with limited mobility and to mothers with prams. As a good example to be highlighted are objects that have both access ramps and alleys leading into the ramps. The compliance with the characteristics of the objects that are part of the tourist attractions is noteworthy - additional ramps are built, where possible, but the architectural integrity of sites was not compromised and the cultural heritage was protected.

Most interviewed beneficiaries during the on-the spot checks, indicated that they had no major problems with the reporting of horizontal principles. Some of those interviewed said they had experienced some difficulties, while others needed more clarification in the initial stage, but did not have problems with the justification in the technical reports. Part of the respondents admits that they have insufficient understanding of the horizontal principles or that they are familiar with all principles, but not in detail. This was noticed also in some open answers to the question "With

¹⁵⁹ Under scheme 4.1-03.

which of the following horizontal principles, issues, policies and national and European strategies are you most familiar with?" – listed are provision of employment, competitiveness and others.

Some of the beneficiaries indicate that during the implementation of the projects they had very good communication with the MA and have received high support from the regional departments. However, the majority of respondents said they would like to receive more and clearer guidance from the MA in terms of reporting and horizontal principles implementation. There is a widespread belief that beneficiaries need more training in the field of horizontal principles. These findings coincide with the replies on this topic in the online questionnaire to the beneficiaries. To the question "What support from MA would you like to receive, in order for the integration of horizontal principles and policies be improved in the projects under the OPRD 2007-2013,?" The largest share of respondents indicates that they would like clearer guidelines from MA (75%). Other desirable forms of support are the provision of more information / training on horizontal policies (54%) and the explicit inclusion of horizontal policies in the application forms templates (30%).

The team of evaluators held interviews with the MA representatives, in order to analyze the role of the MA in the support, guidance and control of beneficiaries in terms of compliance with the horizontal policies. Some of the interviewed experts expressed the opinion that horizontal principles have been incorporated into the projects according to their thematic focus and were adequately reported by the beneficiaries in the technical reports. Other MA experts highlighted the following issues:

- Most of the beneficiaries are not aware with the concept of "horizontal principles" and do not understand the real contribution of individual projects to policies such as sustainable development and equal opportunities;
- Compliance with horizontal principles is often report formally and after project contracting, it loses its importance and is given lesser priority.

Most interviewed employees agree that the following measures are needed to improve the compliance with the horizontal policies:

- Clearer guidance from the MA CCU regarding the reporting of horizontal policies and consequently clearer guidance from the MA to the beneficiaries;
- Unification of the horizontal principles in various documents related to the management and implementation of OPRD to avoid different interpretations and interpretations;
- Using more accessible and understandable language in familiarizing the beneficiaries with horizontal policies.

3.5. Main outputs and results realized in Activity 3

Table 65. Main outputs and results realized under Activity 3

Outputs	Fulfilment
Desk study of strategic, legal and operational documents, reports under the Programme/projects, report on mid-term evaluation of OPRD 2007-	✓

2013

Working meeting (seminar) with representatives of the MA	✓
Interviews and/or focus groups with beneficiaries under the Programme	✓
Results	Fulfilment
Analysis of the continued relevance of the horizontal issues in OPRD 2007-2013	✓
Update of the analysis from the mid-term evaluation regarding the application of the horizontal principles in the evaluation of project proposals	✓
Update of the analysis from the mid-term evaluation regarding the reporting of the horizontal principles and the reporting in the indicators	✓

4. Activity 4: Impact evaluation of the measures applied under the Communication Plan for Information and Publicity of OPRD 2007-2013

The Communication Plan for Information and Publicity is a mandatory element in the management and absorption funds from EU Structural and Investment Funds. According to Art. 69 of Council Regulation (EC) No. 1083/2006 of 11 July 2006 laying down the general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, the Managing Authority shall provide information on and publicise operations and co-financed programmes. The objective of the Communication Plan is to make the European Union citizens familiar with the contribution of the European Community in their country, to ensure broad public awareness as regards the scope, objectives and results from the investments made, to ensure transparent use of the funds, as well as to provoke interest among the potential beneficiaries of the Programme.

The Communication Plan for OPRD 2007 – 2013 has been approved on 24 April 2008 by virtue of letter of the EC, according to which it contains all the required elements and is compliant with Art. 2 (2) of Regulation No 1828/2006. The Plan has been subject to certain modifications in the process of its implementation and this report deals with its last version from March 2012.

The main objective of the plan is to raise the public awareness with respect to ERDF and OPRD during the period 2007-2013, to stimulate the public interest, to promote the participation with projects, to clarify the opportunities and the benefits of the Programme's priorities, to ensure transparency and openness in its implementation.

The specific objectives are:

- Attracting the public interest and raising the public awareness as regards the scope, objectives and results under OPRD and the contribution of the Community;

- Strengthening the interest of the potential beneficiaries under OPRD, ensuring their awareness on the funding possibilities, provided by the ERDF and clarifying the Programme's eligibility criteria
- Familiarising the beneficiaries under the Programme with their responsibilities in the implementation of projects financed under the OPRD, including their obligations for information and publicity, related to the implementation of such projects.

In implementing the Communication Plan of OPRD 2007-2013 7 projects have been developed under Priority Axis Technical Assistance, whereof 2 are completed, 2 are suspended and 3 are being implemented.

Table 66. Communication and publicity projects

Number in UMIS	Name	Status	Start	End	Total budget	Total amount of funds paid	Grants (delivered funds)
BG161PO001-5.3.01-0040-C0001	"Developing and strengthening the positive image of the Operational Programme Regional Development 2007-2013"	Completed	5.8.2010	5.7.2012	5 004	29 121	5 004
BG161PO001-5.3.01-0005-C0001	"Communication, information and publicity of Operational Programme Regional Development 2007-2013"	Completed	16.9.2008	16.7.2013	1 075 076	1 401 605	1 075 076
BG161PO001-5.3.01-0022-C0001	"Logistic and technical provision of conferences, information campaigns, meetings, and other events related to the implementation of OPRD and ongoing activities"	Registered	12.5.2009	12.7.2015	2 050 420	1 070 608	2 050 420
BG161PO001-5.3.01-0044-C0001	"Ensuring transparency in the implementation of Operational Programme Regional Development 2007-2013 and its promotion in the electronic and printed media"	Registered	25.10.2010	25.6.2015	4 263 000	1 828 691	4 263 000
BG161PO001-5.3.01-0056-C0001	"Elaboration and dissemination of information, advertising materials and souvenirs related to the implementation of OPRD"	Registered	4.8.2011	4.8.2015	632 800	368 090	632 800
BG161PO001-5.3.01-0026-C0001	"Ensuring media visibility and transparency of the implementation of Operational Programme Regional Development 2007-2013"	Registered	27.8.2009	27.8.2010	0	0	0



EUROPEAN UNION
European Regional
Development Fund

"Impact evaluation of the interventions under Operational Programme Regional Development 2007-2013 and their contribution to the implementation of the horizontal policies of the EU"



	Development 2007 – 2013"						
BG161PO001- 5.3.01-0020- C0001	"Provision of information and publicity of the EU's integrated urban development policy"	Registered	12.5.2009	12.5.2011	0	0	0
Total					8 026 300	4 698 115	8 026 300

Up to December 2014 the total amount of funds provided for the implementation of the information and publicity activities under the Programme is BGN 8 026 300 or 7,58% of the funds under Priority Axis Technical Assistance, whereof BGN 4 698 115 have been paid up (4,44% of the funds under TA).

4.1. General evaluation of the achievement of the objectives of the Communication Plan

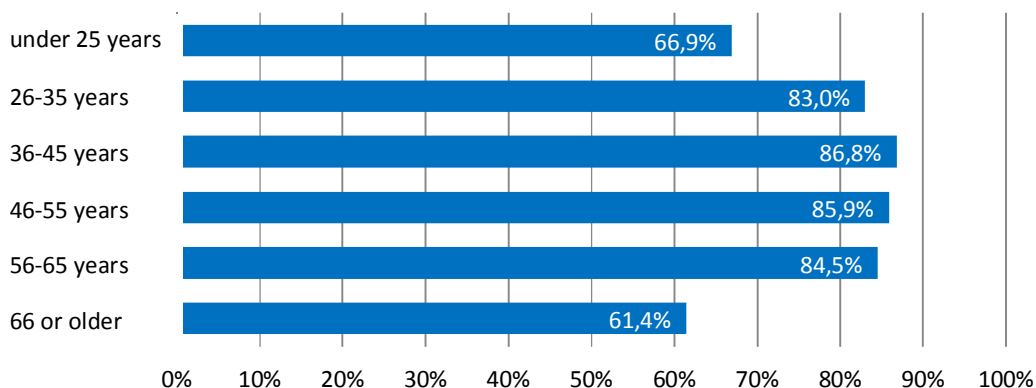
? Has the public awareness of the scope, objectives and results under OPRD and the Community's contribution been increased?

The evaluation of the increased public awareness is, in its essence, an evaluation of the achievement of the first specific objective of the Communication Plan for OPRD 2007-2013. The data on the public awareness has been gathered through a sociological survey, which is described in section 1.1 of this report. As set out above, results of the sociological survey carried out among the Bulgarian public, show very high relative share of the individuals who have heard about the OPRD – 77,8%, which means that the target value of 40% set for this indicators is not only achieved, but it is also exceeded almost twice.

Further analysis of the data on this indicator studied show that the following have heard about OPRD:

- 80,6% of the men and 73,9% of the women. The dependency between the sex of the individuals and their overall awareness of OPRD is rather weak, but nevertheless the level of recognition of OPRD among men is higher;
- 79,0% of the residents of district towns, 70,0% of the residents of towns, other than the district administrative centres and 80,7% of the residents of villages have heard about OPRD;
- The OPRD has reached the different age groups to a different extent. The data indicate that the recognition of the Programme is highest in the age groups 36-45, 46-55, 56-65 and 26-35. The recognition is relatively lowest among individuals of up to 25 years and individuals over 66 years. These findings are illustrated on the figure below - Fig. 34:

Figure 39: Distribution of the respondents by age groups and depending on whether they have heard about OPRD or not

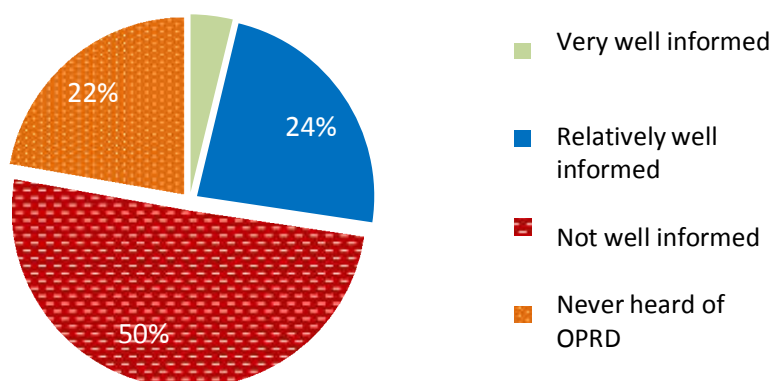


The dependency between the level of recognition of OPRD and the educational status of the individuals is the most obvious one. The data show that the individuals with elementary school education (36,4%), as well as individuals with primary school education (46,1%), are least aware of the Programme. As the educational level increases the relative shares of individuals who have heard about the Programme increase: 73,8% of the people with secondary school education, 96,4% of the people with college education and 96,0% of the people with higher education.

The sociological survey includes collection of self-evaluations, which is a mandatory element in this kind of surveys. The respondents are asked to evaluate their own awareness of OPRD.

The empirical data obtained confirm that only 22,2% of the individuals have not heard about OPRD. The awareness picture for the remaining 77,8% is diverse. The figure below illustrates the self-assessments received:

Figure 40: Self-assessments of the level of awareness of OPRD



Only 3,8% of the respondents have assessed themselves as being very well informed. This minimum share should not surprise – the evaluation surveys, including the survey at issue, show

a trend for a very small number of the individuals to choose the extreme statements, especially the highest level of awareness.

- 23,6% have chosen the option "Relatively well informed"
- The majority of the respondents (50,4%) have stated that they are not well acquainted with the OPRD. During the survey the respondents have shared with the interviewers that they are aware of the existence of OPRD, but they have only general idea of the Programme – they know it is aimed at improving the local territorial development, public works in urban environment, but since they are not aware of the details, they do not feel well acquainted with this Operational Programme.

Following on the summary of the empirical data regarding the individuals who stated to have heard about OPRD, several conclusions can be drawn:

- The level of recognition of OPRD is extremely high. However, no sign of equality should be put between the level of recognition of the Programme, on one hand, and the depth / details known about the Programme itself (mission, specifics, objectives, goals, and priorities).
- The survey shows that OPRD is mostly recognised by individuals with higher educational level, as well as individuals in active working age. The youngest and the oldest are less informed about the Programme, which may be subject to additional analysis in developing the Communication Plan for the next programming period.
- OPRD is best recognised in the district cities, but also in the villages, especially when specific public works projects or projects for recovery of local sights have been implemented in these settlements.

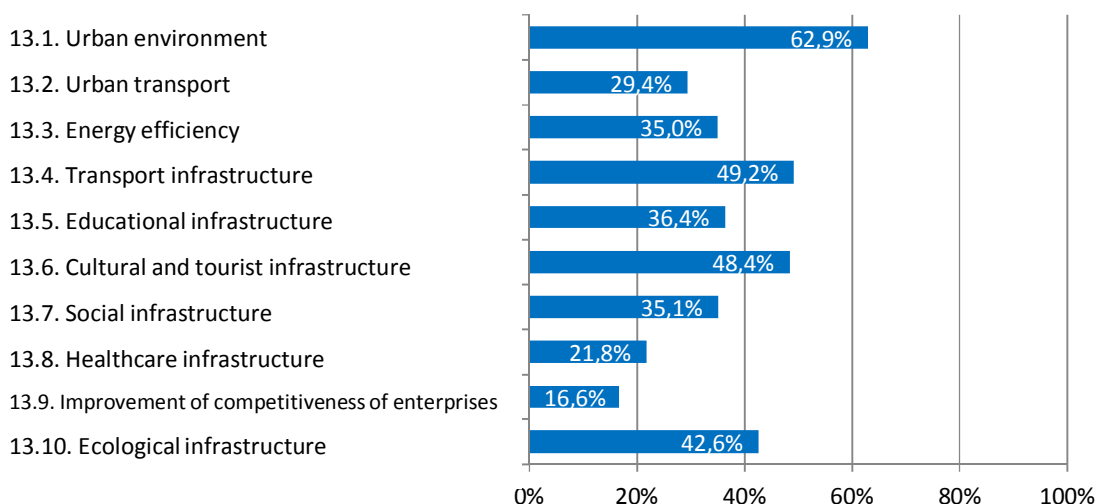
With a view to evaluating the awareness of the public regarding the scope, objectives and results achieved under OPRD, a socially constructed thematic block focused on the citizens' awareness of specific projects implemented under the Programme was included in the sociological survey. Through a series of questions the respondents have named specific projects which have been implemented in the settlements where they live.

52,8% of the respondents state that they are aware of specific projects implemented with the financial support of OPRD. This is a relatively high percentage indicating that significant part of the people have not only heard of the Programme, but they are also able to name specific projects implemented under it. 56,2% of the participants in the survey have stated that they are aware of projects implemented in their settlements under OPRD.

When asked to name a specific project, 52,3% have mentioned at least one such project. Complete description of the projects /sites names is contained in the data from the survey, but the summary of this information shows that the respondents have identified mostly repaired roads, bicycle alleys, improved urban transport (including new trolley buses), zebra crossings, ring-roads, river bed adjustments, tourist hiking tracks, water attractions, recovered green areas and parks, restored architectural buildings and monuments, children's playgrounds and sports fields built, ecological improvements, eco-tourism facilities, creation of orchards, energy efficiency projects, improvements of healthcare establishments, repair of schools, renovations of houses – museums, restoration of churches, modernisation of community cultural centres, local sights.

In the respondents' view, the major investments under OPRD are in the following areas:

Figure 41: Evaluation of the Bulgarian public as to the areas where the major investments under OPRD have been made



As evident from the data presented the Bulgarian public associates OPRD mostly with the investments in improvement of the urban environment (62,9%), construction and improvement of the transport infrastructure (49,2%), improvements in the cultural and tourist infrastructure (48,4%), and 42,6% have assumed that such investments are also made in the field of ecological infrastructure. 36,4% point out investments in educational infrastructure, 35,1% - in social infrastructure, 35,0% - in energy infrastructure, 29,4% point out investments in urban transport, 21,8% - in healthcare facilities, and 16,6% have even assumed that the Programme's investments are also aimed at enhancing the competitiveness of the companies, the reason for this most probably being the fact that the information materials of OPRD mention that local development and cooperation is supported, including the creation of jobs.

The survey has found an extremely high evaluation of the practical benefits for the local communities resulting from the specific projects implemented in the settlements – according to 75,6% of the adult population there are specific and visible benefits of the implemented projects funded under OPRD.

The very fact that every other person is able to name a specific project implemented in the settlement where he / she lives is in itself a very good evaluation of the investments under the Programme. There are also individuals who have stated in the survey that they are aware of such projects but they are unable to communicate their exact names. This is another confirmation of the broad recognition and popularity of OPRD among the Bulgarian public.

Asked to specify the benefits from the projects implemented to the local communities, the respondents have indicated two or three types of benefits:

- According to 66,0% of the adult population the benefits consist in an improvement of the quality of life and work environment;
- 44,3% have claimed that they see a benefit in the creation of jobs;

- 43,5% appreciate the improvements in the environment;
- 38,8% see the benefits to their local community in the created specific opportunities for sustainable development of the region;
- According to 17,2% the benefits consist in the created conditions for competitive economy;
- 15,2% think that the projects have improved the capacity of the local public administrations.

With a view to promoting OPRD 2007-2013 and achieving the objectives of the Communication Plan, the MA of OPRD has engaged Zenith Advertising & Communications AD in the implementation of the project "Ensuring transparency in the process of implementation of Operational Programme Regional Development 2007-2013". On a quarterly basis, the company submits to the MA a report including content analysis and analysis of the impact of the published materials. The Contracting Authority submitted quarterly reports for the following periods: April-June 2013, October-December 2013, January-March 2014, April-June 2014, July-September 2014, and January-February 2015.

Table 67. Identified results from the implementation of the Communication Plan

Period	Publications	National publications	Publications	Periodicals	Publications	Regional publications	Publications	National weekly paper	Priority axis	Target	Attitude	Potential number of audience
April-June 2013	11	7	0	0	13	10	0	0	<ul style="list-style-type: none"> • 9 publications - PA 1: "Sustainable and integrated urban development" • 10 publications - PA 3 "Sustainable tourism development" • 1 publication - PA 4 "Local development and cooperation" • 1 publication out of 24 is related to Priority Axis 5: "Technical Assistance" • 3 publications out of 24 provide information on the progress and implementation of OPRD and the prospects for the next programming period. 1 publication out of 3 provides information on the Joint European Support for Sustainable Investments in City Areas - JESSICA 	Beneficiaries-municipalities Specific beneficiary Ministry of Economy Specific beneficiary Ministry of Health OPRD OPRD, jointly with OPAC and Rural Development Programme JESSICA	positive	2 446 050 people
October-December 2013	2	2	0	0	1	1	0	0	<ul style="list-style-type: none"> • 1 publication out of 3 is related to Priority Axis 1: "Sustainable and integrated urban development" • 1 publication out of 3 is related to Priority Axis 2: "Regional and local accessibility" • 1 publication out of 3 is related to Priority Axis 3: "Sustainable tourism development" 	Beneficiaries-municipalities Specific beneficiary	positive	225 300 people
January-March 2014	2	2	0	0	0	0	0	0	2 publications – Priority Axis 3: "Sustainable tourism development"	Beneficiaries-municipalities	positive	192 000 people

April-June 2014	9	7	2	2	1	1	1	1	<ul style="list-style-type: none"> • 8 publications - PA 1: "Sustainable and integrated urban development" • 5 publications - PA 3 "Sustainable tourism development" • 12 publications providing information on the progress and the implementation of OPRD • 1 publication providing information on the Joint European Support for Sustainable Investments in City Areas - JESSICA 	Beneficiaries-municipalities JESSICA	positive	1 841 550 people
July-September 2014	5	5	1	1	1	1	0	0	<ul style="list-style-type: none"> • 4 publications - PA 1: "Sustainable and integrated urban development" • 3 publications - PA 3 "Sustainable tourism development" 	Beneficiaries-municipalities	positive	774 150 people
January-February 2015	10	6	2	1	0	0	0	0	<ul style="list-style-type: none"> • 6 publications out of 7 are related to Priority Axis 1: "Sustainable and integrated urban development" • 1 publication out of 7 is related to Priority Axis 3 "Sustainable tourism development" 	Beneficiaries-municipalities OPRD	positive	2 038 650 people

According to the data summarized in the submitted reports, OPRD 2007-2013 has been promoted mainly through publications (39 in total) in national daily newspapers: "Standard", "Telegraph", "Duma", "24 chasa" "Monitor", "Trud", "Pressa", "Sega", "Novinar", "Kapital Daily", "Zemya", "Reporter" and in regional daily newspapers (16 publications in total) as follows: "Bryag" (Rousse), "Vesti" (Gabrovo), "Shumenska zarya" (Shoumen), "Dobrudzhanska tribuna" (Dobrich), "24 chasa" and "Trud" (Plovdiv), "Maritsa" (Plovdiv), "24 chasa" and "Trud" (Burgas), "Burgas-dnes i utre" (Burgas), "Starozagorski novini" (Stara Zagora), "Slivenski novini" (Sliven). The analyses show that a potential audience of 7 517 700 people has been reached.

The publications in question are mostly related to the implementation of projects under PA1: "Sustainable and integrated urban development", PA3 "Sustainable tourist development", implementation of the Joint European Support for Sustainable Investments in City Areas and information on the general progress and implementation of OPRD 2007-2013.

According to the analysis submitted, the information is set out precisely and accurately by the authors of the publications, with clearly stated positive attitude toward the Programme. The contribution of the Programme to the regional development and its importance to the local development have also been reflected.

? Have transparency and openness been ensured in the implementation of OPRD?

One of the main objectives of the information and publicity measures is to ensure the transparency and openness upon the utilisation of the funds provided by the European Union. According to Art. 69 of Council Regulation (EC) No. 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, the Managing Authorities for the Operational Programmes should provide sufficient and easily accessible information on the financial opportunities under the Programme, the implementation of the Programme and the absorption of the granted funds.

The transparency and openness of the implementation of OPRD is followed up through the information which is reported and publicised on its implementation at the two main levels: potential beneficiaries and beneficiaries under the OPRD, and the general public.

Transparency at the level of potential beneficiaries and beneficiaries:

According to Art. 5 of Commission Regulation (EC) No 1828/2006 of 8 December 2006 setting out the rules for the implementation of Council Regulation (EC) No 1083/2006 laying down general provisions for the European Regional Development Fund, the European Social Fund and the Cohesion Fund, the Managing Authority shall provide potential beneficiaries with clear and detailed information on at least the following:

- the conditions of eligibility to be met in order to qualify for financing under an operational programme;
- description of the procedures for examining applications for funding and the time periods involved;
- the criteria for selecting the operations to be financed;

- the contact persons at national, regional or local level who can provide information on the operational programmes.
- publishing, electronically or otherwise, the list of beneficiaries, the names of the operations and the amount of public funds allocated to the operations

The review of the annual reports (for 2007, 2008, 2009, 2010, 2011, 2012, 2013) on the implementation of OPRD indicate that the MA of OPRD has not only fulfilled the above requirements, but it has also developed additional elements facilitating the applicants and beneficiaries under the Programme.

OPRD has a website since its launch in 2007, which is accessible at www.bgregio.eu. The website of the Programme provides a glossary, explaining the terms used in the implementation of the Programme and the following elements:

- A list of the most frequent mistakes in the development of project proposals;
- A brief simulation model showing the path of the project after its submission to the Managing Authority;
- Minutes from the meetings of the Programme's Monitoring Committee and the contacts of the Committee's members;
- Irregularities section;
- Internal detailed rules for the functioning of the Evaluation Committees evaluating projects under OPRD;
- A list of the submitted project proposals under the grant schemes with information on the status of each project proposal;
- Lists of beneficiaries and the grants provided to them by grant contract;
- Publication of the Indicative Work Programme on forthcoming grant procedures under OPRD;
- "Questions and answers" section, where questions related to the Programme and the schemes open under it are accepted;
- General Guidelines for the beneficiaries under OPRD, providing information on their fundamental obligations and responsibilities in order to ensure efficient technical and financial management of the grant contract;
- Guidelines on the implementation of the contracts under each of the grant schemes;
- A link to the official graphic requirements of the European Commission to the use of the EU logo.

In order to ensure transparent implementation of the Programme, since 2009 the following information can also be found on the OPRD's website:

- “Evaluated projects” section, providing information on all stages of the evaluation of the project proposals under the open grant schemes
- “Reserve proposals” section, where the lists of the approved project proposals are published, which cannot be funded due to the exhaustion of the funds under the respective scheme;
- “OPRD evaluation” section aimed at providing access to information related to the evaluation of OPRD throughout all of its stages.

The Managing Authority of OPRD has organised the sending to each municipality of a Practical Guide “How to Apply Successfully under OPRD”.

Since 2009 the Managing Authority of OPRD has been adding new information to the content of the website, by publishing in advance the application guidelines, so as to be able to discuss them with the beneficiaries before their official announcement and publishes on a monthly basis the updated information on the funds paid up under the contracts with beneficiaries under OPRD.

The functionality of the design of www.bgregio.eu has been optimised in 2011, which is aimed at facilitating the beneficiaries and in accordance with the requirements of Regulation 1828/2006, Art. 7/2.d an up-to-date list of the beneficiaries under the Programme, the names of the operations and the amount of public funds allocated to the operations is kept on the website of OPRD.

The MA has taken all necessary measures to inform the beneficiaries of the programme on their obligations to promote the support received under OPRD in accordance with Art. 8 of Regulation 1828/2006. The publicity requirements are included as an appendix to the Guidelines for Application of each grant scheme and are also set in the general terms of the grant contracts. In the interim and final technical reports on the projects implemented by them the beneficiaries should report the information and publicity measures implemented and should also provide evidentiary material for the activities undertaken. The MA has also drawn the beneficiaries’ attention to the fact that non-compliance with the information and publicity requirements for the project will be treated as irregularity and may result in financial corrections under the project.

Other measures that the MA has described in the annual reports aimed at promoting the OPRD among the beneficiaries include:

- Organisation of information days for potential beneficiaries, the information on such events being announced in the media and on the website of OPRD prior to the day they are held on;
- “Open doors day” devoted to the management and implementation of Operational Programme Regional Development 2007-2013;
- Official OPRD contract signing ceremonies in the presence of the media.

With a view to ensuring the promotion of OPRD and its full presentation to the **general public**, the MA has carried out the following initiatives:

- Organisation of a conference and 6 separate events for each of the NUTS2 regions and a central conference in Sofia have been organised on the occasion of the official approval of OP “Regional Development” by the European Commission

- Information seminars for raising the awareness of journalists of the Programme's specifics in accordance with the requirement of Art. 7/2.a of Regulation No 1828/2006;
- Participation of OPRD experts in radio and television broadcasts
- Organisation and conducting of press conferences, providing information on the progress achieved on the implementation of the Programme;
- In accordance with the requirements of Art. 7/2.b of Regulation No 1828/ 2006, since 2009 the MA has started organising official annual conferences to present the progress achieved in the implementation of OPRD;
- Development and dissemination of information and advertising materials, including leaflets and brochures promoting the activities implemented under the Programme
- Conferences and presentation of the financial agreement and the opportunities under the Joint European Support for Sustainable Investment in City Areas (JESSICA);
- Placement of 250 billboards (as of December 2013) throughout the country, aimed at attracting and increasing the public interest to the Programme and its implementation;
- Official opening of sites built under OPRD to which the media and the general public has been invited.

Based on the activities described above in relation to the implementation of the Communication Plan, a conclusion can be drawn that the MA of OPRD has met all requirements of Regulation No 1083/ 2006 and Regulation 1828/ 2006 on ensuring the transparency and openness in the implementation of OPRD.

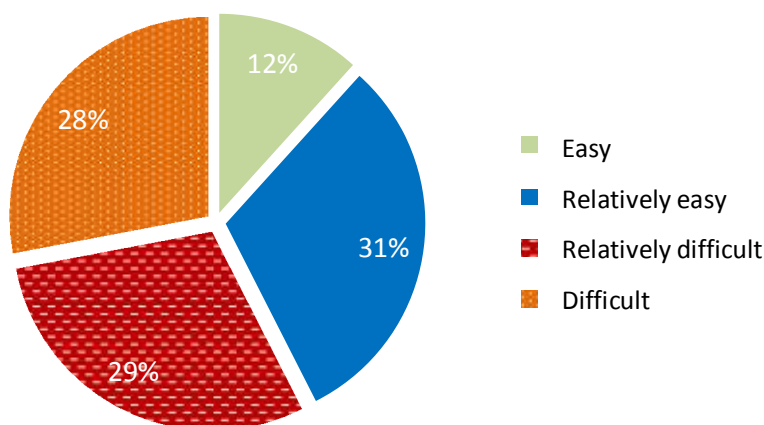
MA presents detailed information on all identified target groups, special attention being paid to the beneficiaries and potential beneficiaries under the Programme, as the overall implementation of OPRD depends on their active participation. Detailed information on signed contracts, contracted and certified funds, list of approved and non-approved beneficiaries, processes and rules for the evaluation of draft proposals is presented.

The MA has also made efforts to present the implementation of OPRD to the general public, while trying to not only build a positive image of the programme, but also to present the actual results achieved and the effect of the funds used under the Programme.

The results from the sociological survey show that the public opinion on two key indicators related to the transparency in the implementation of OPRD: 1) overall access to information on OPRD and 2) communication style used to present the information (accessibility and comprehensibility), require additional efforts to be improved.

The survey indicates that with respect to the first indicator the public is divided into two groups. A total of 42,5% of the public takes the view that the overall access to information on OPRD is relatively easy, but 57,5% consider that information on the Programme is difficult to access. The figure below presents visually the evaluations obtained on this indicator:

Figure 42: Evaluations on the overall access to information on OPRD



The verification of the data indicates that there is a strong dependency between the evaluations of the people on the access to the information, on one hand, and the self-evaluations of their own awareness. Thus, for example, 86,5% of the individuals who have stated that the access to the information is difficult, have at the same time stated that they have not heard of OPRD. The opposite is also valid: 53,7% of the individuals who have stated that the access is easy, have self-assessed themselves as very well-informed. Obviously, there is a direct relation between the self-evaluation as to the awareness of this Operational Programme and the evaluation of the overall access to information about the Programme.

At the same time the survey found that according to a total of 52,0% the information about the Programme is presented in a language that may be defined as clear and understandable. This is good as a general evaluation, but at the same time it means that for the remaining 48,0% the language remains difficult due to the specialised terminology used. It is namely the respondents who consider that the language is difficult and not understandable that represent the highest share of individuals (77,7%) who do not think they are well informed about OPRD.

Obviously, corrective actions may be taken in this respect in the future. It should be taken into account that people find it difficult to orient in the specialised terminology of the operational programmes and this is evident in the specific case when the recognition and level of awareness of OPRD are tested. In this respect, it may be considered to present the information about the

Programme in a clearer and more understandable language for the people. When the language and the messages are more comprehensible, including with respect to the information billboards, it would probably be appropriate to consider even clearer messages, which could be recognised and understood by the Bulgarian public.

The results of the online survey showed that according to 76% of the beneficiaries the information and publicity measures of the Programme have ensured transparency in its implementation. Also, the information and publicity measures of the CP have raised the interest of potential beneficiaries to OPRD 200-2013 funding opportunities according to 79% of respondents to the online survey and have introduced beneficiaries to their responsibilities with respect to project implementation (according to 84%). The created website of the Programme satisfies the beneficiaries as they unanimously confirm that they can find enough information about the possibilities for applying under the Programme and the project implementation. According to most the information in it is well structured and easy to navigate and work with it.

This evaluation confirms the findings of the mid-term evaluation of the Programme carried out in 2011 that the execution of the communication plan does not burden MA.

<u>Findings of the mid-term evaluation of the Programme</u>	<u>Findings from the current evaluation of the Programme</u>
There are clear roles and responsibilities for the implementation of communication activities.	The finding is confirmed.
Most of the beneficiaries consider that it is easy to get information from the website of OPRD. The general opinion of the MA page is that it is easy to use and contains / updated with all necessary information.	The finding is confirmed.
With regard to recent developments in the Programme, the new sections of the site improve publicity, transparency and accessibility to the implementation process of the Programme. Also the publication of data from the UMIS is a positive step, providing more transparency.	The finding is confirmed.
The allocated budget for the website (0.3%) is extremely small, given the importance of the page.	As seen from the results of the online survey over 90% of the beneficiaries are of the opinion that at the website of the Programme all necessary information about the opportunities and the implementation of the Programme can be found. It can therefore be concluded that the allocated budget is sufficient.
Not all indicators defined in the CP are monitored in the Annual reports.	The finding is confirmed.

Based on the abovementioned, it can be concluded that the Communication Plan of the Programme and its activities provide the necessary transparency in the implementation of the Programme and ensure its popularization and promotion among both the beneficiaries and the general public.

? To what extent have the potential beneficiaries been informed about the funding opportunities under ERDF and the eligibility criteria of the Programme?

The MA has taken all necessary measures to comply with the requirements of Art. 5 of Regulation 1828/2006 and to inform potential beneficiaries about funding opportunities available under the Programme. The Programme's website has a section "Application", at which are being published the indicative annual work programs for the upcoming application schemes, schemes for applications and submitted projects. To the application schemes are published guidelines for applications that contain the eligibility conditions, selection criteria, deadlines for evaluation of proposals, the necessary package of documents and draft contract. At the start of each scheme, MA organizes information days at which experts from the department present application requirements. During the interviews the beneficiaries explained that for them these information campaigns were of great benefit, for they had the opportunity to ask questions related to the eligible activities and project costs.

In the responses to the conducted online survey, the beneficiaries identified as useful the MA information meetings / campaigns and seminars on presentation of schemes for financing of projects on the priority axes of the Programme. They indicated that they had received sufficient and adequate information regarding funding opportunities, rules and eligibility criteria, the requirements for project development, evaluation criteria of the projects, the rules for the implementation of projects and rules for information and publicity in project implementation. It should also be noted that the beneficiaries have gained considerable experience in seeking information about funding opportunities and for them there is no difficulty to find the information they need on project application and preparation. The results of the online survey showed that in terms of awareness of the beneficiaries with the requirements for applying and implementing projects under the OPRD 2007-2013 most useful to the beneficiaries was the website of OPRD 2007-2013 (according to 93%), followed by trainings and seminars (according to 91%), organized information days (according to 88%) and developed manuals, brochures and guidelines (82%).

? To what extent are the beneficiaries of the Programme aware of their responsibilities in the process of implementation of projects under OPRD, including their information and publicity obligations related to the implementation of these projects?

The MA has taken all necessary measures to inform the beneficiaries of the Programme on their obligations to promote the support received under OPRD in accordance with Art. 8 of Regulation 1828/2006. The publicity requirements are included as an appendix to the Guidelines for Application of each grant scheme and are also set in the general terms of the grant contracts. In

the interim and final technical reports on the projects implemented by them the beneficiaries should report the information and publicity measures implemented and should also provide evidentiary material for the activities undertaken. The MA has also drawn the beneficiaries' attention to the fact that non-compliance with the information and publicity requirements for the project will be treated as irregularity and may result in financial corrections under the project.

According to the Procedure manual for implementation of the OPRD 2007-2013, version 9, the beneficiaries of the Programme should submit to the MA:

- Interim technical reports and interim financial reports upon request for interim payment
- Six-monthly technical reports – by the 15th day of the month after the reporting period (by 15th of July of the respective year)
- Annual technical reports – by 30th of January of the year after the reporting year
- Final technical report and final financial report – within 2 months following the completion of the project activities, but within the deadline for implementation of the contract.

The Technical Report template is identical to all types of contracts mentioned above. In section "General information" the beneficiary should describe how the publicity and public awareness of the EU's financial contribution are ensured in the framework of the project. The MA has, in turn, a check-list – Appendix 13.5-5 "Check-list for information and publicity measures", which enables it to keep track of the beneficiaries' compliance with the information and publicity requirements.

The compliance with the information and publicity measures is also part of the on-the-spot-checks of ongoing as well as completed projects, during which the condition of the objects of intervention, the conservation of the property and its purpose, the way the project documentation is stored by the beneficiaries, the opportunities to generate revenues and the compliance with the information and publicity measures within five years after the completion of the project are verified.

The conducted on the spot checks to the beneficiaries showed that they are well familiar with the requirements for information and publicity. This is confirmed by the online survey in which 90% of the beneficiaries indicated that they are well aware of their responsibilities with respect to publicity under the implemented projects. Beneficiaries also strictly comply with the requirements for information and publicity during the five year sustainability period of the projects have provided funds in their budgets for the renewal of the signs and stickers.

The interviewed MA employees noted that according to them the beneficiaries do not face difficulties in meeting the requirements for information and publicity, and that they do not have imposed financial corrections related to breaches of the information and publicity. In most cases, if the beneficiaries had a failure in compliance following a comments made by the MA, they immediately amend the respective shortcomings.

4.2. Impact evaluation of the implementation of the communication methods and channels set the Communication Plan

? **To what extent have the activities related to the communication methods and channels set in the Communication Plan been implemented?**

The Communication Plan for OPRD provides for communication channels depending on the specifics of the target groups identified.

The following have been provided for the internal target group (structures within the Ministry of Regional Development and the state administration in general): official correspondence, correspondence via e-mail, personal contacts and informal communication.

The following have been provided for the external target group (general public, socio- economic partners, potential beneficiaries, specific beneficiaries and beneficiaries) – press releases, website, correspondence via e-mail, media, billboards, explanation boards, public events, printed publications.

The following have been provided for the mediators target group – media releases, electronic communications, press release, briefings, press conferences, website of the Programme.

Obviously, the MA has planned to use all information channels available for raising the awareness of these groups about the mission, objectives and priorities of OPRD.

The table below presents the activities related to the communication methods and channels and the level of their implementation in accordance with the information in the annual reports on the implementation of OPRD in the period 2007-2013. The information in the table will be supplemented after meetings with representatives of MA.

Communication method and activities envisaged under the method	Activities implemented
Media campaigns	
Press conference related to the launch of the Programme.	An information event has been carried out simultaneously in the capital city and in the 6 regions at NUTS II level following the official approval of the Programme by the EC.
Annual press conference at which the Head of the MA presented the progress achieved under the Programme.	Since 2009 every year the MA of OPRD has held annual conference on the progress achieved in the implementation of the Programme.
Closing press conference on the occasion of the closing of OPRD, presenting the results achieved, the successful projects and good practices	To be implemented in 2015
Media releases and overviews, including comprehensive information on specific subjects, photographs, overview of the Programme, best practices, overview of the calls for tenders	MA prepares reports and review the media on various topics.
Briefings (short press conferences), assistance to journalists in the development of in-depth materials about the Programme	MA assists the media in the preparation of in-depth materials for the Programme.
Seminars for journalists	An information seminar for journalists was held at the end of 2007, where the journalists were informed about the first schemes launched under OPRD and the forthcoming schemes. Subsequently several trainings for journalists

Trainings for beneficiaries and potential beneficiaries	were organized. The MA organises information days for the potential beneficiaries upon the launching of each grant scheme. A total of 250 information days and trainings have been organised to date (as of December 2013).
Printed publications	
The Managing Authority will provide a wide variety of printed publications. General information about the Programme will be presented initially, then it will be supplemented and enriched. Printed publications include brochures, leaflets, justifications, guidelines and copies of key documents.	The MA has contracts signed for the preparation and printing of brochures, booklets and photo albums presenting both the progress achieved in the implementation of OPRD and the results achieved under successfully completed projects under the Programme and the good practices identified. The MA also promotes the Programme through handing out advertising materials, such as: pens, notebooks, conference folders with notebooks attached therein, filing folders, work calendars, desktop work calendars.
Internet information	
E-mails, correspondence It is envisaged as a key tool for regular provision of up-to-date information on the Operational Programme, including the European Structural Funds, the application forms, guidelines, frequently asked questions, press reviews, information on projects approved, calls for tenders and guidelines on the implementation of the information and publicity measures.	
Website	The website address of OPRD 2007-2013 is www.bgregio.eu . The website was launched with an advertising campaign aiming to promote it.
Communication methods to reflect the EU contribution to the achievement objectives of OPRD for the development of the Bulgarian regions	
Visual image	A logo of OPRD was created, and the MA, the beneficiaries and the contractors of projects under OPRD are obliged to use it.
Guidance and guidelines	Guidelines have been developed on the implementation of the information and publicity measures that are attached as Appendix I to the Communication Plan.
Placement of the European flag for one week as of 9 May in front of the headquarters of the Managing Authority.	The MA of OPRD complies with this requirement.
Information methods to disseminate the results from the implementation of the projects under OPRD	
Annual event to report on the achievements under OPRD.	Every year the MA organises a conference at which the progress on the implementation of OPRD is presented.
The beneficiaries under the Programme are	The information and publicity requirements

obliged to organise at least two information events upon the launch and completion of each project implemented. This requirement is valid for all projects amounting to more than EUR 10 000.	underlie the general terms of the grant contracts. The MA has developed Guidelines for the implementation of the information and publicity measures by the beneficiaries under OPRD 2007-2013, which are published on the Programme's website.
Information network of non-governmental organisations.	MA works with all stakeholders by organizing public debates and discussions with a wide network of organizations including social partners, employers' organizations, the Association of Municipalities and others.

In addition to the activities indicated above and according to the information in the annual reports in the period 2007-2013, the MA has organized and carried out:

- 113 information days in relation to the launch of grant schemes
- 14 workshops / seminars in relation to the implementation of the Programme
- 291 presentations in radio broadcasts;
- 150 presentations in television broadcasts;
- 60 official grant scheme signing ceremonies
- 2 official presentations of the Joint European Support for Sustainable Investments in City Areas
- 3 trainings for journalists

As seen from the table above the MA has implemented all activities related to the communication methods and channels provided for in the Communication Plan.

? What is the effectiveness, efficiency, utility, impact of the activities implemented related to the communication methods and channels?

With a view to finding out what part of the information has reached the target groups, a separate question measuring the relative weight of the information channels was included in the sociological survey carried out. This is question 2: "How did you find out about Operational Programme Regional Development?". The empirical data allow to estimate the relative weight of the main channels used to inform the population about Operational Programme Regional Development:

- The survey shows that audio visual media (radio, television) have contributed most to the awareness of the Bulgarian public about Operational Programme Regional Development – this information source has been identified by 72,0% of the adults and thus ranks at the top as the source which has contributed most to the dissemination of information regarding Operational Programme Regional Development. The shares of men and women (74,3% and 69,8%) who have stated that audio visual media have served as their source of

information about Operational Programme Regional Development are similar in size. Audio visual media have shaped the awareness about Operational Programme Regional Development mainly among individuals aged 46-55 (81,7%), 56-65 (77,4%) and 26-35 (74,3%). The shares of individuals aged over 66 (65,0%) and among the youngest individuals (51,9%) are also high. Interesting differences appear with regard to the educational status of the individuals: only one third (33,3% of the individuals with elementary school education and 46,9% of the individuals with primary school education) have been informed about Operational Programme Regional Development by the audio visual media. These shares are apparently higher for the individuals with higher educational status - 70,0% of the individuals with secondary school education, 84,8% of the individuals with college education and 82,2% of the individuals with higher education. It is clear from the data that audio visual media have been recognised to the least extent (58,0%) as an information medium by the individuals living in cities other than the district centres, while these shares represent 75,9% of the individuals living in the district cities and 80,5% of those living in the villages;

- The second information source which appear to have high contribution in this respect are the printed media (newspapers, magazines). During the survey, 47,0% of the respondents have identified the printed media as the information source that raised their awareness of Operational Programme Regional Development. This source has been identified by 51,2% of the men and 43,1% of the women, which is probably related to the fact that significant number of men prefer to be informed about current events from the printed media. Interesting differences are evident in the identification of the printed media by the different age groups of the population. The data indicate that printed media have served to the highest extent as an information source about Operational Programme Regional Development for the individuals in the age group 46-55 (60,6%), as well as for those aged between 56 and 65 (55,3%) and 36-45 year-olds (54,2%). The weight of this information source is average among the individuals aged 26-35 (45,3%), and with respect to the eldest individuals the share is 35,6%. The smallest is the share of individuals informed by the audio visual media among the youngest people up to 25 years of age – every fourth (25,4%) has stated that they have been informed about Operational Programme Regional Development by the printed media. This source has been recognised to a differing extent as a source of information about Operational Programme Regional Development by the individuals with different educational statuses, namely, 11,1% of the individuals with elementary school education and 12,9% of the individuals with primary school education, these shares increasing up to 43,8% of the individuals with secondary school education, 59,8% of the individuals with college education and 62,6% with higher education. No significant divergences are evident in the level of recognition of the printed media as source of information regarding Operational Programme Regional Development by reference to the place of residence of the individuals;
- 40,7% of the adults have been informed about Operational Programme Regional Development by the permanent explanatory boards of the completed sites. 42,6% of the men and 38,8% of the women state that this is how they have learned about Operational Programme Regional Development. Four age groups have recognised the permanent boards of the completed sites as an important source of information about Operational Programme Regional Development: 56-65 year-olds (50,4%), 46-55 year-olds (49,2%), 36-45 year-olds (48,6%) and 26-35 year-olds (44,1%). This information source has also

been recognised by 36,6% of the youngest individuals and the smallest is the share of individuals over 66 (21,4%). Similarly to the first two information sources discussed, here also is evident a direct relationship between the educational status and the level of recognition of the source as medium of information regarding OPRD. The shares of individuals who have pointed this information source are 11,1% for the individuals having elementary school education, 19,0% for the individuals having primary school education, 37,0% for the individuals having secondary school education, 43,1% for the individuals having college education and 54,9% for the individuals having higher education. Logically and expectedly the permanent boards of the completed sites have been identified as information source about OPRD by those living in the villages (31,7%), whereas this share is higher for those living in cities - 41,8% for the residents in district cities and 39,6% for the residents of the cities other than the district centres;

- The fact that 38,7% of the adults have been made aware of OPRD from relatives and friends should not be underestimated. Although it seems at first glance that this is the source with a lower level of confidence, it should be taken into account that people form significant part of their evaluations on the basis of opinions and impressions of their relatives whom they trust and value. In this respect no differences between the two sexes are identified (39,1% of the men and 38,4% of the women). In terms of age, however, there are evident specifics and the trend is generally for higher shares under this indicator for the individuals of middle and upper working age (between 36 and 65 years of age): these shares are 46,3% for the individuals aged between 36-45, 46,1% for the individuals aged 46 to 55 and 44,8% among the 56-65 year-olds. However, interesting is the fact that the individuals with the lowest educational status have the smallest shares with respect to this indicator as well, namely: 11,1 % for the individuals having elementary school education and they increase up to 24,7% for those having primary school education. They continue to increase and reach 36,8% for the individuals with secondary school education, 45,5% for individuals having college education and 46,8% for those with higher education. No significant divergences are noticed in the preferences for information on OPRD from relatives / friends with respect to the place of residence of the respondents.
- 34,8% of the adult population have designated the information billboards placed along the roads as the source from which they have learned about OPRD. Men recognising this information source are a slightly more (38,0%) than the women (31,9%). The information billboards have impressed most the 46-55 year-olds (47,5%), 56-65 year-olds 41,6%) and 36-45 year-olds (39,5%). One third of the individuals aged between 26 and 35 (33,1%) and 28,8% of the youngest have also paid attention to the information billboards. Only one fifth of the people aged over 66 (20,4%) have remembered being informed about OPRD from information billboards. The recognition of the information billboards varies significantly depending on the education level of the respondents: their share is 22,2% of the individuals having elementary school education, 14,6% of the individuals having primary school education, 30,0% of the individuals having secondary school education, 42,3% of the individuals having college education and 48,2% of the individuals having higher education. Depending on the place of residence of the individuals, the shares of those indicating the information billboards range between 29,6% (in the villages) and 36,0% (in the cities other than the district administrations);

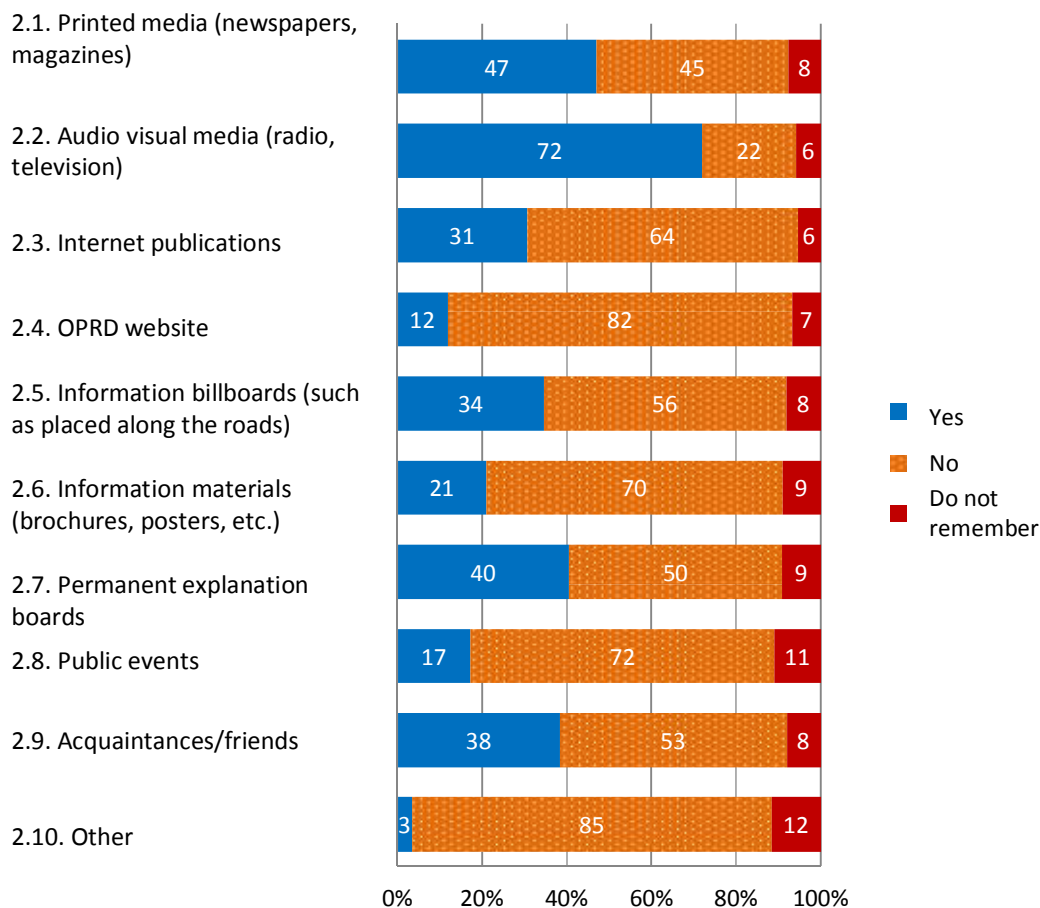
- Approximately one third of the adult population (30,6%) have identified the internet publications (websites) as a source from which they have obtained information regarding OPRD. The shares of men and women who have identified internet publications as a source of information are practically equal (31,6% and 29,7%). Expectedly, this information source is a favourite among the individuals of up to 45 years of age and the older the age group the smaller the share of those obtaining information regarding OPRD from this type of source: this share is 39,4% for the individuals aged up to 25, 47,5% for the individuals aged 26 to 35, 47,0% for those aged 36-45. This share remains relatively high with respect to the 46-55 year-olds (39,3%), while it drops down to 23,2% for the 56-65 year-olds, and it is only 5% for those over 66. As can be expected, individuals with elementary school education have practically minimum chance of using this source (0 %), and this share is only 8,2% for those having primary school education. However, the relative share of the individuals who have been informed about OPRD from internet publications increases in the higher educational level groups. This information source has been used by 11,0% of the people living in the villages, 29,25% of the people living in cities other than the district centres and by 32,7% of the people living in the district cities;
- The information materials (brochures, posters) about OPRD have played the role of an information source for 20,8% of the adult population. This is a more specific source of information reaching more specialised audiences. This explains the smaller share of people who own their awareness to the information materials about OPRD. The shares of these individuals are very close by sex - 21,4% of the men and 20,3% of the women. Depending on their age the shares are the highest among the 36-45 year-olds (32,2%), 46-55 year-olds (29,3%) and 26-35 year-olds (24,3%). They are relatively smaller among the 56-65 year-olds (19,1%) and the youngest (14,4%), and they are the smallest among people aged over 66 (8,7%), which is absolutely logical. Also expectedly, these shares are small among people with elementary (0%) and primary school education (7,5%). Their share gradually increases with the increasing of the educational level - 15,5% for the individuals with secondary school education, 31,8% for the individuals with college education and 32,3% for the individuals with higher education. Depending on the place of residence the level is lowest in the villages (12,2%), whereas it is 21,4% in the district cities, and 21,2% in cities other than the district centres;
- 17,3% of the adult population has obtained information about OPRD from public events held in the respective settlement. These have been indicated as a source of information about OPRD by 17,6% of the men and 16,9% of the women. This kind of source has been pointed out mainly by the working-age population - 27,9% of the 36-45 year-olds, 21,2% of the 56-65 year-olds, 19,3% of the 46-55 year-olds and 19,2% of the 26-35 year-olds. These shares vary significantly by educational level groups, with practically zero in the group of people with elementary school education and reach up to 28,8% in the group of people with higher education. Since this refers to public events that have actually occurred, the share of those who indicated this information source is only 6,1% of the residents in villages, almost two times higher in the cities (15,8%) and three times higher in the district centres (18,7%);
- The website of OPRD has been indicated as a source of information by somewhat more than one tenth of the respondents (11,8%). It is appropriate to take account of the fact that this type of information source has most probably been used by an audience with

specialised interests and special, targeted interest in OPRD. 13,0% of the men and 10,7% of the women have benefited from this specific opportunity to familiarize themselves with the Programme. In terms of age, the highest is the interest to the OPRD website of the 36-45 year-olds (23,5%), as well as 46-55 year-olds (16,7%) and 26-35 year-olds (15,7%). The interest to this information channel is the lowest among individuals aged over 66 (only 1,9%), which is expected and easy to explain.

The data and findings commented above are visualised on the figure below:¹⁶⁰

Figure 43: Information channels through which the public has been informed about the OPRD

¹⁶⁰ Fig. 6 discusses only the key distributions and the relative weight of the assessed information channels. As regards the distributions of the evaluations by sex, age, education and residence, these have been made using relevant statistic and mathematical tools and only the results thereof have been discussed.



Additional questions have been asked with a view to evaluating the satisfaction from the OPRD website. Data indicate that 41,8% of the individuals who have used the OPRD website are content with the navigation on the website. 41,7% of those who have used the website are satisfied with the quality and content of the information they found and 35,9% of them estimate that the information found was up-to-date.

To sum up, based on the data presented regarding the weight of the information channels, the following findings can be drawn.

In accordance with the specific characteristics and the priorities typical for each age group, the age groups have obtained information about OPRD through different means of information. The age group of 36-45 year-olds was the most actively interested group, which has taken advantage of all possible channels and has received information on OPRD from audio visual media, printed media, permanent boards on completed sites, the internet publications, billboards, information materials and OPRD website. Similar is the case of the individuals in the age groups between 46 and 65, with the only difference that there are several dominating channels and others playing the role of auxiliary channels for this group. The youngest respondents (up to 25 years of age) have recognised three main channels through which they have obtained information about OPRD – audio visual media, internet publications and the permanent boards on the completed sites. The

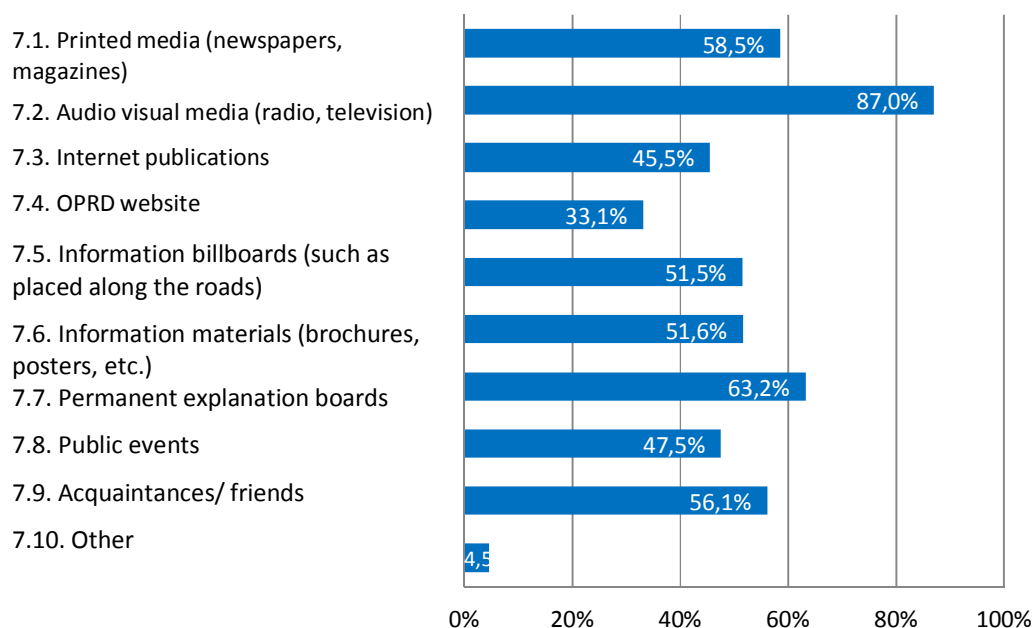
eldest individuals have relied on the classical information channels – mainly audio visual media and printed media and billboards to some extent.

The differences in the educational statuses have had visible impact on the channels from which information regarding OPRD has been obtained. Individuals with low educational levels have taken minimum advantage of the opportunities provided by the information channels. The increasing educational level results in an increased interest of the people to the opportunities provided by the different information channels. Thus, individuals with college and higher education turn out to be the most open to the diversity of information channels and they have combined at least three channels to obtain information about OPRD.

Depending on the place of residence the information channels have had different informative value. The biggest set of information channels have been used by individuals living in district cities, followed by the residents of cities other than the district centres and those living in villages.

The survey has examined which information channels are preferred by the Bulgarian public to obtain information regarding OPRD. The data indicate the following:

Figure 44: Preferences of the Bulgarian public as regards the information channels through which information about OPRD can be obtained



The figure above shows that the communication channels which the public prefers to obtain information about OPRD from include mainly audio visual media, printed media and explanatory billboards. These are also the communication channels most widely used by the public to obtain information about the Programme to date, in accordance with figure. 39. The responses received confirm that the communication channels to promote OPRD have been adequately selected and should be kept in the development of the Communication Plan for the next Operational Programme "Regions in Growth 2014 – 2020".

In addition to the foregoing, the final report will include the beneficiaries' evaluation of the effectiveness of the communication methods and channels used, on the basis of the results obtained through the online questionnaire.

4.3. Evaluation of the performance of the result and output indicators set in the Communication Plan

? Are the target values of the indicators adequate? What is the difference between the target and achieved values of the indicators?

Result and output indicators have been set in the OPRD Communication Plan to measure the implementation of the plan, as set out in the table below.

Table 68. Indicators set out in the Communication Plan of OPRD 2007-2013

Indicator	Measure	Baseline value	Target value	Information source	Value achieved	Difference between the values
Result indicators						
Level of awareness of the public	%	15%	40%	Sociological survey	77,8 %	exceeded more than two times
Visits to the OPRD website	number	0	300 000	Online WEB counter	6439 ¹⁶¹	
Number of residents who have seen the billboards and the documentary films on OPRD	thousands	0	2 000	Sociological survey	More 2800 (billboards 23,3% have watched a documentary film)	similar values
Broadcasts in the electronic media (television, radio, internet publications)	number	0	100	Media survey	441	Exceeded more than four times
Publications in printed media	number	0	60	Media survey	61	no
Share of participants in the seminars who have enhanced their knowledge	%	0	80%	Initial and final survey	90%	similar values
Output indicators						
Billboards placed	number	0	60	MA	250	exceeded more than four times
Guidelines, brochures and manuals	number	2100	20 000	MA	70 705	exceeded

¹⁶¹ This is the number of registered users of the OPRD website. It can be assumed that website visits are much more.

printed for the needs of the potential beneficiaries						three and a half times
Press releases and brochures printed for the needs of the media	number	0	20 00	MA	70 705 ¹⁶²	Exceeded 35 times
Announcements published on the website of OPRD	number	0	200	MA	331	exceeded one and a half times
Information events (press conferences, briefings, workshops, seminars, etc.)	number	6	60	MA	271	exceeded four and a half times

Source: Communication Plan for OPRD 2007-2013

The values of the indicators were calculated based on the information from the conducted sociological study, the OPRD 2007-2013 annual reports, and final project reports provided by the Contractor. On the reporting of the information and publicity measures in the OPRD annual reports, information has been provided only for measures implemented during the respective year. Therefore, no information summary on the implementation of all indicators defined in the CP of the Programme has been presented.

As seen from the table above, MA has achieved the set values of all indicators in the OPRD Communication Plan 2007-2013 except indicator "OPRD Website Visits" for which there is no complete information.

As a whole the result indicators, the target values set are adequate as compared to the values achieved. The indicator "Level of awareness" has a set target value of 40% of the public to be informed of OPRD. The sociological survey data indicate 77,8 % achievement of this indicator. As regards the other result indicator, the set target was that 2 million residents should have seen the OPRD billboards. According to the results from the sociological survey, it can be concluded that more than 2,8 million people have paid attention to the billboards promoting the Programme. The documentary films presenting the Programme and the results achieved have been seen by 23,3% of the respondents in the sociological survey. The elements of this indicator have been split in the sociological survey, as there is a difference in the number of the residents who have seen the billboards and those who have watched the documentaries on OPRD. There is only one result indicator which has been overachieved with 400%, and this indicator is "Broadcasting in electronic media (TV, radio, internet)."

With the indicator values for product, however, there are major differences between planned and achieved values. There is overperformance between 150% and 400%.

The target value of the output indicator "Billboards placed" is 60 and the value achieved - 250. The value achieved shows overachievement of the indicator by 400%, which indicates that the target value has not been set adequately.

The same is valid for the other output indicator "Information events", the achieved value of which 271 also exceeds 4 times the target value set and for the indicator "Guidelines, brochures and manuals printed for the needs of the potential beneficiaries" whose value is exceeded with 350%. The indicator "Announcements published on the website of OPRD" also exceeded its value by 150%. The indicator related to the press releases and brochures printed for the needs of the media is exceeded 35 times since virtually all printed materials for the Programme can be

¹⁶² The printed brochures serve the purpose of the media too.

used for the needs of the media.

4.4. Main outputs and results realized under Activity 4

Table 69. Main outputs and results realized under Activity 4

Outputs	Fulfilment
Sociological survey on the level of public awareness of OPRD	✓
Online questionnaire	✓
Review of beneficiaries' reports	✓
Interviews/Meetings	✓
Desk study of annual reports of OPRD, specific information and reports on information events held, information materials, website of the OPRD, etc.	✓
Review of the organization related to the information and publicity of OPRD	✓
Results	Fulfilment
Evaluation of the implementation of the Communication Plan's objectives	✓
Impact assessment of the implementation of the communication methods and channels set in the Communication Plan	✓
Evaluation of the implementation of the indicators set in the Communication Plan	✓

IV. Findings, conclusions and recommendations

The major findings, conclusions and recommendations of the evaluation are presented in this Section and are structured according to the criteria applied: impact, effectiveness, efficiency, utility and sustainability. It should be taken into account that over 300 contracts under OPRD 2007-2013 (out of 1187 in total) have not been completed yet i.e. the data used in this evaluation cannot be viewed as definitive in terms of the programme achievements.

Programme impact evaluation

According to the results of the **macroeconomic model** SIBILA, the implementation of the OPRD policies have a positive impact on the economic development of the country during the

programming period. The net impact assessments of OPRD show that by the end of 2014 the accumulated effect of the Programme on the real GDP of the country amounted to 1,1%, and it is expected to rise to 1,2% by the end of 2015 (the real GDP as at the end of 2014 would have been by 1,1% lower in the absence of funds spent under OPRD throughout the programming period). The OPRD has a positive impact on the private investments, public investments, private consumption, public consumption, export, import, number of employed persons and average wage.

The crisis impact analysis shows that while the effect is not entirely homogeneous by Member States and EU sub-national regions, the economic crisis that arose after 2008 has led to an overall delay and in some cases to a reversal of the convergence trend between the EU regions. However, at the same time, in the context of very limited public and private investments, the available funds under the SCF, and in particular under OPRD, become a key priority in overcoming the negative effects of the crisis both at shortterm by generating demand in the economy and at longterm by accumulating industry factors, such as public infrastructure, human capital and others.

The macroeconomic evaluation of the net impact of OPRD 2007-2013 shows clearly important effects of the interventions realized under the Programme on the real gross value added, employment, investments and other important economic indicators at national and sectoral level. The lack of investments under OPRD would have had a tangible effect upon lower values of the indicators examined. Although it is not possible and accurate to compare the OPRD with the other operational programs, each of them having its specifics and volume of funding, it can be argued that OPRD is effective in achieving the regional development objectives embedded therein as well as socio-economic progress. On one hand, this positive effect is due to the vital role of these investments in a period of economic crisis and severe limitation of public investments. On the other hand, the positive effect is due to the simultaneous impact of different growth factors within the Programme, which contributes to the complex improvement of the economic conditions in the country.

The "difference-in-differences" approach provided valuable results for the territorial impact analysis. The steps described in EVALSED were followed in applying this method. It was applied to the indicators "Unemployment" and "Mechanical population growth". The main conclusion of the analysis is that the unemployment rate in municipalities receiving the most funding under OPRD per capita was nearly 10 p.p. lower than that in municipalities receiving the lowest funding under OPRD per capita. As regards the effect of other impact indicator selected – mechanical population growth – it has also been assessed as positive, yet not statistically significant.

Programme effectiveness evaluation

The general conclusion that can be drawn on the effectiveness of OPRD 2007-2013 is that despite the delay in achieving the interim target values, the Programme is highly effective. This concerns primarily the interventions aimed at sustainable tourism development (Priority Axis 3) and local development and cooperation (Priority Axis 4). However, when interpreting the outcome of the evaluation of effectiveness, the problems identified with the indicators, including the setting of target values (the main observations are presented below), should be kept in mind.

Priority axis 1 (PA1) achieves effectiveness in terms of projected and achieved indicator values, since the target values of the majority of the indicators have been achieved or are expected to be achieved by the end of 2015. This refers mostly to the education-related indicators the target values of which have been overachieved. Lower is the effectiveness in the health-care sector (result indicator) and cultural infrastructure as well as with regard to the output indicator "Projects improving the physical environment, attractiveness of the cities".

By the end of 2014 under PA1 the target value of the indicator "Reduction of greenhouse gas emissions (CO₂ and equivalents)" was not achieved yet, the case of the indicator "Energy savings from renovation of buildings" having been similar. To take account of the two indicators, the beneficiaries are required to provide information following the performance of energy audits as well as an in-depth review of the indicator values which will be accounted in the upcoming Final Technical Reports (FTR) on the ongoing projects. In the case of absence of information from energy audits, or the FTR, it is recommended that such information be required anew from the beneficiaries, including upon sustainability on-the-spot visits. The target value of the indicator "Patients benefiting from improved health infrastructure" would not be easily achieved and certain methodological difficulties have also been identified in reporting the indicator, including the lack of concrete definition of the term "patient". In addition to the difficulties in target-setting and reporting the indicator, among the reasons for the failure to achieve the values by the end of 2014 is also the relatively late announcement of the calls for tenders focused on health infrastructure (e.g. compared to the procedures in sector "Education").

The main reason for the failure to achieve the target value of the indicator "Projects improving the physical environment, attractiveness of the cities" is the excessively high target value. A reason for the failure to achieve the target value of the indicator "Improved cultural infrastructure" may be the relatively weaker interest of the beneficiaries to this scheme which is illustrated by the number of submitted project proposals and the lower contracting against the allocations, respectively.

The effectiveness of **PA2** cannot be finally assessed yet due to the incomplete information on the outcomes of the road network rehabilitation and the ongoing intervention in the ICT network.

In the light of the achieved indicator values under **PA3**, it can be concluded that it is highly effective. Although the output indicator values have not yet been achieved in view of the large number of ongoing projects, achieving them is not expected to be problematic. With the exception of indicators relating to bed occupancy rate and annual number of participants in tourist fairs and exhibitions, the target values of the result and impact indicators were achieved as well.

All the four indicators under **PA4** demonstrate high effectiveness of the priority axis despite the gap vis-a-vis the projected interim values. The indicator "Population benefiting from small-scale investments" highly exceeds the target indicator value. Besides the large number of interventions under PA4 related to this indicator, the exceeding is due to the vague scope of the indicator. If similar indicator is to be used during the next programming period, it should be made more explicit what is meant by "benefiting population".

Problems related to the indicators under OPRD 2007-2013 and their reporting

The evaluation identified three major problems with regard to the indicators of OPRD 2007-2013: programming-related problems (of the programme and/or the schemes); problems related

to the lack of guidelines/manual on indicators; problems related to the lack of clear instructions as regards the indicators set in the Guidelines/Requirements for applicants.

The **programming-related problems** include the following:

- There is no clear intervention logic linking the road infrastructure investments under PA2 with the reduction of greenhouse gas emissions, wherefore this indicator should be dispensed albeit being formulated in OPRD 2007-2013
- The indicators "Reduction of greenhouse gas emissions" and "Energy savings from renovation of buildings" were not set under PA4 of OPRD although they were provided for similar interventions under PA1. Indeed, the majority of the beneficiaries take account of them in the final technical reports. In order to prevent any loss of valuable information on the progress of the Programme, the indicators should be reported at programme level as well, and the data of sustainability on-the-spot checks of the completed projects can also be used to that end.
- Energy savings from renovation of buildings have been reported under some of the schemes (1.1.02, 1.1.04 and 1.1.05). However, this was not accompanied by reporting of reduction of greenhouse gas emissions although the indicators are interrelated.
- As pointed out in the mid-term Evaluation, the indicator "Jobs created" does not reflect accurately the objectives of the Programme which are not directly aimed at creating jobs. It has not been reported under all projects and in addition, the beneficiaries do not have a uniform understanding of the method and the sources of reporting the indicator.

The lack of Guidelines / Manual on indicators is another serious problem with regard to the indicators which was also identified by the mid-term evaluation. The lack of such guidelines leads to problems in the reporting of both the output and result indicators. For instance, with regard to the key indicator "Value of time savings in euro/year stemming from reconstructed roads for passengers and freight" the beneficiaries (municipalities and RIA) do not use a uniform methodology which results in different methods of reporting the indicator values and difficulty to aggregate the data obtained, respectively.

Following the lack of Manual on indicators, **there are no clear instructions on the indicators in the Guidelines/Requirements for Application as well**. For instance, the Requirements for Application under the three schemes for integrated urban transport which do not include the same guidelines with regard to the indicator "Number of people benefiting from improved urban public transport"

The indicator-related problems set out above entail **problems to collect information on the outcomes of the Programme**. Information on all indicators subject to this study¹⁶³ (with the exception of the public awareness indicator) is provided in the final technical reports of the beneficiaries. The review of the information resulted in the following findings:

¹⁶³ Reduction of greenhouse gas emissions; Energy savings from renovation of buildings; Value of time savings in euro/year stemming from new and reconstructed roads for passengers and freight; Increased passengers and freight traffic on the rehabilitated roads (baseline 2006); Net annual revenues from international tourism; Bed occupancy rate; Additional annual number of visitors of supported attractions; Satisfaction of visitors with attractions and information services; Level of public awareness about the OPRD.

- The information in the FTR is not always complete, i.e. not all beneficiaries have submitted information on relevant indicators.
- The beneficiaries do not follow a uniform methodology in reporting the indicators (e.g., as regards the greenhouse emissions, energy savings or time savings).
- Different beneficiaries use different sources to report on one and the same indicator—examples are the indicators for energy savings, increased visits to tourist sites and increased passengers and freight traffic on the rehabilitated roads.
- As a result of the different approaches used by the beneficiaries to report on the indicators, certain indicator values are unrealistically high (e.g., 917 172 MWh/y energy savings from renovation of buildings reported under only one project).
- Reporting on indicators using different units of measurement – e.g., the energy savings indicator is reported in: BGN, %, KWh/y and MWh/y.
- Although the beneficiaries have reported the indicators “Net annual revenues from international tourism” and “Bed occupancy rate”, in practice, they could not receive sufficiently reliable information unless they have undertaken specific surveys.
- The inaccurate reporting of indicators is also due to the failure to include all relevant indicators in the Guidelines/Requirements for applicants. For example, the indicator “Energy savings from renovation of buildings” is included in the Guidelines of the majority of the schemes under PA1, yet this is not the case with the indicator “Reduction of greenhouse gas emissions”. Furthermore, the Guidelines point out “Permanent jobs created” (1.1.12) for some of the schemes, “Number of temporary jobs created” (1.1.11) for others, “Number of jobs created” (for example 1.1.01) or include the indicator “Number of jobs created at the supported tourist attractions from the cultural heritage of national and global significance” (3.1.01).

Part of the missing information on the indicator values was collected within this evaluation. About 70% of the beneficiaries to whom requests for information were sent responded to the requests, and this is not a negligible percentage.

Nevertheless, the serious limitations of this approach, resulting from the lack of baseline information with the beneficiaries (e.g., number of temporary jobs created) and the impossibility for it to be collected retroactively should be taken into account. Due to the late reporting of some indicators, important information on the progress of the Programme is lost, which makes its impact evaluation difficult.

The main recommendations to address the difficulties in reporting the indicators during the next programming period are as follows:

- Elaboration of methodologies for reporting specific indicators (indicated below), which the beneficiaries should familiarize themselves with.
- Organisation of specialised trainings for the beneficiaries, directly aimed at familiarizing them with the requirements concerning the indicators.

- Provision of specific requirements for the indicators in the Guidelines/Requirements for Application.

Problems related to the setting of target values

The evaluation found that the final target value of indicator "Energy savings from renovation of buildings" was increased in the October 2010 version of the Programme although no values were reported on this indicator up to 2010 inclusive. Although the indicator values have been changed, the target value of the interrelated indicator "Reduction of greenhouse gas emissions" remains unchanged. Considering the above, the following two recommendations can be made:

- The target indicator values should not be increased before their values have been reported, since no real appraisal of the achieved results can be made. In addition, when reporting the first results of a scheme, methodological difficulties can be identified which may affect the likely increase of the target value.
- In the case of change in the value of the indicator "Energy savings from renovation of buildings" the values of the interrelated indicator "Reduction of greenhouse gas emissions (CO₂ and equivalents)" should also be changed.

Another example of the problems related to the setting of target indicator values is the indicator "Students benefiting from improved educational infrastructure". The overachievement (over 10 times) of the target value is mostly due to the conservative target of 20 000 students. It is noteworthy that the target value set in the initially approved 2007 recast of the Programme is even more conservative – 10 000 students, and it was increased to up to 20 000 in the March 2012 version of the Programme. The change is not linked to the already achieved programme results since as early as 2011 the achieved value was 33 786 students, i.e. the target value was already over-fulfilled and in that case monitoring data have not been properly linked to the target-setting. This is illustrated by the related output indicator "Improved educational infrastructure". Despite the increase of the target value of the result indicator, the target value of the output indicator was not increased and it was overachieved.

An example of target-setting problems, but in the opposite sense is the indicator "Projects improving the physical environment, attractiveness of the cities". The analysis shows that the projected value of 130 projects improving the physical environment is too high because they would constitute about 24% of the contracts. Furthermore, 130 projects would require about 34% of the financial resource under this axis. Additional analysis by the MA and further decrease of the target indicator value is recommended should there be any plans to revise the Programme in 2015.

Another example of target-setting problems is the indicator "Value of time savings in euro/year stemming from new and reconstructed roads for passengers and freight". The achieved indicator value as of 2014 over-fulfils the targeted one but according to information of RIA, the main cause of the big difference between the two values are the different methodologies used to determine the target and achieved values. In case that the indicator is used in the next programming period, as recommended by RIA, a uniform methodology should be used in calculating the target value and reporting the indicator.

Programme efficiency evaluation

In terms of contracted funds the financial progress of OPRD can be regarded as good since over 3% of funds have been already overcontracted. The financial implementation of OPRD 2007-2013 is approximately equal to the percentage of the funds paid up to Bulgaria under the SCF as of December 2014, which constitutes 76,48%. The fluctuation in the performance of this indicator among the specific operational programmes is already very small. The average percentage of the funds paid up against the funds contracted under the OPRD (by the end of 2014) is 77%, which is an argument in favour of the over-contracting under the Programme.

One of the findings of the unit (output/result) cost analysis is that the costs for improvement of a site which is part of the health and cultural infrastructure are higher than those in the field of education and social activities due to the more specific requirements for health infrastructure and activities required for the restoration of cultural sites. The relatively lower effectiveness and efficiency of the interventions in healthcare and cultural infrastructure should be taken into account in designing the interventions during the next programming period with regard to the target value setting and projecting of tender budgets.

The following proposals can be regarded as general recommendations in the planning and implementation of OPRG 2014-2020 with a view to increasing the effectiveness / efficiency of the Programme:

- The possibility of introducing simplified costs in the projects under OPRG 2014-2020 should be considered. These could be, for example, project management costs defined as a fixed share of the total amount under the project (flat rate) or single fixed sum (lump sum) for projects of the same type or projected unit (output/result) costs. Using all these opportunities would have the effect of decreasing the administrative costs for management and control of the implementation of relevant projects and, at the same time, would reduce the possibility of carrying out highly inefficient projects.
- The system for monitoring of project implementation should be improved, whereby the reporting of the predefined indicators should be followed up in order to ensure comparability in reporting the results achieved under the relevant projects. In addition to methodological guidelines, specific instructions and trainings for beneficiaries, this could be achieved, for example, in the following ways:
 - Referring reports back to beneficiaries who have not provided information on all relevant indicators
 - Referring reports back to beneficiaries who have not submitted correct information on the indicator sources used
 - Reports providing unrealistic indicator values should be discussed/referred back to the beneficiaries. MA's experts can estimate how feasible the reported indicators are, based on comparison with other similar projects and target values set in the Programme. Thus, the occurrences of extreme indicator values, reported under Activity 1 and 2 of this evaluation, would significantly decrease.
- The overachievement of the target values and the failure to achieve the target values, which is observed with part of the indicators listed above, have a negative impact on the effectiveness and efficiency of the Programme. Accordingly, the monitoring and

evaluation process should track the relation between targeted and achieved values so as to enable a prompt response, as early as the middle of the programming period, aimed at reviewing the target values and/or opening schemes which would contribute to the achievement of the projected indicator values.

- A uniform methodology should be used in setting targets and reporting indicators. Otherwise the situation with the indicator "Value of time savings in euro/year stemming from new and reconstructed roads for passengers and freight" may repeat, whereby, the initial and current methodology being different, this could have a very high impact on the effectiveness analysis.

Programme utility evaluation

The analysis of the **utility** of the interventions has been hindered by the general definitions of the specific objectives of the OPRD operations. For instance, the specific objective of Operation 4.1 is defined as "Supporting the local development through the realization of important and useful small-scale local investment solutions", which is difficult to be linked directly to the achieved results.

Nevertheless, a conclusion can be drawn that the investments in educational infrastructure, energy efficiency, deinstitutionalization, cultural infrastructure, road infrastructure and tourist infrastructure are highly useful and help addressing the identified needs.

The utility is not so high with respect to the identified need of renewable energy sources development, and in practice very few beneficiaries take account of this indicator. In view of the serious needs and objectives discussed, the utility of the performed activities is not possible to be highly evaluated before the very construction of the intersystem gas connection. The utility of the activities under OPRD is lower due to the fact that the value projected for the indicator "Patients benefiting from improved health infrastructure" has not yet been achieved. The reporting of the utility of the urban environment investments is made difficult by the lack of information on the results achieved in this sphere. The evaluation of the contribution to the development of sustainable urban transport systems cannot be made yet because of the ongoing implementation of the relevant projects. The Programme does not provide for indicator related to the improvement of physical environment. In order to take into account the results achieved in this sphere, it is recommended that the aggregated values for the indicator "Population benefiting from the renovated urban environment" be included in the final report on the implementation of OPRD.

Like the urban environment interventions, the evaluation of the utility of the risk prevention activities is made difficult by the lack of information on the results achieved in this field. The Programme does not provide for result indicator relating to risk prevention. With a view to reporting the results achieved in this area, it is recommended that the aggregated value of the indicator "Population benefiting from the infrastructure built to prevent floods and/or bank erosion" be included in the final report on the implementation of OPRD.

Programme sustainability evaluation

The **sustainability** analysis shows that, in effect, the design of the interventions under OPRD ensures the institutional sustainability, the beneficiaries of the operational programme (e.g. central and local authorities) being highly sustainable.

The evaluation identified the following factors in the implementation of the Programme as having a favourable impact on the sustainability of the interventions under OPRD:

- The development of interrelated projects concerning different interventions contributes to the achievement of synergies providing opportunities for a better general sustainability of the outcomes of the programme implementation.
- The preparation of in-depth preliminary study of the site at which the project activities are aimed is an important factor in avoiding contingencies and preventing other risks during the project implementation.
- Experts with proved qualification in the field of the projected activities should be actively involved in the design stage of the interventions (e.g. civil engineers in case of construction/renovation of buildings) with a view to avoiding unforeseen scenarios in the implementation phase. In addition, the study of the experience from past realization of similar activities in the country and abroad aimed at adopting good practices can have a highly positive impact on the sustainability of interventions' outcomes.
- An important factor in achieving sustainability of interventions' outcomes and impacts is the administrative experience and memory preserved over time. Following the visits on-site it can be generally concluded that retaining the administrative staff (the beneficiary) over a longer period of time can be regarded as an advantage.
- When new equipment is purchased within a project, it is important to carry out specialized training for the staff who will use it and to create conditions for its conservation and exploitation
- Ex-post controls on the condition of the site carried out by the beneficiary
- The regular maintenance (cleaning, remedial actions, etc.) of the equipment or facility after its placing in service is an important measure in achieving sustainability of intervention outcomes and impacts. In order to do so, funds need to be allocated in the beneficiary's budget in case that there is no maintenance warranty.

In addition to the measures referred to above which have benefited the achievement of sustainability of the outcomes and impacts of the interventions under OPRD, factors having an adverse impact on preserving the achievements have been identified. Examples are natural factors, such as adverse soil and weather conditions, against which there are a limited number of possible measures.

Another factor which may lead to a decrease of sustainability is the legislative framework. In the course of the meetings with representatives of the beneficiaries it was unanimously agreed that the entry into force of the DCM no. 330 in 2011 cutting the remunerations of public and municipal officers responsible for the management of the projects had an adverse effect on the general motivation of the beneficiaries' officers and contributed to the loss of reliable employees.

In some cases, problems related to the property of specific sites or facilities pose obstacles to the achievement of sustainability of the project results thus hindering (or making impossible) the implementation of subsequent projects which build on the existing achievements.

On the basis of the on-the-spot visits the general conclusion can be drawn that the beneficiaries have undertaken the necessary measures to ensure sustainability of interventions' outcomes.

With regard to the specific character of the regional development programme and in addition to the standard evaluation criteria presented above, territorial impact evaluation of OPRD 2007-2013 has been performed within this evaluation.

Territorial impact evaluation

The data produced by comparing the support under the Programme and the number of residents at district level and at region level 2, show that there are no significant differences between the regions and districts in terms of grant received per 1 resident living in the respective territorial unit. The dispersion toward the average value for the country (variation coefficient) at region level 2 is extremely low – 10%, and at district level – 27%. This, in turn, indicates that the financial resource under the Programme has been evenly allocated throughout the territory of the country and there is no distinct territorial concentration in particular districts or regions at level 2.

However, there are differences with respect to the concentration of grants between municipalities – both in regard to the absolute amount of contracted grants under the Programme (grant value) and the support per 1 resident. The districts where there is more distinct concentration of grants are those where the largest cities in the country are – Sofia, Varna, Bourgas, Plovdiv, Rousse, Stara Zagora and Pleven. The allocation in the other regions is relatively homogeneous.

However, it should be noted that the territorial distribution maps do not point to specific territorial patterns - there is no concentration of grants in particular districts or regions. Therefore, a conclusion can be drawn that the attraction of funds under the Programme depends, to a large extent, on the beneficiaries' capacity and activity.

In regard to the territorial distribution by type of intervention, it is difficult to reach definitive conclusions on the existence of territorial concentration of projects or funds in particular municipalities or districts. In some cases (e.g. culture-focused projects) the number of projects is not adequate; in other cases the number of projects implemented on the territory of 2 or more municipalities at the same time is significant. Furthermore, with some types of projects there is a large number of municipalities that did not participate with any projects in the Programme, which is determined by the very nature of the operations and schemes under the Programme. Having regard to the foregoing, the following main findings can be drawn:

- The supported projects aimed at improving the educational infrastructure are fairly evenly spread over the territory of the whole country. In municipalities where such projects are being implemented, the amount of contracted funds per 1 resident is also regularly allocated – i.e. no significant number of municipalities has been over-supported in terms of educational infrastructure per number of residents.
- Projects intended to improve the cultural infrastructure are being implemented on the territory of 46 municipalities. The territorial distribution over the country as well as the allocation of funds is fairly even. The only exception in this respect is the project of Sofia

Municipality focused on the construction of National museum complex, for which BGN 23 million out of the totally contracted BGN 89 million have been provided for.

- Projects on the setting up of energy efficiency measures are being implemented on the territory of 113 municipalities from all the 28 regions in the country. The total amount of contracted funds under the Programme for the implemented projects is fairly normally allocated and no significant divergences are found. There are evident differences with respect to the values per 1 resident. The values vary significantly – from BGN 2/resident of the capital to BGN 440/resident in Chavdar municipality. However, this is mainly due to the limited number of people in certain municipalities, rather than to the amount of the projects implemented by them.
- A total of 75 projects with focus on urban environment have been identified and these are being implemented on the territory of 51 municipalities in 27 out of the 28 districts in the country. Albeit relatively few in number (implemented on less than 20% of the territory of the country) the projects are fairly evenly distributed.
- Risk prevention projects are implemented in a substantial part of the territory of the country – a total of 144 projects are being implemented on the territory of 143 municipalities from all regions in the country. Concentration of support is noted in the SWR and SCR (39 projects in each region), whereas only 11 such projects are being implemented in the NCR.
- Projects on the improvement of road infrastructure are being implemented on the territory of 27 districts in the country (with the exception of Sliven district). The funds are fairly evenly allocated by districts, excluding the “Northern Speed Tangent” project of Sofia Municipality, which is disproportionately big compared to the other implemented projects.

The territorial distribution of the interventions seen in relation to the types of municipalities and grouped according to the Programme’s strategy (agglomeration areas, non-agglomeration areas) shows clearly that the major resource of the Programme is concentrated in municipalities which are a part of agglomeration areas. Data on the allocation of the contracted funds show that the OPRD investments outside the agglomeration areas are, in effect, reduced to educational infrastructure (including energy efficiency), health infrastructure, risk prevention and tourist infrastructure. As it can be expected, municipalities in agglomeration areas were granted higher amount of OPRD funding under each type of intervention than municipalities outside these areas. Most focused are the investments in integrated urban transport implemented in the capital and the 6 biggest cities. Furthermore, the investments in cultural infrastructure are focused mostly on the capital agglomeration area (44%) which comes not as a surprise given that it is naturally for the capital to be the leading cultural center. Taking into account the nature of the road infrastructure covering the territory of several municipalities, the largest share of investments under OPRD in this sector are expectedly the projects implemented on the territory of several municipalities at the same time. The only unexpected result is the relatively large amount of resources allocated to urban environment in the medium-sized cities.

OPRD 2007-2013 does not fully comply with the logic of the National Concept for Spatial Development (2013-2025), but this is no surprise in view of the different periods to which these strategic documents refer. A number of smaller towns have already received assistance and realized underlying capital investments during the period 2007-2013. In this context, during the

programming period 2014-2020 the attention can be further focused on the cities at Levels 1-4 according to the National Concept for Spatial Development

The analysis of the territorial distribution in terms of efficiency confirms the expected finding that more efficient are those interventions the results of which are accessible for a greater number of people. This is confirmed by the relatively higher efficiency of investments in educational infrastructure and urban environment in the bigger cities.

Besides the standard evaluation criteria and territorial impact the evaluation included also specific issues with respect to the administrative capacity, environmental impact, horizontal principles and evaluation of the impact of the programme's communication strategy. The main findings on these issues are presented below.

Administrative capacity impact evaluation

The evaluation identified the positive impact of the interventions under Priority Axis Technical Assistance on the building and strengthening of the administrative capacity of both the MA and the beneficiaries of the Programme. The administrative capacity of the MA and the beneficiaries has been mostly influenced by the provision of incentives to the employees and of modern material-technical stock. The target values of the indicators set under Priority Axis Technical Assistance have been achieved, the achieved values being considerably higher than targeted ones. The two indicators the values of which have not been achieved – "Technical assistance, consulting, etc." and "Evaluations performed" - are subject to interpretations in calculating the achieved values¹⁶⁴.

The interventions under priority Technical Assistance are aimed at ensuring effectively operating structure of the MA which would guarantee the proper and full management of the Programme. Furthermore, the necessary number of experts has been ensured in order to achieve effectiveness in fulfilling the work duties and in order to meet the requirements of the national and European law on the distribution of functions, the four-eye principle, ex-ante and ex-post control. Nevertheless, the interviews and the results of the online questionnaire point out that additional human resources are needed to decrease the current workload of the employees. In the context of the current work organisation, the structure of the DG PRD is adequate to its duties and responsibilities as MA.

The funds under this priority are also focused on providing incentives to the employees, reducing the staff turnover and retaining the expert potential which has by far the most significant impact on the administrative capacity, the human resources being the most important factor for the successful implementation of each and every project and of the operational programme as a whole.

Approximately 8% of the funds contracted under Priority Axis Technical Assistance are provided for financing of interventions aimed at increasing the qualification of the employees of the MA and the beneficiaries of the Programme. In most cases the trainings have satisfied the needs of knowledge and qualification. The main recommendations in respect of the trainings for the

¹⁶⁴ For instance, this evaluation contains a lot of sub-evaluations which can be examined in isolation. This refers also to the number of consultations carried out by virtue of technical assistance contract as well as support from external experts. The very term „technical assistance“ is difficult to be measured.

programming period 2014-2020 are: ensuring opportunity for all employees to attend the trainings set out in the annual plans; provision of more targeted trainings and practical experience exchange; as well as "soft skills" trainings (e.g. team work).

The beneficiaries' capacity has significantly increased during the project preparation and implementation stage but the training practice should be extended to the current programming period as well. In addition to the trainings organized so far, specialized trainings should be also organized for the beneficiaries and the MA. The practice of meetings organized by the MA aimed at discussing problems and case studies should be continued.

The trainees have made use of what was learned in the performance of their work duties and responsibilities and this have helped them to discharge more effectively their responsibilities associated with the management and absorption of the EU funds. The participants in the trainings consider that their behavior at work has changed and this has affected the overall work process of their organization.

In implementing the OPRD 2007-2013 the MA made efforts to reduce the administrative burden to the beneficiaries and took actions aimed at streamlining and simplifying the project implementation procedures (reduction of the volume of the documents in reporting the project and submission of payment requests), publication of the application guidelines in advance, so as to enable the beneficiaries to discuss and comment on the requirements set in the guidelines, projected objectives, activities and results, and to submit electronically project proposals under some of the OPRD schemes. However, in the opinion of the beneficiaries the MA did not reduce sufficiently the administrative burden and therefore, more actions are needed in that respect. The main recommendations in this context are: avoiding the frequent change of rules and instructions in the course of project implementation as well as introducing electronic submission and reporting of projects.

Environmental impact assessment

The environmental impact of the interventions under OPRD 2007-2013 is generally positive. The analysis has not found new or negative impacts other than those assessed in the EA of OPRD 2007-2013 or those assessed in the First Triennial Report.

With respect to the measures for prevention, reduction and as full as possible elimination of adverse effects on environment, the analysis shows that the updated measures are being implemented, which ensures the absence of negative effect.

Most of the monitoring and control indicators have been set in the grant schemes, which, to some extent, ensures that they will be accounted and reported by the beneficiaries, but at the same time certain indicators have not been set in the schemes and respectively, have not been reported by the beneficiaries (e.g. generation of energy from alternative sources).

In conclusion, regardless of the fact that OPRD is not immediately focused on environmental protection, the analysis shows that not insubstantial part of the projects funded under the Programme have direct or indirect positive effect on environment, mostly through supporting measures related to energy efficiency and green and accessible urban environment.

The positive environmental effect of the interventions under OPRD could be even more significant but this can be ascertained:

- after the completion of all projects
- upon improvement of the beneficiaries' data collection and processing system and the programme monitoring system (UMIS) with respect to the progress on all relevant environmental indicators.

Evaluation of the impact of the interventions under OPRD 2007-2013 on the implementation of the EU horizontal policies

OPRD 2007-2013 lays down the relevant horizontal policies at national and European level. It can be concluded that they are up-to-date with the main documents defining the EU's horizontal principles. The horizontal policies set in OPRD 2007-2013 are duly described but it is advisable to be defined in more detail and harmonised between the different documents – the Manual for Management and Implementation of OPRD, the guidelines for application under the schemes, the templates of technical reports of the beneficiaries and the annual reports on the implementation of the OPRD.

Possible definitions of the specific horizontal principles are presented below:

- Equal opportunities – principle which ensures the exclusion of any discrimination based on sex, race or ethnic origin, religion or beliefs, disability, age or sexual orientation.
- Sustainable development – principle which contributes to growth through harmonized and balanced development of economic activities, employment and human resources as well as of environment.
- Protection of environment – reduction of activities having adverse effect on environment, biodiversity protection and conservation of resources.
- Partnership – cooperation between all territorial and socio-economic stakeholders, and in particular, regional and local authorities, in managing and implementing activities of public interest.

Inconsistency is established with respect to the innovation principle – in addition to being one of the selection criteria in the evaluation of project proposals¹⁶⁵, it appears also in the technical report form, but it is not among the horizontal issues listed in the Manual and no document provides clear definition of what is meant by "innovations" or "innovative approaches". A possible definition of "innovations" is as follows:

- Innovations and policy-making – development and application of new approaches and implementation of good practices contributing to the improvement of the results achieved in implementing a project.

The horizontal principles are adequately and comprehensively set out in the application guidelines of the schemes and in particular, in the eligibility criteria, eligible activities, selection criteria as well as the project evaluation methodology.

Two of the recommendations on the horizontal principles laid out in the mid-term evaluation were successfully fulfilled, and the other three recommendations have not yet been implemented

¹⁶⁵ Schemes 1.1-02, 1.1-05, 2.1-01 and 3.1-01

and remain in force during the next programming period. One of the successfully fulfilled recommendations refers to the inclusion of horizontal selection criteria complying with the objectives of the new and updated schemes. Another successfully implemented recommendation concerns the monitoring of horizontal indicators upon visits on site – this element shall be checked for compliance with the Manual for Management and Implementation of OPRD 2007-2013. The recommendation aimed at measurement of common horizontal indicators at programme level has not been fulfilled – indicators at priority axis level and at scheme level have been used with respect to the specific characteristics of the schemes. The other two recommendations – setting horizontal objectives at OPRD level and creating a separate section in the annual reports dealing with the horizontal issues and indicating the current values of the horizontal indicators under all schemes, also remain in force for the next programming period.

The horizontal principles are adequately set out in the Manual for Management and Implementation of OPRD, however, definitions to all principles as well as more detailed description of how the beneficiaries should report the horizontal principles should be added for the next programming period. The mechanisms provided for ensuring the respect of the horizontal policies are comprehensively described. It is recommended that the annual reports contain information on the actually used control mechanisms, not only on the projected ones.

In regard to the reporting of the horizontal principles by the beneficiaries, it can be concluded that it lacks consistency and comprehensiveness. The final reports on some of the schemes do not include any information on established compliance (or non-compliance) with the EU's horizontal policies, whereas in other reports it is duly reported for each of the policies – equal opportunities, protection of and impact on environment, sustainable development and innovations and policy-making. The final reports contain omissions most often as regards the earlier completed projects, whereas as regards the recently completed projects they are quite comprehensive. Furthermore, some reports on the horizontal principles are thorough and specific, whereas others are superficial and general. In the opinion of MA's experts the majority of the beneficiaries are not fully aware of the concept "horizontal principles" and of the real contribution of specific projects to large-scale policies such as sustainable development and equal opportunities. Therefore, the compliance with the horizontal principles is often reported formally, and soon after the signing of the contracts, it loses its importance and is largely ignored.

In conclusion, the main recommendations with respect to the horizontal principles are:

- Explicit and concrete definition of each horizontal principle to make it more comprehensible for the beneficiaries. This can be achieved if the CCU addresses clearer guidelines to the MA with respect to the reporting of the horizontal principles and the MA addresses clearer guidelines to the beneficiaries, respectively.
- Trainings for beneficiaries explicitly covering the horizontal principles issue.
- Harmonisation of the horizontal principles between all documents of OPRD – Manual for Management and Implementation of OPRD, guidelines for application of the schemes, templates of technical reports for the beneficiaries and annual reports.
- Explicit requirement for the beneficiaries to report in the FTR – reporting on the compliance with each EU horizontal policy as well as on relevant horizontal indicator values.

- Explicit requirement for the MA to report in the annual reports – inclusion of the current values of the horizontal indicators under all schemes and creation of a separate section dealing with the horizontal issues.

Impact evaluation of the measures applied under the Communication Plan for Information and Publicity of OPRD 2007-2013

The results of the survey demonstrate extremely high relative share of individuals who have heard of OPRD – they are 77,8%, which means that the target value of 40 % set for this indicator was not only achieved but it was exceeded almost twice. OPRD is best recognized in the district cities, but also in the villages, especially when specific public works projects or projects on restoration of local sights have been implemented in these settlements. The survey also showed that OPRD is recognized mostly by individuals having higher educational levels as well as by working-age individuals.

Every other person is able to name a specific project, realized in the respective settlement where he / she lives and the Bulgarian public associates OPRD mostly with the investments in improving urban environment, construction and improvement of the transport infrastructure and improvements in the cultural and tourist infrastructure.

High transparency and openness in the implementation of the Programme have been achieved both at the level of beneficiaries and general public. The MA of OPRD has not only met all requirements pursuant to Art. 5 of Regulation (EC) No 1828/2006 of the Commission of 8 December 2006 setting out the rules for the implementation of Council Regulation (EC) No 1083/2006 laying down general provisions for the European Regional Development Fund, the European Social Fund and the Cohesion Fund, but it has also developed additional elements facilitating the applicants and the beneficiaries under the Programme.

Furthermore, the MA has undertaken all the necessary measures to inform the beneficiaries under the Programme of their obligations to promote the support received under OPRD according to Art. 8 of Regulation 1828/2006. The publicity requirements are included as an appendix to the Guidelines for applicants of each grant scheme and are also embedded in the general terms of the grant contracts. The beneficiaries are quite aware of the responsibilities associated with the publicity of the projects they implement.

The results from the sociological survey show that the public opinion regarding two key indicators related to the transparency in implementing the OPRD: 1) overall access to information on OPRD and 2) communication style used to present the information, require additional efforts aimed at their improvement. In this respect, it could be considered to present the information about the Programme to the public in a plainer and more intelligible language.

The values of the indicator projected in the Communication Plan of OPRD 2007-2013 have been achieved, although the annual reports on the implementation of the OPRD provide information only about measures applied during the relevant year. Accordingly, no summarized information was provided about the performance of all indicators formulated in the Communication Plan of the Programme.

The communication channels the public prefers to receive information about OPRD include mainly audio visual media, printed media and explanatory billboards. Accordingly, there should be focus on these information sources during the next programming period. The beneficiaries are



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satisfied with the website of the Programme and they confirm that the website provides sufficient and clear information on the possibilities of applying under the programme and project implementation.

The main findings, conclusions and recommendations are presented in the table below.

Nº	Activity	Findings	Conclusions	Recommendations	Programme cycle
1.	Activity 1 (1.1)	As of December 2014 over 300 projects under OPRD 2007-2013 were not yet completed. Furthermore, no objective information can be provided on the indicator values achieved to date under some of the projects, due, for example, to ongoing energy audit or tourist season.	In view of the large number of uncompleted projects under OPRD 2007-2013, the data used in this evaluation cannot be regarded as definitive in terms of progress achieved.	Upon sustainability on-the-spot checks of the completed projects the beneficiaries should provide information on those indicators the performances ¹⁶⁶ of which have to be reported at least one year after the completion of the project, so as to enable the fullest possible reporting of the programme achievements.	Programming period 2007-2013
2.	Activity 1 (1.1)	There is no explicit intervention logic linking the road infrastructure investments under PA2 with the reduction of greenhouse gas emissions. The indicator "Reduction of greenhouse gas emissions" is reported by the beneficiaries under PA4, but not at programme level.	Due to the lack of explicit logic linking the indicator "Reduction of greenhouse gas emissions" under PA2 with the road infrastructure investments, the indicator can not and should not be reported. Following the failure to take account of the indicator "Reduction of greenhouse gas emissions" under PA4 the monitoring system at programme	In case of further modification of OPRD 2007-2013, it is recommended that the indicator "Reduction of greenhouse gas emissions" be removed under PA2 but be reported under PA4, since the interventions for small-scale investments under PA 4 are similar to those under PA1, the values of which have been already reported by the beneficiaries.	Programming period 2007-2013

¹⁶⁶ Reduction of greenhouse gas emissions, Energy savings from renovation of buildings, Additional population served by improved public transport, Additional annual number of visitors of supported attractions, Increased traffic of passengers and freight on rehabilitated roads, Value of time savings in euro/year stemming from new and reconstructed roads for passengers and freight.

			level omits part of the achieved results that could be aggregated.		
3.	Activity 1 (1.1)	The indicator "Energy savings from renovation of buildings" has not been set under PA4, but in view of the types of interventions undertaken under this axis, it has a substantial contribution toward the results achieved under the Programme in terms of energy savings.	Following the failure to take account of the indicator "Energy savings from renovation of buildings" under PA4 the monitoring system at programme level omits part of the achieved results that could be aggregated.	It is recommended that the indicator "Energy savings from renovation of buildings" be reported under PA4 as well, since the interventions for small-scale investments under priority axis 4 are similar to those under PA1, the values of which have already been reported by the beneficiaries.	Programming period 2007-2013
4.	Activity 1 (1.1)	A number of methodological challenges have been identified in reporting the indicators, and this mostly concerns the following indicators: "Reduction of greenhouse gas emissions", "Energy savings from renovation of buildings", "Value of time savings in euro/year stemming from new and reconstructed roads for passengers and freight", "Increased traffic of passengers and freight on rehabilitated roads", "Jobs created", "Additional annual	Most of the methodological challenges encountered with regard to the reporting of indicators could have been resolved through the development of methodological guidelines to be provided to beneficiaries.	1. With a view to tackling the challenges in reporting the indicators, it is recommended that methodological guidelines be developed for the following indicators, in the event that they are included in OPRG 2014-2020: <ul style="list-style-type: none"> • "Reduction of greenhouse gas emissions" • "Energy savings from renovation of buildings" • "Value of time savings in euro/year stemming from 	Programming – programming period 2014-2020



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		number of visitors of attractions supported".		<p>new and reconstructed roads for passengers and freight"</p> <ul style="list-style-type: none"> • "Increased traffic of passengers and freight on rehabilitated roads" • "Jobs created" • "Additional annual number of visitors of attractions supported" <p>The Methodological Guidelines should pay special attention to the national and European regulations (e.g., regarding indicator "energy savings").</p> <p>2. The electronic forms for reporting the projects can be improved. To avoid technical inaccuracies and facilitate the beneficiaries in introducing the required information, different notifications and alerts can be added in the case of inserting the unfeasible data.</p> <p>3. Specialised trainings for the</p>	
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				<p>beneficiaries should be carried out, aimed directly to the requirements to the indicators.</p> <p>4. Provision of specific requirements to the indicators defined in the Guidelines/Requirements for applicants.</p> <p>5. In case of planned energy efficiency measures, the practice of submitting energy audit at the stage of application should continue to be applied.</p> <p>6. With a view to improving the reporting of "Energy savings" indicator, the Guidelines for applicants for the next programming period should recommend that the beneficiaries be required to report further on the indicator values on the basis of energy audit at least one year after the completion of the relevant project (in accordance with the requirements of the relevant</p>	
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				existing legislation).	
5.	Activity 1 (1.1)	In practice, it is not needed the beneficiaries to report on indicators "Net annual revenues from international tourism" and "Bed occupancy rate", since they are reported by reliable sources such as BNB and NSI.	The reporting of indicators by the beneficiaries, when there are other reliable and accessible sources through which it can be reported, would engender unnecessary burdens to the beneficiaries and monitoring system.	The beneficiaries should not be required to provide information on the following indicators: <ul style="list-style-type: none"> • "Net annual revenues from international tourism" • "Bed occupancy rate" Information from BNB and NSI can be used instead.	Programming period 2007-2013
6.	Activity 1 (1.1)	Energy savings from renovation of buildings were reported under some of the schemes. However, this is not accompanied by reporting on reduced greenhouse gas emissions.	Following on the Guidance Document of the EC with concepts and recommendations on monitoring and evaluation for the programming period 2014-2020, the indicator for reduction of greenhouse gas emissions should be reported with respect to all schemes which cover interventions aiming to increase renewable energy production or decrease energy consumption.	The indicator relating to the reduction of greenhouse gas emissions should be set in the Guidelines for applicants and reported by the beneficiaries for all schemes which cover interventions aiming to increase renewable energy production or decrease energy consumption.	Programming – Programming period 2014-2020
7.	Activity 1 (1.1)	The beneficiaries (municipalities and RIA) do not use a uniform methodology with respect to the key indicator "Value of time	Using different methodologies would lead to results which cannot be aggregated.	In the final reporting of the indicator under all road-related projects, including those of municipalities, it is recommended	Monitoring – Programming period 2007-2013

		savings in euro/year stemming from new and reconstructed roads for passengers and freight".		to use the methodology used by RIA. With a view of the uniform application of a unique methodology for the national and municipal roads, it is recommended that RIA's experts be involved in the reporting of the indicator.	
8.	Activity 1 (1.1)	The requirements for application under the three integrated urban transport schemes do not include identical guidelines with regard to the indicator "Number of people benefiting from improved public transport"	As a result of the absence of explicit guidelines with respect to the indicator "Number of people benefiting from improved public transport" it might not be reported uniformly by the beneficiaries under the integrated urban transport schemes.	<p>Prior to the submission of final report by the beneficiary under scheme 1.5-01, the MA should make clear that "Number of population benefiting from improved urban public transport" refers to additional population that has not used public transport before the improvements.</p> <p>To report the indicator, the beneficiaries should be able to give its real value upon sustainability on-the-spot checks of the completed projects (one year after the completion of the project activities at earliest).</p>	Monitoring – Programming period 2007-2013
9.	Activity 2 (2.2)	The target value of the indicator "Reduction of green house gas emissions (CO2 and equivalents,	The failure to achieve the target indicator values is mostly due to	To enable the reporting of the two indicators, the beneficiaries should provide information after	Programming period 2007-2013

		kt)" was not achieved as at the end of 2014. This is also the case of the indicator "Energy savings from renovation of buildings".	the: <ul style="list-style-type: none"> • yet incomplete information from beneficiaries • not yet concluded projects which are relevant to the indicators 	conducting energy audits as well as in-depth review of the indicator values that will be reported in the upcoming FTR on the ongoing projects. In case of lack of information from energy audits, or from the FTR, it is recommended such information to be requested anew from the beneficiaries and/or be provided upon sustainability on-the-spot checks of the completed projects.	
10.	Activity 2 (2.2)	The target value of indicator "Projects improving the physical environment, attractiveness of the cities" was not achieved.	Although the target value of the indicator was reduced in the March 2012 revision of OPRD and resources were reallocated to "Green and accessible urban environment", the target value is too high. The failure to achieve the target value leads to a decrease of programme effectiveness.	Additional analysis by the MA and further decrease of the target indicator value is recommended, should there be any plans to revise the programme in 2015.	Programming period 2007-2013
11.	Activity 2 (2.2)	With a view to overcoming the challenges in collecting information on indicators, several possibilities to improve the effectiveness / efficiency of	The simplified costs, (for instance, project management costs defined as a fixed share of the total amount of the project (flat rate) or single fixed sum	<ul style="list-style-type: none"> • The possibility of introducing simplified costs in the projects under OPRD 2014-2014 should be considered. 	Programming period 2014-2020

		<p>OPRG 2014-2020 have been identified.</p>	<p>(lump sum) for specific projects of the same type or determination the unit (output) costs) may result in an increase of the effectiveness of OPRG 2014-2020. Using all these opportunities would have the effect of decreasing the administrative costs for management and control of the implementation of relevant projects and, at the same time, would reduce the possibility of carrying out highly inefficient projects.</p> <p>In addition to the improvement of the methodological guidelines and trainings, the monitoring process can also increase the effectiveness and efficiency of the interventions under OPRD through a more detailed review of the indicators reported in the final technical reports and actions with regard to the beneficiaries (laid out in the recommendations). Experts from the MA can estimate how</p>	<ul style="list-style-type: none"> Besides the already proposed methodological guidelines, specific instructions and trainings for beneficiaries, the monitoring system could be improved, for example, by the following means: <ul style="list-style-type: none"> Return for revision reports back to beneficiaries who have not provided information on all relevant indicators Return for revision reports back to beneficiaries who have not submitted correct information on information sources for the indicator used Reports providing unfeasible indicator values should be discussed/referred back to the 	
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			feasible the reported indicators are, based on comparison with other similar projects and target values set in the Programme. Thus, the occurrences of extreme indicator values, reported in Activity 1 and 2 of this evaluation, would significantly decrease.	beneficiaries.	
12.	Activity 2 (2.2)	The review of the effectiveness reveals the existence of indicators with overachieved values as well as target values which are difficult to be achieved.	The monitoring and evaluation process should track the ratio between targeted and achieved values and enable the prompt reaction as early as the mid-programming period by reviewing the target values and/or opening schemes contributing to the achievement of the projected indicator values. The set interim indicator values should be used more effectively as a tool for early alerting of possible problems in achieving the target values.	To avoid failure to achieve or overachieve interim / final target values, the following is recommended: <ul style="list-style-type: none"> • Annual in-depth review of planned and achieved target values of indicators • Reasoned and timely revision of planned target values and/or opening of schemes contributing to achievement of planned values 	Programming period 2014-2020
13.	Activity 2 (2.2)	The final target value of indicator "Energy savings from	It is hazardous to increase the target indicator value prior to the	<ul style="list-style-type: none"> • The target values of indicators should not be 	Programming

		<p>renovation of buildings" was increased in the October 2010 revision of OPRD, although no values were reported with respect to this indicator up to 2010 inclusive.</p> <p>Despite the changes in the indicator value, the target value of the associated indicator for reduction of greenhouse gas emissions remains unchanged.</p>	<p>reporting of the first indicator values since no realistic estimate of achieved values can be made.</p> <p>In addition, when reporting the first results under a scheme, methodological challenges having an impact on the possible increase of the target value can be identified.</p>	<p>increased before the first reports on the indicator values</p> <ul style="list-style-type: none"> Any change in the value of indicator "Energy savings from renovation of buildings" should be followed by changes in the values of the interrelated indicator "Reduction of greenhouse gas emissions (CO2 and equivalents)" 	period 2014-2020
14.	Activity 2 (2.2)	<p>During the on-the-spot visits it was found that the results of the interventions were available after the completion of project activities.</p>	<p>The general finding of the evaluation is that the beneficiaries have undertaken the necessary actions to ensure sustainability of interventions' results.</p>	<p>To ensure the sustainability of interventions under OPRG the following factors identified within the evaluation should be taken into account:</p> <ul style="list-style-type: none"> Development and financing of projects which are interrelated Financing of projects subject to a thorough preparatory study of the sites Experts with proved qualification relevant to 	Programming period 2014-2020



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				<p>the planned project activities should be involved in the development and implementation of the project</p> <ul style="list-style-type: none">• The administrative staff (beneficiary) should be retained for longer periods• Ex-post controls on the condition of the site carried out by the beneficiary• When new equipment is purchased within a project, it is important to carry out a specialized training for the staff who will use it as well as to create conditions for its conservation and exploitation• In some cases, problems related to the property of specific sites or facilities pose obstacles to the achievement of sustainability of the project	
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				<p>outcomes hindering (or making impossible) the implementation of subsequent projects which build on the existing achievements.</p> <ul style="list-style-type: none"> • Natural factors 	
15.	Activity 2 (2.2)	The published list of "good practices" at the time of the evaluation has not yet been updated.	The "good practices" can be used by beneficiaries during the application and project implementation phase. In this context, the MA should make more efforts to update and disseminate them.	<ul style="list-style-type: none"> • The MA should update more often the examples of good practices and successful projects under OPRG • The examples of good practices / successful projects should be based (as far as possible) on explicit criteria, such as: effectiveness, efficiency, sustainability • The examples of good practices / successful projects should be promoted among the beneficiaries with a view to enabling their reproducibility. Some of 	Programming period 2014-2020

				the most appropriate means to disseminate good practices are: trainings for beneficiaries and websites (OPRG website and Single Information Web Portal - http://www.eufunds.bg)	
16.	Activity 2 (2.2)	The territorial distribution maps do not point to specific territorial patterns – there is no concentration of grants in particular districts or regions. The projects aimed at improvement of urban environment are fairly evenly distributed.	The territorial distribution analysis confirms the expected finding that more efficient are those interventions the outcomes/ results of which are accessible for a greater number of people. This is confirmed by the fairly higher efficiency of investments in educational infrastructure and urban environment in larger cities.	To achieve greater efficiency, it is recommended that during the next programming period the investments in educational infrastructure and urban environment be focused on larger cities.	Programming period 2014-2020
17.	Activity 2 (2.2)	OPRD 2007-2013 does not fully comply with the logic of the National Concept for Spatial Development (2013-2025) but this is not surprising given the different periods to which these strategic documents refer.	A number of smaller cities have already received support and realized main capital investments during the period 2007-2013. In this sense, during the programming period 2014-2020 the attention should be further focused on the cities at levels 1-4	It is recommended that the investments be further focused on the cities at levels 1-4 according to the National Concept for Spatial Development during the next programming period.	Programming period 2014-2020

			according to the National Concept for Spatial Development.		
18.	Activity 2 (2.2)	The provision of incentives for the staff as well as modern material-technical stock impacts most on the administrative capacity of the beneficiaries and employees of the MA.	The provision of incentives to the staff as well as the modern material-technical stock is expected to be among the most significant factors relating to the administrative capacity during the next programming period.	Funds for incentives to the staff as well as provision of adequate working conditions in terms of building, equipment, halls and specialized software should be provided for under PA Technical Assistance during the next programming period.	Programming period 2014-2020
19.	Activity 2 (2.2)	Need of additional human resources to reduce the current workload of the staff	Although the number of experts necessary for fulfilling professional duties and meeting the requirements of the national and European legislation has been ensured, additional human resources are still necessary to reduce the current workload of the staff.	To provide for possibilities for increasing the human resource of all units of the MA, except for the regional ones, as well as to involve experts with specific expertise (engineering specialists) in the Monitoring Unit.	Programming period 2014-2020
20.	Activity 2 (2.2)	Need of further improvement of training practices	The trainings of MA's staff and beneficiaries have been instrumental in increasing the administrative capacity but, as pointed out in the recommendations, there is still room for improvement of the	<ul style="list-style-type: none"> Financial resources for trainings of MA's staff should be envisaged and all employees should be provided the opportunity to attend the trainings set out in the annual plans. 	Programming period 2014-2020



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			training practices during the programming period 2014-2020.	<ul style="list-style-type: none">• Furthermore, it is also important to allow for participation in trainings not provided for in the annual plans but necessary for the smooth completion of work.• As most of the employees have already gained significant experience and knowledge in the field of programming, management and implementation of EU funds, more targeted specialized trainings of employees should be envisaged, including working visits for exchange of experience with other managing authorities in Member States, invitation of external lecturers on specific issues, trainings on concrete case studies and precedents.	
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				<ul style="list-style-type: none"> To improve the working climate, provision needs to be made for trainings on the following topics: teamwork, working culture, stress management, management skills, etc. The beneficiaries' capacity has significantly increased during the project preparation and implementation but the practice of trainings should be extended to the 2014-2020 period as well. In addition to the trainings organized so far, specialized trainings should be also organized for the beneficiaries and the MA. The practice of meetings organized by the MA aimed at discussing problems and case studies should be continued. 	
21.	Activity 2 (2.2)	Need of further reduction of	Despite the efforts made by the	To reduce the administrative	Programming

		administrative burden	MA, the beneficiaries find that the MA did not reduce sufficiently the administrative burden and therefore, more actions are needed in that respect.	burden, the MA should undertake the following measures: <ul style="list-style-type: none"> • Avoiding the frequent change of rules and instructions in the course of project implementation; • Applying the simplified costs rule in remunerating the project teams; • Introducing electronic submission and reporting of projects. 	period 2014-2020
22.	Activity 2 (2.2)	The revision of the measures to prevent and decrease the environmental impacts, recommended by Opinion on EA 4-3/2007, shows that two of them were described as irrelevant to the OPRD in the First Triennial Report but now they may be considered relevant.	In order to take more account of the measures to prevent and reduce the environmental impact, the MA should take account of the following measures laid down in Opinion on EA 4-3/2007: <ul style="list-style-type: none"> • Measure 10 – the necessity to build local waste-water treatment plants and developing waste management system should be taken 	The implementation of Measure 10 and Measure 13 set out in Opinion on EA 4-3/2007 should be reported in the final report on the environmental impact of the OPRD 2007-2013, if relevant interventions exist.	Programming period 2007-2013

			<p>into account, when drafting projects on new objects under PA3</p> <ul style="list-style-type: none"> Measure 13 – When drafting development schemes and plans, the location of the particular types of zones and territories as well as sites and activities generating pollution should be in accordance with the requirements for health protection of the settlement environment. 		
23.	Activity 2 (2.2)	When reporting the measures to prevent and reduce the environmental impacts all relevant decisions of MEW should be taken into account.	<p>The two decisions of MEW on the need of preparing environmental assessment of the amendments of the operational programme (EA-4/12.02.2012 and EA-24/26.07.2013) provide for the following measures:</p> <ul style="list-style-type: none"> Plans, programs, projects and investment proposals, subject to the changes provided for in the amendments of the 	When preparing the final report on the environmental impact, the implementation of the measures provided for in EA-4/12.02.2012 and EA-24/26.07.2013 should be reported.	Programming period 2007-2013



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			<p>OPRD, falling within or outside the scope of Appendix 1 and/or Appendix 2 of the EPA and covered by the provisions of Art. 31 of the Biodiversity Act (BA) are subject to assessment as to their compatibility with the subject and aims of conserving the protected areas and may be approved only after obtaining a positive EIA/EA decision/opinion and taking into account the recommendations set out in the performed evaluations as well as the terms, requirements and measures laid down in the decision/opinion.</p> <ul style="list-style-type: none">• Information on the implementation of the measures to prevent, reduce and eliminate as full as possible the		
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			assumed adverse effects stemming from the application of the amendments of the OPRD 2007-2013 should be included in the Monitoring and Control Report, in accordance with section II of the EA No. 4-3/2007, which is submitted by 15 April every three years.		
24.	Activity 1 (1.2) and Activity 2 (2.2)	Not all indicators related to the environmental impact have been reported by the beneficiaries	Most of the monitoring and control indicators are set in the grant schemes, which ensures, to a certain extent, that they will be accounted and reported by the beneficiaries, but at the same time certain indicators are not set in the schemes, and have not been reported by the beneficiaries, respectively.	The recommendations set out in Table 10 of the First Triennial Report, which has been updated in the Second Triennial Report, should be taken into account in preparing the next report on environmental impact.	Programming period 2007-2013
25.	Activity 3 (3.1)	Need of clarity regarding the horizontal principles which must be reported by the beneficiaries	The evaluation found that there is no explicit and specific definition of the final set of horizontal principles to be reported by the beneficiaries.	<ul style="list-style-type: none"> More explicit and specific definition should be given to each of the horizontal principles (e.g. in the Manual for beneficiaries) 	Programming period 2014-2020

			This results in limited comprehensibility and incomplete or inaccurate reporting.	<p>with a view to making them more comprehensible for the beneficiaries. This can be achieved through clearer instructions from the CCU to the MA regarding the reporting of the horizontal principles and clearer instructions from the MA to the beneficiaries, respectively.</p> <ul style="list-style-type: none"> • Conducting trainings for beneficiaries covering explicitly the topics for the horizontal principles. 	
26.	Activity 3	The different documents of the OPRD (Manual for Management and Implementation of OPRD, guidelines for application of the schemes, templates of technical reports for the beneficiaries and annual reports) describe different horizontal principles.	The lack of consistency with regard to the horizontal principles results in confusion and ambiguity for the beneficiaries.	Harmonisation of the described horizontal principles between all documents of OPRG – Manual for Management and Implementation of OPRG, guidelines for application of the schemes, templates of technical reports for the beneficiaries and annual reports.	Programming period 2014-2020
27.	Activity 3 (3.4)	The quality of reported horizontal principles by the	Although the technical report template in the Manual for	It is recommended that the beneficiaries should be explicitly	Programming period 2014-2020

		beneficiaries is different.	Management and Implementation of OPRD requires reporting on the compliance with the horizontal principles, some technical reports do not meet this requirement and make absolutely no mention of horizontal policies.	required to report in the FTR – reporting on the compliance with each of the horizontal policies of the EU and the values of the relevant horizontal indicators.	
28.	Activity 3 (3.3)	The recommendation made in the mid-term evaluation in regard to the coverage of the horizontal principles in the annual reports is still relevant and applicable.	The annual reports of the MA deal mainly with two principles – equal opportunities and partnership, whereas the other principles are not addressed. Furthermore, current values of the horizontal indicators are reported with respect to just some of the schemes. This results in incomplete reporting on the horizontal principles by the MA.	Explicit requirement for the MA to report in the annual implementation reports that need to be submitted in 2017 and 2019, and in the final report – inclusion of the current values of the horizontal indicators under all schemes and creation of a separate section dedicated to the horizontal issues.	Programming period 2014-2020
29.	Activity 3 (3.4)	Need of clarity regarding the horizontal principles which should be reported by the beneficiaries and the MA.	On the whole, the horizontal principles are adequately covered in the Manual for Management and Implementation of OPRD, but there is room for improvement	It is recommended that definitions of all horizontal principles as well as more detailed description of how the beneficiaries are supposed to report on the horizontal principles during the next	Programming period 2014-2020

			notably with regard to the inclusion of definitions for the MA and for the beneficiaries as well as clarifications on the practical implementation of the principles.	programming period be added to the Manual of the MA and/or the Guidance on project implementation for beneficiaries.	
30.	Activity 4 (4.1)	The results of the sociological survey show that the public opinion on two key indicators related to the transparency in implementing the OPRD: 1. Overall access to information on OPRD and 2. Communication style used for provision of information (accessibility and comprehensibility), require further efforts to be improved.	Despite the high rates of individuals who have heard of the Programme, it is recommended that more accessible communication style be used with a view to making them more aware of the programme's theme.	The information about the Programme during the next programming period should be presented to the public in even clearer and intelligible language.	Programming period 2014-2020
31.	Activity 4 (4.2)	-	The general conclusion with regard to the communication channels is that they are adequately selected.	The communication channels used should be kept in developing the Communication Plan of the next operational programme "Regions in Growth 2014-2020", with the main focus on audio visual media, printed media and explanatory billboards.	Programming period 2014-2020
32.	Activity 4 (4.3)	Need of improving the reporting	The MA has generally achieved	When reporting the Annual Plans	Programming

		on the implementation of the indicators set in the Communication Plan	the indicator values set in the Communication Plan of the OPRD 2007-2013 but the annual reports of the MA submit information only on the measures implemented during the relevant year. There is no summarized information on the implementation of all indicators set in the Communication Plan. This leads to difficulty in monitoring and evaluating the results of the Communication Plan.	for Implementation of Communication and Information Activities under OP Regions in Growth, summarized information on the achieved values of the set indicators should be included (if such indicators have been defined in the plans or in the National Communication Strategy).	period 2014-2020
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Appendices

1. **Electronic tables**
2. **A list of the key documents and sources of information used in the evaluation**
3. **Territorial distribution maps**
4. **A list of the projects visited in the final stage of the evaluation and of the interviewed MA experts**
5. **Distribution of the municipalities according to the funds received under OPRD 2007-2013 per capita**
6. **Minutes of meetings held during Stage III**
7. **Table for compliance with the horizontal principles**
8. **Updated list of successful projects**