



Final Evaluation Report

‘Evaluation of the System of Measurable Indicators and the Monitoring System’

Operational Programme ‘Education’

IBS SLOVAKIA, s.r.o.

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1 Introduction

The Managing Authority (hereafter referred to as 'MA') for the Operational Programme 'Education' (hereafter referred to as 'OPE'), and the Ministry of Education, Science, Research and Sport of the Slovak Republic, has commissioned a final evaluation report in order to evaluate the system of measurable indicators and the monitoring system of OPE, based on the contract for work no. 0718/2010, as regulated by 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 and repealing Regulation (EC) No 1260/1999 and Commission Regulation (EC) No 1828/2006 of 8 December 2006 setting out rules for the implementation of Council Regulation (EC) No 1083/2006, in accordance with the CCA Guideline 5/2008 for the evaluations of operational programmes in the 2007-2013 programming period and the OPE Evaluation Plan for the 2007-2013 programming period.

The report was prepared by IBS Slovakia s.r.o. Prievidza.

The outcome of the evaluation has been elaborated in the final report, structured according to the evaluation questions. Its final form is in accordance with evaluation quality standards.

The purpose of the final report is to evaluate, on an on-going basis, the indicators and their use in OPE. The main goal of the final report is to evaluate the suitability of the system of indicators and their use in OPE in order to create an effective tool with suitable indicators to improve OPE implementation.

The result of the evaluation is an in-depth, impartial evaluation of the alignment and effectiveness of the system of OPE indicators, as well as a set of recommendations to be taken in the decision-making process.

The following background documents were used in the evaluation:

- National Strategic Reference Framework 2007 – 2013
- Operational Programme 'Education' (September 2007)
- The management system of structural funds and the Cohesion Fund for the 2007-2013 programming period, version 4.1 as of June 30, 2010
- OPE Programme Manual, version valid from May 5, 2010
- Annual reports on the OPE implementation
- Half-year monitoring reports from IBMA
- Internal manual of MA procedures for OPE and OPRD (version 10.0 valid as of evaluation date, June 30, 2010)
- CCA Guideline no. 3 regarding the creation and use of project indicators and their introduction into ITMS 2007-2013, update no. 2

- Code-book of project indicators (Annex no. 1 to the CCA Guideline no. 3, update no. 2 as of April 15, 2010)
- List of priority themes linked to measures of the individual operational programmes (Annex no. 2 to the CCA Guideline no. 3, update no. 2 as of April 15, 2010)
- List of projects introduced into ITMS according to calls as of September 14, 2010
- Coordination systems for the implementation of horizontal priorities

2 Subject Matter

The subject matter of the evaluation report is to evaluate the suitability and use of the system of indicators that are closely related and in mutual interaction. The evaluation was based on data collected in monitoring of indicators in contractual projects and in calls for applications and in direct awards /written calls. At the same time, indicators and their updates were evaluated in ITMS, official documents, such as OPE and its programme manual.

The results of the evaluation can have an influence on the introduction of new indicators and their updating or on amendments to existing indicators.

The evaluators followed the structure of the evaluation questions when drafting this report.

Each chapter analyses themes covered in evaluation questions in the following order: analysis of a given theme, a question and its answer, findings and recommendations for MA. The data collected and the statistical data are presented as part of the text of the report or in tables and charts.

The report, in accordance with the contract for work, is divided into 6 main topics:

- 1) Evaluation of indicators at operational programme level;
- 2) Evaluation of indicators at project implementation level;
- 3) Evaluation of indicators at the level of preparation of calls for AfNRF and direct awards'
- 4) Evaluation of indicators in ITMS;
- 5) Evaluation of the cooperation between CCA and HP coordinators during the preparation and use of indicators;
- 6) Evaluation of HP indicators.

3 Evaluation Methodology

The evaluator analysed all relevant indicators for OPE at all levels, according to the scale described below. Based on priority themes for OPE, the evaluator selected relevant project indicators (annexes 1 and 2 to the CCA Guideline no. 3, update no. 2). The indicators at higher levels were taken from the relevant annexes of NSF and OPE.

All HP indicators relevant to OPE were also evaluated. They were taken from the individual HP coordination and implementation systems.

The indicators of selected calls were evaluated and then, in an Excel sheet (Annex 8), they were linked to the actually used indicators in contractual projects and to the measure indicators. The background document for this evaluation is an Excel spread sheet generated from ITMS.

Evaluation Process

For the purpose of the final evaluation report, the following steps were taken:

- collecting supporting materials
- analysis of supporting materials
- mapping of indicators
- evaluation of all relevant indicators for all levels of OPE, including HP
- analysis of relevant data
- answers to evaluation questions based on the findings
- conclusions, findings and recommendations

Description of Annexes

Annex no. 1 - map of existing linkages between programme objectives, priorities and indicators.

An Excel sheet showing the linkage between measure goals, priority axes, the operational programme and NSF. It also connects the indicators to the individual objectives. It has been generated based on the data from the Operational Programme 'Education', OPE Programme Manual and NSF.

Annex no. 2 - evaluation of indicators listed in the code-book of project indicators.

An Excel sheet containing all relevant project indicators for OPE. It was created based on the database of the CCA Guideline no. 3 and the assigned priority themes for OPE. The indicators were first sorted according to indicator code and then duplicities were eliminated. (The

indicators are present in several priority themes.) After the 'clean-up' an evaluation of indicators was carried out, according to the scale below. All irregularities were identified.

Annex no. 3 - evaluation of indicators of the global objective.

An Excel sheet containing the values of OPE indicators, based on the scale below.

Annex no. 4 - evaluation of indicators of priority axes.

An Excel sheet containing the evaluation of OPE indicators for priority axes, based on the scale below.

Annex no. 5 - indicators of the individual projects listed in ITMS according to calls.

Excel sheets containing selected data from a spread sheet generated from ITMS. The first sheet titled '2007 - Indic- OPE' contains data sorted according to calls from the indicators used in projects. It was then established how many times an indicator was used. The second sheet titled 'Eliminated indicators' contains all duplicate cases of indicators with the same code; each indicator is assigned the number of times it was used in projects. The third sheet titled 'Duplicities' contains indicators with the same wording but different codes, together with the number of times they were used. The fourth sheet titled 'Eliminated duplicities' contains a list of indicators used with the same wording. The primary goal was to find out how many times and which indicators were used. The secondary goal was to show duplicities in indicators with the same wording and formal errors in texts.

Annex no. 6 - numbers and definitions of indicators used, according to measures.

Excel sheets containing selected data from the Excel sheet of the Annex no. 5 and the sheet titled '2007 - Indic - OPE'. The individual sheets list selected indicators used in measures, sorted according to their call codes. The data from this annex was then used in Annex no. 7.

Annex no. 7 - linkages between project indicators (used and recommended) to measure indicators.

The annex allows evaluating linkages between project indicators on one hand and measure indicators, priority axes and OPE on the other. The annex contains a list of indicators used and their linkage to relevant measure indicators. Project indicators are recommended in such a way to allow for various levels of aggregation.

Annex no. 8 - linkages between objectives of selected calls and project indicators.

An Excel sheet containing the call code, objective and scope of the call, as well as the indicators used in projects related to this call. Based on this data, it is possible to evaluate the relevance of the indicators used and their relations with the objectives of the call.

Annex no. 9 - evaluation of HP indicators.

An Excel sheet containing the evaluation of HP relevant to OPE, based on the scale below.

Evaluation Scale

The evaluation of indicators is based on the following scale:

highly satisfactory, satisfactory, unsatisfactory, highly unsatisfactory

A sample of 10 indicators was used to establish the following percentage scale.

If all indicators are rated with a grade of 1 and 2, the implementation then equals to $10/10 \times 100$ (100%).

If one in ten indicators is rated with a grade of 3 or 4, the implementation equals to $9/10 \times 100$ (90%).

In order to receive a 'highly-satisfactory' grade, only one in ten indicators can be 'bad'.

Similarly, up to three in ten indicators can be 'bad' in order to receive a 'satisfactory' grade.

If the number of 'bad indicators' is higher than three in ten, the overall evaluation is unsatisfactory or highly unsatisfactory.

Table no. 1

Evaluation Scale	Setting of OPE indicators	Setting of OPE indicators in ITMS	Setting of indicators used in calls and projects
Highly satisfactory	90 – 100%	90 – 100%	90 – 100%
Satisfactory	89 – 70 %	89 – 70 %	89 – 70 %
Unsatisfactory	69 – 30 %	69 – 30 %	69 – 30 %
Highly unsatisfactory	under 29%	under 29%	under 29%

Each indicator defined in OPE is rated using the scale from 1 to 4 and the following SMART criteria.

S – specific

M – measurable

A – achievable

R – realistic

T – timely

Table no. 2

Specific	Measurable	Achievable	Realistic	Timely
1	1	1	1	1
2	2	2	---	2
3	3	3	---	---
4	4	4	4	4

Specific

- 1 – Clearly defined; measures the given objective
- 2 – Measures the given objective but could be defined more clearly and in a more targeted way
- 3 – Is well defined but does not measure the given objective
- 4 – Is not clearly defined and does not measure the given objective

Measurable

- 1 – Can be quantified and has clearly defined measurement units.
- 2 – Can be quantified but has incorrectly defined measurement units.
- 3 – Cannot be quantified but has clearly defined measurement units.
- 4 – Cannot be quantified and has incorrectly defined measurement units.

Achievable

- 1 – Is achievable within the given time period
- 2 – Is achievable but it is not possible to estimate the time period (it is not clear whether the given time period will be sufficient)
- 3 – Is not achievable because the given time period is too short
- 4 – Is not achievable

Realistic

- 1 – Planned (or achieved) indicator values are verifiable (there is objective data, such as the statistics)
- 2 – Dismissed in this case
- 3 – Dismissed in this case
- 4 – Planned (or achievable) values of indicators are not verifiable.

Timely

- 1 – An indicator is well defined in terms of its time limits (output, result, impact)
- 2 – An indicator is time-limited but not for a relevant period
- 3 – Dismissed in this case
- 4 – An indicator is not time-limited

If the sum of all the grades equals 5, the indicator is well defined and is evaluated as - highly unsatisfactory. (No changes are necessary)

If the sum of all the grades equals 6 to 9, and none of the grades is higher than 2, the indicator is evaluated as - satisfactory. (Only minor amendments of administrative or formal nature are necessary)

If at least one grade is higher than or equal to 3, the indicator is evaluated as - unsatisfactory. (It must be discarded, replaced by another or reclassified.)

The overall percentage for a given area is calculated as follows: the sum of indicators rated highly satisfactory and satisfactory is compared to the sum of all indicators for a given area.

4 Summary

The author of this report followed the required methodology, the tender documentation, as well as the terms and conditions of the contract for work.

4.1 Responsibilities and powers in the administration and use of indicators

Within the meaning of Act no. 275/2006 J. of L., CCA is the administrator of ITMS for structural funds and the Cohesion Fund and is responsible for its design, implementation, management and its updating. CCA is also the administrator of relevant code-books.

CCA prepared a managing document - Guideline for the design and usage of project indicators and their introduction into ITMS 2007-2013. (CCA Guideline no. 3, update no. 2 as of April 15, 2010) In annexes 1 and 2, the document defines the Codebook of indicators linked to a priority theme, used at project level, and the List of priority themes linked to the individual measures of operational programmes.

CCA Guideline no. 3 defines basic procedures that managing authorities are obliged to follow when designing and using project indicators. It defines rights and obligations of managing authorities and coordinators of horizontal priorities when designing and using project indicators.

4.2 Conclusions

Based on the inputs from relevant documents and information collected during interviews with MA and IBMA employees, the following conclusions were drawn:

Conclusions relevant for MA

1. Given the fact that NSF for OPE and indicators measuring the global objective of OPE are both context indicators, it will be difficult to identify, in exact terms, the impact of OPE activities on the values of these indicators. It will only be possible to identify statistical values for the entire SR (based on the Eurostat statistical methods) but it will not be possible to tell how much OPE has contributed to these values.
For example, for the indicator 'Share of population participating in life-long learning in 100 aged 25 – 64' in the Annex no. 5 of the 2007-2013 OPE, the column titled 'measurement methodology' states the following: 'Measurement will be based on the Eurostat methodology. Participating in life-long learning is defined as taking part in education or trainings within the last four weeks before the survey.'

Recommendation: In the following programming period for OPE, it is recommended to change method for calculating context indicators, so that the contribution of OPE activities to these indicators could be evaluated.

2. Project indicators that monitor the individual groups of objectives are not used in a rigorous manner. Some categories (gender, age, disabled persons) can be selected within the equal opportunities HP. Data about target groups can be aggregated, in accordance with Annex no. XXIII of the implementation regulation, during project monitoring using quarterly monitoring reports or based on the publication of the SF and CF Management System, version 4.1 (June 30, 2010) that requires the beneficiary to submit the 'Information about Participants' following the structure of Annex XXIII of the implementation regulation.

Recommendation: To thoroughly examine monitoring reports from MA and IBMA and make sure information regarding participants is mentioned there.

3. Objectives of OPE, priority axes and measures are clearly defined and are linked to indicators that measure these objectives.
4. Indicators of programmes, priority axes and measures are rated as highly satisfactory.
5. Indicators used in calls are well defined and monitor their objectives. However, a more detailed description of target groups is needed. MA used 36 indicators from the indicators listed in the code-book according to relevant priority themes¹.

Recommendation: See point no. 2

6. Indicators of HP were evaluated as highly satisfactory.
7. Project indicators are defined in the same way in the NRF Contract and in ITMS.
8. The cooperation between CCA, MA and IBMA and HP coordinators is not always effective. See point 3 in conclusions relevant to CCA.

¹ Within priority themes relevant to OPE, the evaluator identified 600 indicators, some of which will be able to use in future calls for OPE.

Conclusions relevant for CCA

1. ITMS has several deficiencies and should be better designed for the needs of evaluators and MA and IBMA employees, especially when generating cumulative values. Employees have no other option than to do much of the monitoring manually. Evaluators examined the indicators entered into ITMS and their values in ITMS. It is practically impossible to generate a single spread sheet with indicators of calls and project indicators linked to them. It is only possible to search or to show indicators for individual projects, which would be too ineffective and time-consuming, since there are hundreds of projects. When trying to get the above-mentioned data in an interactive way, response-time is very long. The system of access rights does not allow getting information regarding all calls. The evaluators, helped by MA employees, got the relevant data through a request to the data-centre, presented in an Excel sheet that contained 75,194 lines. When duplicates and data regarding other operational programmes were eliminated, the spread sheet contained 3,289 lines. Using a filter, it is possible to view a code of an indicator and all projects that contain this indicator. At the same time, it is possible to filter the list according to call code - and then to identify the number of indicators per call. ITMS cannot, however, view these values in parallel. This is considered to be the biggest deficiency in OP evaluation at project level.

Recommendation: For further use to create a user guide on how to get required data in the current software that would help generate, by a simple selection, the most frequent spread sheets, statistical lists and selections.

2. The indicators relevant to OPE and listed in the code-book of project indicators were evaluated as highly satisfactory. It is necessary to eliminate duplicate indicators that are listed as both, impact and result indicators or that have the same definition and different codes. Many indicators also need to be reclassified from impact indicators to result indicators. (See Annex no. 2 of this report)

Recommendation: To correct data in the code-book of project indicators according to suggestions listed in Annex no. 2.

3. Late publication of the CCA Guideline no. 3 caused problems in reporting relevancy of projects to HP through measurable indicators relevant to HP (until Guidance no. 3 took effect, it was not required to make result indicators relevant to HP legally binding)

Recommendation: To respond to implementation needs in a timely manner.

5 General Criteria

5.1 Definition of Terms

Indicators serve as a basic tool for monitoring the implementation progress and the evaluation of how objectives are achieved in operational programmes and in the National Strategic Framework.

Indicators serve to assess the cost-effectiveness (minimize the costs of an activity or acquisition of goods, works and services while maintaining the appropriate level and quality), efficiency (maximizing the results of activities in relation to available public resources) and effectiveness (the relationship between planned and actual results of an activity in relation to public funds used) of the use of funds allocated to the operational programme, priority axis and measure.

Context (macroeconomic) indicators serve to quantify the expected impact of a program, its global objectives of the program and / or its priority axes. The value of context indicators should not be calculated based on the data at project level; their value is usually published by relevant national and international organisations.

Programme indicators show values of indicators for a given operational programme, priority axis and measure. They are created based on operations with values of result and impact indicators of individual financed operations/projects.

Result indicators help quantify services and products available to a target group / final beneficiaries, based on work, goods and services co-financed by non-repayable funding in approved activities of a project. Result indicators are dependent mostly on activities of a beneficiary.

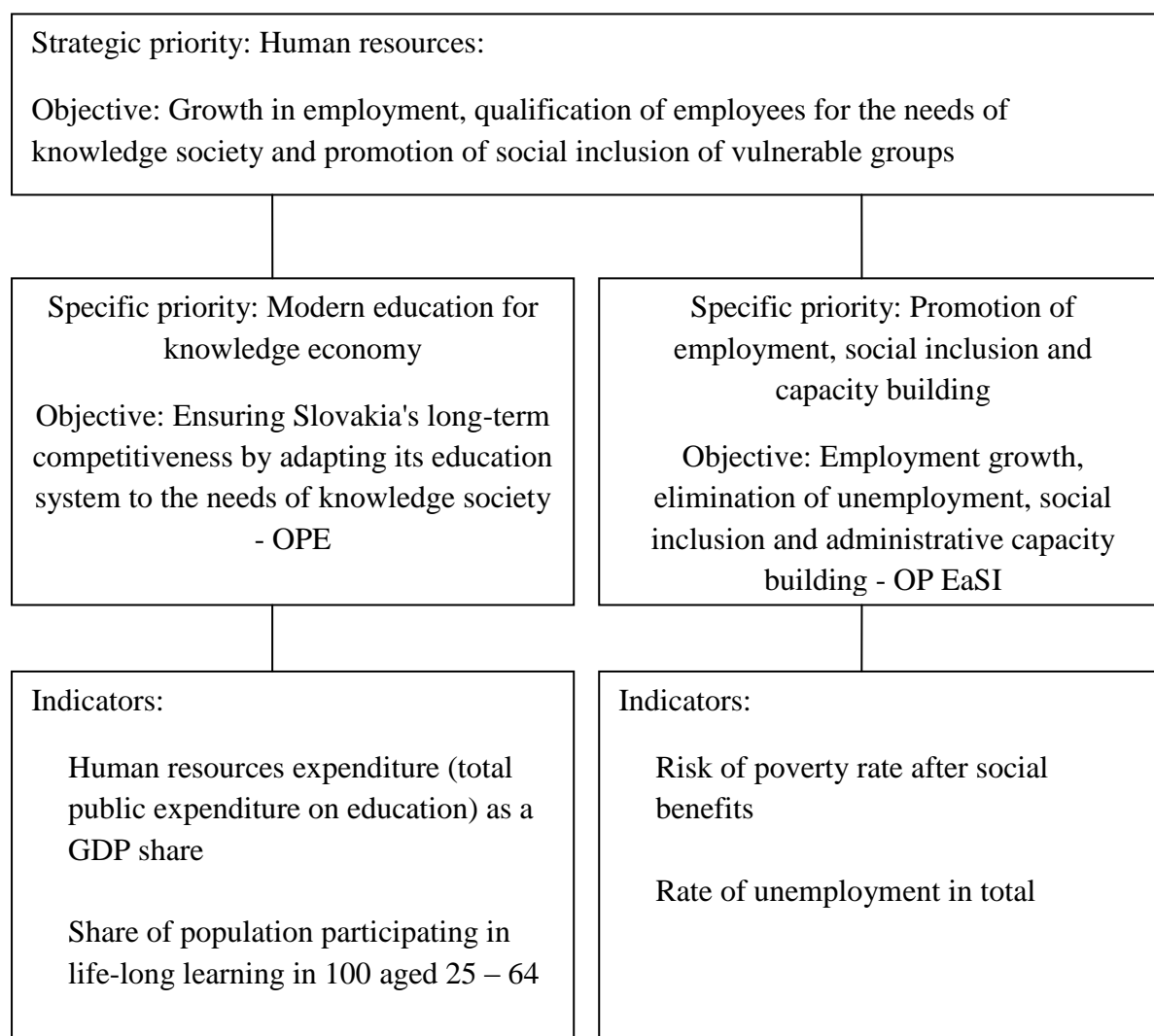
Project impact indicators express a planned projection of future changes that will probably occur after the implementation of project activities, or later as a result of an implemented project. Project impact indicators depend on external factors (such as demand, response from the target group / final beneficiaries in connection to existing legislative framework) that a beneficiary influences very little or not at all.

Operations with values of indicators are, among others, the sum of individual values of indicators, their number and the average value.

5.2 Linkage between Programme Indicators and Indicators of the NSF Strategic Priority 'Human Resources'

Operational programme 'Education' falls under a NSF strategic priority 'Human resources'.

Linkage between 'Human Resources' strategic priority and specific priorities and indicators:



Two context indicators were identified for OPE:

- Labour costs as a GDP share
- Share of population participating in life-long learning in 100 aged 25 – 64

Values for NSF indicators for OPE

Table no. 3

Indicator	Unit	Referential year	Initial value	Final value
Human resources expenditure (total public expenditure on education) as a GDP share	%	2003	4.4	5.2
Share of population participating in life-long learning in 100 aged 25 – 64	%	2005	4.6	12.5

Source: <http://www.nsrr.sk/sk/hodnotenie/programove-obdobie-2007-2013/>, Annex no. 9 of NSF - updated

The analytical section of Annex no. 6 of NSF titled 'Slovakia's status quo' lists the following initial values for context indicators:

Table no. 4

Indicator	Unit	Year	Value
Human resources expenditure (total public expenditure on education) as a GDP share	%	2000	:
		2001	:
		2002	9.0
		2005	4.8
		2004	4.6
		2005	5.0
Life-long learning - share of population aged 25-64 taking part in education lasting more than 4 hours at the time of the survey	%	2000	4.2
		2001	4.0
		2002	4.4
		2003	:
		2004	:
		2005	:

Source: <http://www.nsrr.sk/sk/hodnotenie/programove-obdobie-2007-2013/>, Annex no. 6 of NSF - updated

The above-mentioned data shows that initial values of indicators were taken from Eurostat surveys for 2002 and 2004. The table of NSF for OPE, however, states years 2003 and 2005. In order to remedy this discrepancy, we suggest that the referential year in Annex no. 9 of NSF for OPE be corrected.

Contribution of OPE to the values of NSF indicators

Human resources expenditure (total public expenditure on education) as a GDP share

The sum of values of indicators can be calculated as follows: The sum of costs for individual educational projects implemented for OPE per year / Total sum of GDP per year * 100

For this indicator, Annex no. 5 of OPE for 2007-2013, the column 'measurement methodology' states the following: 'Measurement will be based on the Eurostat methodology.'

Share of population participating in life-long learning in 100 aged 25 – 64

The sum of values of indicators can be calculated as follows: The sum of persons aged 25-64 involved in educational activities in the individual OPE projects per year / The total number of citizens of SR aged 25-64 per year *100

For this indicator, Annex no. 5 of OPE for 2007-2013, the column 'measurement methodology' states the following: 'Measurement will be based on the Eurostat methodology.' Participating in life-long learning is defined as taking part in education or trainings within the last four weeks before the survey.'

The above-mentioned information shows that, in order to establish the contribution of OPE to values of NSF indicators for OPE, it is necessary to monitor indicators that monitor financial value of educational projects and the number of persons aged 25-64 who participated in educational activities of projects.

If values of indicators are to be measured according to the Eurostat methodology, it will not be possible to identify the exact contribution of a program to values of NSF indicators for OPE.

Since OPE has been implemented for some time already, we recommend that, in the next programming period, the methodology for calculating context indicators be changed or that context indicators are used in such a way that the contribution of OPE on their values can be identified.

Linkage between indicators of priority axes, context indicators of OPE and indicators of NSF for OPE

Table no. 5

NSF indicators for OPE	Context indicators of OPE	Indicators of Priority axis 1
Human resources expenditure (total public expenditure on education) as a GDP share	Human resources expenditure (total public expenditure on education) as a GDP share	Schools successful in repeated quality evaluations
Share of population participating in life-long learning in 100 aged 25 – 64	Rate of employment in total	Employment prospects for high-school graduates
	% of population participating in life-long learning in 100 aged 25 – 64	Number of newly created educational programmes
	Graduates from the tertiary level of higher education	Number of teaching staff members who participated in further education programmes
	High-school graduates	Number of trainings for teaching staff
	Share of population (aged 18-24) with lower high-school diplomas not participating in further education	Share of universities that have increased their effectiveness and management quality through OPE
		Share of partnerships and development and innovation networks still in existence after the termination of OPE support
		Share of university graduates placed on the labour market
		Share of research and development staff participating in further education
		Number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS)
		Share of research and development staff involved in international research projects
		Number of partnerships and networks in research and innovations funded by OPE

Table no. 6

Indicators of Priority axis 2	Indicators of Priority axis 3	Indicators of Priority axis 4
Share of networks created during trainings for regions that are still in existence after the termination of OPE support	Share of placed graduates of formal education programmes for members of MRC	Schools successful in repeated quality evaluations
Number of trainers who participated in further education programmes	Share of placed graduates of further education programmes for members of MRC	Number of newly created educational programmes
Number of supported further education programmes	Number of pupils from MRC involved in educational programmes	Number of teaching staff members who participated in further education programmes
Number of newly created networks created during trainings for regions	Number of formal education programmes for pupils from MRC	Number of trainings for teaching staff
Share of medical staff who remained in health system after completing further education programmes	Number of persons involved in social inclusions programmes for members from MRC trained in further educational programmes	Share of partnerships and development and innovation networks still in existence after the termination of OPE support
Share of medical staff who participated in further education programmes for medical personnel	Number of further education programmes for persons involved in social inclusion programmes for members of MRC	Share of research and development staff participating in further education
Share of training programmes for further education of medical personnel	Share of placed graduates of formal education programmes for persons with special needs	Number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS)
	Share of placed graduates of further education programmes for persons with special needs	Share of research and development staff involved in international research projects
	Number of pupils from socially disadvantaged environments (SDE) and pupils with special needs involved in educational programmes	Number of partnerships and networks in research and innovations funded by OPE
	Number of formal education programmes for pupils from SDE and pupils with special needs	
	Number of persons involved in social inclusions programmes for persons with special needs trained in further educational programmes	
	Number of further education programmes for persons involved in social inclusion programmes for persons with special needs	

Linkages between indicators are highlighted. The above-mentioned data shows that 4 context OPE indicators, namely 'Human Resources Expenditure (total public expenditure on education) as a GDP share' 'Graduates from the tertiary level of higher education', 'High-school graduates' and 'Share of population (aged 18-24) with lower high-school diplomas not participating in further education' are not incorporated into the indicators of priority axes.

6 Evaluation of Indicators at Operational Programme Level

6.1 General Information regarding OPE

Operational Programme 'Education' is a reference document, based on which aid is given to promote the development of human resources, using national resources and ESF. It defines the global objective, priority axes, measures and activities that will be supported within the objectives of convergence and regional competitiveness and employment during 2007-2013. It covers the whole territory of the Slovak Republic. OPE implements the specific priority 3.1 'Modern education for knowledge economy' within the Slovak National Strategic Framework for 2007-2013. Within the meaning of 3rd regulation on ESF that defines the scope of aid, OPE aims at increasing the adaptability of labour force by improving the quality and access to life-long learning.

The aid is granted from the European Social Fund (ESF) and the Slovak state budget through the following types of projects:

National projects are implemented either through direct awards or through concluded calls for project submissions. Direct award method is used when the final beneficiary is responsible for the provision of services in question.

In relation to national projects, support stems from legislation or is given to projects that have either nation-wide scope, are unique and can only be implemented only by one institution, or to pilot projects created and implemented especially in the area of social health services, social and activation enterprises in order to promote sustainable employment. Verification of the completeness of a file and its compliance with terms of a contract concluded are carried out by MA employees.

Demand-driven projects are implemented based on calls for project submissions. Grant schemes cover funds used for demand-driven projects. Many measures contain activities sponsored by global national projects, as well as demand-driven projects in which funds are distributed based on competition. Verification of the completeness of a file and its compliance with terms of a contract concluded are carried out by MA or IBMA employees. The substance of the file is assessed by a project selection committee.

The operational programmes are implemented along the following 5 priority axes:

1. Reform of the education system and vocational training
2. Further education as a tool for developing human capital
3. Promoting education for persons with special needs
4. Modern education for knowledge economy for the Bratislava region
5. Technical assistance for the Convergence Objective

6.2 Analysis of Indicators in Relation to Objectives

Based on the results of socio-economic analysis of intervention context, the global objective of the operational programme is defined as follows: *"Ensuring Slovakia's long-term competitiveness by adapting its education system to the needs of knowledge society".*

Definitions of key indicators at operational programme level linked to the global objective appear in Annex no. 5 of OPE; all indicators at OPE level are considered context indicators.

Table no. 7

Context indicator title	Indicator definition	Measure ment unit	Initial value		Target value	Source	Measurement methodology
			year	value	year 2013		
1. Human resources expenditure (total public expenditure on education) as a GDP share	human resources expenditure (total public expenditure on education) as a GDP share	%	2003	4.4	5.2	<u>Eurostat</u>	Measurement will be based on the Eurostat methodology.
2. Rate of employment in total	employment rate in total (share of population aged 15-64 employed per total population in the given age group)	%	2005	57.7	63.4	<u>Eurostat, SO SR</u>	Measurement will be based on the Eurostat methodology.
3. % of population participating in life-long learning in 100 aged 25 – 64	% of population per 100 individuals aged 25 – 64, participating in life-long learning that lasts more than 4 hours at the time of the survey (benchmark EU)	%	2005	4.6	12.5	<u>Eurostat</u> (EU Labour Force Survey)	Measurement will be based on the Eurostat methodology. Participating in life-long learning is defined as taking part in education or trainings within the last four weeks before the survey.
4. Graduates from the tertiary level of higher education	number of university graduates (doctorate candidates) per 1000 citizens aged 20-29	number	2005	8.3	12	<u>Eurostat</u>	Measurement will be based on the Eurostat methodology.
5. High-school graduates	share of population aged 20-24 who graduated at least from high schools or finished post-secondary education (EU benchmark)	%	2005	91.8	92	<u>Eurostat</u> (EU Labour Force Survey)	Measurement will be based on the Eurostat methodology. The indicator is monitored by means of questionnaires for population aged 20-24 who has achieved at least the 3 rd level of education in the ISCED scale. ISCED 3-4 represents secondary or post-secondary education. Those who did not state their response are eliminated from the total of population.
6. Share of population (aged 18-24) with lower high-school diplomas not participating in further education	share of population aged 18-24 with lower secondary education (elementary or secondary education without a diploma - ISCED 0, 1, 2, 3C) who are early school leavers (EU benchmark)	%	2006	6.4	5.5	<u>Eurostat</u> (EU Labour Force Survey)	Measurement will be based on the Eurostat methodology. Students are not considered to continue their education if four weeks before the survey they did not attend any kind of training while it is not taken into account whether such training is or is not relevant to their future career. Those who did not state their answers were dismissed from the survey.

Specific objectives and indicators according to measures

The main objective of priority axis no. 1 is to implement the education reform at primary and high schools and to promote quality improvement at universities, as well as the quality of human resources in research and development, in order to prepare graduates for existing and potential knowledge society needs and the labour market.

The main objective is fulfilled based on the following 2 measures:

1.1 Transforming a traditional school into a modern educational facility

The objective of measure 1.1 is to transform primary and high schools using innovative teaching methods and to prepare their students for existing and potential knowledge society needs, as well as for further education at universities or other institutions.

Specific objectives for measure 1.1

- To innovate subject matters and teaching methods, to increase the quality of education outputs for labour market needs in knowledge society.
- To focus the initial training and further education of the teaching staff on the development of key skills needed to transform traditional schools into modern establishments.
- To improve school administration and management and to motivate their leadership to open the schools more to the needs of local communities,
- To ensure institutional quality of schools.

Indicators for measure 1.1

- schools successful in repeated quality evaluations,
- employment prospects for high-school graduates,
- number of newly created educational programmes,
- number of teaching staff members who participated in further education programmes
- number of trainings for teaching staff

Indicators are well defined and linked to specific objectives.

1.2 Universities and research and development as driving forces of knowledge society development

The aim of measure 1.2 is to promote education quality improvement and to facilitate development of human resources in research and development in order to help universities adapt to current and potential knowledge society needs

Specific objectives for measure 1.2

- To adapt higher education to the needs of knowledge society.
- To promote high-quality instruction at universities.
- To increase the quality and personal growth of research and development staff.
- To promote cooperation among universities, research and development centres and the private sector at the national and international level.

Indicators for measure 1.2

- share of universities that have increased their effectiveness and management quality through OPE
- number of newly created educational programmes,
- number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS)
- ... and others

Indicators are well defined and linked to specific objectives.

The main goal of priority 2 is to create and develop an effective system for life-long learning and counselling that would focus on developing key competencies and deepening know-how available for all Slovak citizens throughout their life, according to the existing and potential knowledge society needs.

The main objective is fulfilled based on the following 2 measures:

2.1. Promoting further education

The goal of measure 2.1 is to increase the quality of further education while focusing on the development of key competencies and deepening employees' know-how.

Specific objectives for measure 2.1

- To increase the quality of further education programmes and institutions and to strengthen the system of quality control and to promote innovations in teaching methods and subject matters.

- To increase the share of economically active population that takes part in further education programmes and to raise awareness regarding the choice of life-long learning programmes.
- To increase and adapt the level of know-how and to offer continuing education for people in the labour market, in accordance with the existing and potential needs of knowledge society.
- To create a system of compatibility and permeability between formal and informal streams of education.

Indicators for measure 2.1

- share of networks created during trainings for regions that are still in existence after the termination of OPE support
- number of trainers who participated in further education programmes
- number of supported further education programmes
- number of newly created networks created during trainings for regions

Indicators are linked to specific objectives, they fulfil their purpose, are measurable from a short-term point of view; a longer-term effect will only be visible after the termination of the project.

2.2. Supporting further education in health sector

The goal of measure 2.2 is to promote education of medical staff, with regard to changes in legislation and reform of the healthcare system.

Specific objectives for measure 2.2

- To build qualified human resources in healthcare system as part of the healthcare reform.
- To implement innovations and to increase the quality in further education in healthcare system.

Indicators for measure 2.2

- share of medical staff who remained in health system after completing further education programmes
- share of medical staff who participated in further education programmes for medical personnel
- share of training programmes for further education of medical personnel

Indicators are specific, measurable, and achievable and linked to specific objectives.

The main goal of priority axis 3 is to increase the level of education for persons with special needs, focused specifically on MRC.

The main objective is fulfilled based on the following 2 measures:

3.1 Bolstering educational levels of members of marginalised Roma communities (MRC)

The goal of measure 3.1 is to increase the level of education of MRC members by facilitating their access to formal education and further education.

Specific objectives for measure 3.1

- To promote social inclusion of MRC members by facilitating their access to formal education and by helping them to acquire skills needed in the labour market.
- To offer further education to MRC members, as well as to persons working in the area of their integration into society.

Indicators for measure 3.1

- share of placed graduates of formal education programmes for members of MRC
- number of pupils from MRC involved in educational programmes
- number of formal education programmes for pupils from MRC
- ... and others

Indicators are linked to specific objectives.

3.2 Bolstering educational levels of persons with special needs

The goal of measure 3.2 is to increase the level of education of persons with special needs by facilitating their access to formal education, further education and life-long learning.

Specific objectives for measure 3.2

- To promote social inclusion of persons with special needs by facilitating their access to formal education and by helping them acquire skills needed in the labour market.
- To offer further education to persons with special needs, as well as to persons working in the area of their integration into society.

Indicators for measure 3.2

- share of placed graduates of formal education programmes for persons with special needs
- number of pupils from socially disadvantaged environments (SDE) and pupils with special needs involved in educational programmes
- number of further education programmes for persons involved in social inclusion programmes for persons with special needs
- ... and others

Indicators are linked to specific objectives.

The main goal of priority axis 4 is to increase the quality of and facilitate the access to further education, with a special focus on key competencies, in order to ensure long-term competitiveness of the Bratislava region.

The main objective is fulfilled based on the following 2 measures:

4.1 Transforming traditional schools into modern educational facilities in the Bratislava region

The objective of measure 4.1 is to transform primary and high schools using innovative teaching methods and to prepare their students for existing and potential knowledge society needs, as well as for further education at universities or other institutions.

Specific objectives for measure 4.1

- To innovate subject matters and teaching methods, to increase the quality of education outputs for labour market needs in knowledge society.
- To focus the initial training and further education of the teaching staff on the development of key skills needed to transform traditional schools into modern establishments.
- To ensure institutional quality of schools.

Indicators for measure 4.1

- schools successful in repeated quality evaluations,
- number of newly created educational programmes,
- number of teaching staff members who participated in further education programmes
- number of trainings for teaching staff

Indicators are linked to specific objectives.

4.2 Increasing the competitiveness of the Bratislava region by the development of higher and further education

The goal of measure 4.2 is to increase the quality of university education, to adapt their fields of study, to promote research and development and to promote an effective system for life-long learning and counselling, in accordance with current and potential needs of knowledge society. The focus on research, development and innovation projects aims at promoting balanced development and competitiveness of the Bratislava region.

Specific objectives for measure 4.2

- To adapt higher education to the needs of knowledge society.
- To increase the quality and personal growth of research and development staff.
- To promote cooperation among universities, research and development centres and the private sector at the national and international level.
- To increase the quality of further education programmes and institutions, including the creation of a system of compatibility and permeability between formal and informal education and to increase the share of economically active population that takes part in further education programmes.

Indicators for measure 4.2

- share of partnerships and development and innovation networks still in existence after the termination of OPE support
- number of newly created educational programmes,
- number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS)
- ... and others

Indicators are linked to specific objectives.

Based on the above-mentioned information it can be stated that the global objective of OP 'Education' is well defined. The indicators are linked to specific objectives of the individual priority axes and their measures. It can also be seen also in Annex no. 1 of the Map of indicators. The objectives and indicators are evaluated as very satisfactory.

Overall, the linkages between the objectives of the individual priorities and their measures on one hand and the indicators on the other, are evaluated as very satisfactory.

Global objective indicators are well defined; more specific evaluation is listed in Annex no. 3.

Similarly, the indicators of the individual priority axes and their measures are interconnected and, at the same time, in compliance with the global objective of OP 'Education'.

The evaluation of the indicators of the global objective and the indicators of priority axes is mentioned below.

Indicators of the global objective of OPE:

Table no. 8

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
6	6	0	100 % - highly satisfactory

Indicators of priority axis 1

Table no. 9

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
13	13	0	100 % - highly satisfactory

Indicators of priority axis 2

Table no. 10

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
7	7	0	100 % - highly satisfactory

Indicators of priority axis 3

Table no. 11

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
12	12	0	100 % - highly satisfactory

Indicators of priority axis 4 (without the indicators of measure 4.3)

Table no. 12

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
10	10	0	100 % - highly

			satisfactory
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Based on these data it can be stated that the indicators of the global objective and the indicators of the individual priority axes and their measures are specific, measurable and achievable and have clearly defined goals.

Answers to evaluation questions

1. Are the indicators defined in such a way that they could be used to monitor all the specific objectives of the individual measures? Will these monitoring outputs relevant for the purposes of the evaluation of OP implementation?

The individual specific objectives are in accordance with the indicators of the individual priority axes; they are measurable, specific and achievable. A longer term effect will be visible only after the implementation of the individual projects. The evaluation of the indicators of all priority axes is situated in Annex no. 4.

It will be difficult to evaluate the effect of OPE on the values of context indicators. It is possible to assess the change in values of context indicators for the whole of Slovakia or for its regions but it is not possible to identify to what extent OPE has contributed to them.

2. Does the system set-up make it possible to measure also the quality of education (i.e. not only identify the numbers of graduates / programmes etc.)?

In order to evaluate the quality of education, one can use the indicator 'Schools successful in repeated quality evaluation'; such evaluation should be performed annually, based on the rules of Quality Management System. The quality of education can be evaluated based on the placement rate of participants of educational programmes on the labour market or based on their ability to retain a job position by enhancing their skills and know-how. It is extremely important to evaluate not only the quality of education but also its effectiveness by comparing the performance of the staff before and after they complete training or by using indicators, such as successful placement of graduates on the labour market or job retention. The quality of education can be assessed using the indicators; in our opinion, however, such assessment can only measure short-term retention (1 year), since it is not possible to measure how long a graduate actually retained a given position, using the current methodology.

3. Is the indicator system internally coherent, i.e. are programme indicators of output and result mutually linked? Is the indicator system externally coherent, i.e. do the indicators at programme level complement or enhance the indicators listed in NSF?

Output and result programme indicators are interconnected, measurable, and specific; they complement each other and fulfil the main and specific objectives and they are linked to the indicators listed in NSF. (See Annex no. 1 of the Map of indicators)

4. Is there a clearly defined procedure for calculating the final value of indicators shown in %?

In our view, there is a clearly defined procedure for calculating the final value of indicators stated in OPE. Each indicator is followed by its definition, the source where its value can be found and the methodology for this procedure.

5. Are the names and definitions of indicators shown at programme level clearly understandable to relevant bodies (EC, CCA, MA/IBMA and others)?

The names of indicators listed in OP 'Education' and in the Programme manual are understandable, specific and clear; the definitions explain well each indicator.

6. How will the economic crisis (or other external factors) affect the achievement of target values?

Structural funds could help eliminate the impact of the economic crisis and other factors, especially in the following areas: enhancing the quality of education; implementation of education reforms; up-skilling of employees, placement of participants of training programmes on the labour market; job retention by enhancing one's skills and know-how; creating new educational programmes etc. When the funds from structural funds are used in an effective way, when the objectives and rules are clearly defined, then the given target values will be achievable despite the economic crisis. It is important to note that the primary goal of OP 'Education' is not to tackle unemployment - which is the goal of OP 'Employment and social inclusion'. OP 'Education' was designed in such a way as to cover the needs of target groups despite the impact of the economic crisis.

7. Is there a risk that the indicators will not be achieved at programme / priority axis / measure level? Which PA / measure is most likely to be affected? What are the current achieved values of indicators?

Various unexpected factors can affect the achievement of indicators - withdrawal from a contract, late conclusion of a contract etc. Achievement of indicators depends also on their initial values (planned values), which should be real, not set too high, so that the values could be achieved and so that the funds will be used in an effective way. As of December 31, 2009,² indicators are not fulfilled enough. also due to the late conclusion of contracts, the fact that not all contracts were completed, yet, and so physical indicators could not be fulfilled, yet.

² Despite the fact that the evaluation period runs until June 30, 2010, the evaluator, when evaluating the fulfilment of measurable indicators, used the data as of December 31, 2009 from the last approved Annual report on OPE implementation for the period between January - December 2009.

Given the evaluation of fulfilment of indicators of priority axes in the Annual report on OPE implementation for the period between January - December 2009, it is clear that values of several indicators were much higher than expected. This was caused by a heightened interest in educational programmes (brought on by a new reform in education and changes in legislation). Therefore, the number of trainings increased, and so the fulfilment of indicators was exceeded by more than 100%. Such cases arise due to unexpected factors that only become apparent during project implementation and during the programming period. It is sometimes very difficult to set target values but the risk that the indicators are not fulfilled in such cases is extremely low. Reaching the values of indicators depends on the overall implementation and the dates of call publication for which indicators are measured.

8. Is it necessary, based on the risk identified related to non-fulfilment of values of indicators, review the plan for publication of calls / direct awards?

It would be useful to check the plan for publication of calls / direct awards in order to prevent delays in publications of calls, if there is a risk that planned values of indicators will not be fulfilled. Values of indicators are achievable, however, the following areas may present some problems: keeping timetables, meeting deadlines for signatures of contracts, and launching project implementations on time. Whether or not values will be achieved depends mainly on the date of project launch; if the launch is delayed also the achievement period will be delayed. It is also difficult to set a realistic value for certain indicators - such as for the indicators 'Number of trainings for teaching staff' for measure 1.1 - planned value - 15, achieved result - 310; for priority axis 4 - planned value - 15, achieved result - 137, where planned values were disproportionally lower. This happened during the preparation of Operational Programme 'Education' in 2007 when a lower number of trainings for teaching staff was envisaged; the reform in education and legislative changes, however, changed the situation and the values had to be increased.

9. Are the values of indicators set realistically / are they overstated / understated? Is it necessary to amend target values of indicators?

It is not necessary to amend the values of the individual indicators; the values are adjusted and planned in order to be achieved and to help evaluate the effectiveness of the funds used. The planned values are achievable (with exceptions listed in the previous answer).

10. Is reporting system used at MA and relevant to achieved values of indicators at priority level for EC working in an effective way?

Within the meaning of Article 67 of Council Regulation (EC) No 1083/2006 of 11 July 2006, MA is obligated to submit to the EC, by June 30 of a given calendar year, the Annual report on OPE implementation for the given period. Supporting documents for Annual reports are submitted also by the individual IBMAs as part of their half-year monitoring report. The reporting system of achieved values of indicators at priority level for EC is working in an effective way.

11. Is it necessary to make amendments to the OPE indicator system or to indicators? If yes, what amendments are needed?

If there is no need to justify to what extent OPE has contributed to the values of programme and NSF context indicators of, no changes to indicators are necessary. For these indicators, the values are clearly set, measurable, and specific and linked to the global objective and to specific objectives of priority axes and their measures.

7 Evaluation of indicators at project implementation level

7.1 Project indicators

Project indicators were selected based on priority themes which are relevant to OPE³.

Impact indicators are evaluated based on the monitoring of the main programme objectives.

They monitor the global objective, as well as main objectives of a programme.

Other than those which monitor the global objective and the main objectives, but with a long-term impact.

Result indicators are not specified in more detailed, since they are not as important as impact indicators but essential for calculation of certain impact indicators.

A detailed evaluation of project indicators appears in Annex no. 2 which recommends that 77 impact indicators be either discarded or reclassified, and 49 indicators be discarded. The evaluation has found out that 49 indicators are listed among both, result and impact indicators and those 11 indicators have the same wording. 45 indicators were identified as ambiguous while 6 indicators should be corrected due to formal errors, typos and other deficiencies.

Evaluation of project indicators:

Table no. 13

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
600	474	126	79% - satisfactory

A relatively high number of indicators rated 3 and 4 is, in most cases, not due to a wrong wording of an indicator but because they were classed among impact indicators. We suggest that 77 indicators be reclassified to result indicators and discarded from impact indicators. The indicators that we recommend to discard completely are mostly those that monitor rates. These indicators are calculated from the number of participants or successful graduates and are not relevant for project level, especially not in demand-driven projects.

³ The code-book of project indicators lists 600 indicators (347 impact indicators, 226 result indicators) relevant to projects submitted in OPE.

The definition for 'Number of successful graduates...' is not very good, either, since it is not clear what 'successful' really means: being successful on the labour market or successfully pass a training or an educational activity and receive a certificate.

7.2 Use of Project Indicators

The use of project indicators was evaluated based on an Excel sheet with a list of projects entered into ITMS, according to calls as of September 14, 2010. The table was generated from ITMS as a supporting document for this report. Selected data from this table (i.e. data relevant to OPE) are part of Annex no. 5.

By the above-mentioned date, only 36 indicators were used in contractual projects from all project indicators relevant to OPE.

The following indicators were used most often:

Number of employees involved in educational activities of the project (used in 487 projects) and Number of employees using project results after its termination (used in 429 projects)

The following indicators were used least often:

Number of men using project results, Number of organisations using project results (used in 2 projects) and Number of target group members involved in supported projects - people with disabilities (used in 1project).

The complete list of the indicators used is shown in Annex no. 5 in the 'Eliminated duplicities' list

The following irregularities have been found in evaluation:

It is up to CCA to correct these irregularities.

The Slovak wording of the indicator D.0.0.0.0.186.0005 ('Number of primary schools successful in repeated quality evaluation') has a spelling mistake.

The Slovak wording of the indicator SKIMP7016 ('Number of newly created / innovative education programmes used after project termination') has a spelling mistake.

12 duplicate indicators with the same definition (but different codes) were identified. The following indicators are duplicate: Number of employees involved in educational activities of the project (listed under the codes V.0.1.0.0.057.0010, SKRES7006), Number of employees using project results after its termination (listed under the codes D.0.0.0.0.050.0003,

SKIMP7012), Number of pupils/students involved in project implementation (listed under the codes V.0.0.0.0.064.0006, SKRES7031), Number of innovative / newly created educational materials (listed under the codes V.0.0.0.0.093.0002, SKRES7019), Number of newly created / innovative education programmes used after project termination (listed under the codes D.0.1.0.0.093.0003, SKIMP7016, D.0.0.0.0.093.0003), Number of users of new or innovative services (listed under the codes D.0.0.0.0.050.0001, SKIMP7004), Number of schools involved in project implementation (listed under the codes V.0.0.0.0.045.0006, SKRES7005), Number of schools using project results after its termination (listed under the codes D.0.0.0.0.044.0002, SKIMP7014), Number of employees who have successfully passed an educational programme (listed under the codes D.0.1.0.0.159.0013, SKIMP7013), Improvement in level of education expressed in percentage (listed under the codes D.0.0.0.0.207.0005, SKIMP7024), Number of employees involved in mobility programmes (listed under the codes V.0.0.0.0.057.0009, SKRES7007) and Number of introduced electronic services (listed under the codes V.1.0.1.0.092.0006, SKRES7016),

The indicator 'Number of newly created / innovative educational programmes and fields of study' is listed in ITMS under the code SKRES7004, while in the code-book it appears under the code V.0.1.0.0.098.0012.

The indicator 'Number of employees using project results after its termination' is listed in ITMS under the codes D.0.0.0.0.050.0003 and SKIMP7012, while in the code-book it appears under the codes V.0.0.0.0.050.0003 and D.0.1.0.0.050.0003.

The indicator 'Number of newly created / innovative education programmes used after project termination' is listed in ITMS under the codes D.0.1.0.0.093.0003, SKIMP7016 and D.0.0.0.0.093.0003 and, at the same time, it does not appear in the selection of code-book indicators relevant for OPE according to priority themes.

It is up to MA to correct these irregularities.

There is a difference between how many times indicators were used for men and women only. Given the fact they these indicators are of equal nature, they should be represented in projects for both, men and women. The following irregularities have been identified: Number of target group members involved in supported projects - men (used in 10 projects), Number of target group members involved in supported projects - women (used in 12 projects) and Number of men using project results (used in 2 projects), Number of women using project results (used in 4 projects).

7.3 Linkages between Project Indicators and Measure Indicators

Measure indicators are either output indicators or result indicators. Project indicators are either result indicators or impact indicators.

This fact should not have effect on the collection of cumulative values of indicators if correct project indicators that monitor required data are used (regardless of their classification).

The text of the Operational Programme 'Education' in the section 'Monitoring based on the Indicator System' states the following:

The objectives of NSF and the individual OP are defined and quantified through a process of programming based on physical and financial indicators (national system of indicators for NSF). The indicators will be binding for all bodies and they will be part of ITMS. Achieving given indicators is the most important tool used for monitoring and evaluation of OP and NSF objectives.

Monitoring begins at the lowest level - at project level. For the purposes of monitoring a project is the basic unit that is analysed based on the collected data relevant to it. The Contract to grant NRF from ESF states that the beneficiary is obligated to provide data for the purposes of project monitoring and reporting. Physical and financial project indicators provided by the beneficiary through unified monitoring sheets are reflected in ITMS and aggregated upwards to the level of measure, priority axis, OPE and NSF.

MA for OPE also monitors the data regarding the distribution of allocated funds according to target groups, in compliance with Annex XXIII of the implementation regulation. Namely, the following data is monitored:

- number of participants per year;
- classification of participants according to their gender;
- classification of participants according to their position in the labour market;
- classification of participants according to their age;
- classification of participants according to vulnerability groups in accordance with national legislation;
- classification of participants according to their level of education.

The above-mentioned information clearly shows that there is a need to monitor the number of participants in projects according to target groups.

The linkage between relevant project indicators (those that have been used and those that are listed in the code-book and have not been used, yet) and measure indicators is shown in Annex no. 7.

Linkages between indicators for measure 1.1

Five indicators were identified for measure 1.1.

Two indicators, namely 'Schools successful in repeated quality evaluation, out of which primary schools, high schools (result)' and 'The number of trainings for teaching staff (output)' are linked well to project indicators and can be accurately cumulated.

The other three indicators can be cumulated but it is difficult to cumulate their values according to target groups.

For the indicator titled 'Employment prospects for high-school graduates, out of which according to gender (women, men), according to position in the labour market (inactive persons - students, vocational training participants, employees) (result)' no indicator has been used in projects, yet. In order to enable monitoring of this indicator, it is necessary to monitor it through the indicator 'Number of successful graduates...'. However, it is necessary to amend these indicators or to divide them into 'Number of successful graduates.... on the labour market' and 'Number of successful graduates in educational activities'. It is also difficult to monitor the indicator at high schools only, since it is necessary to monitor it through the individual projects that were approved for high schools, in order to set them apart from projects at elementary schools. It is also necessary to monitor the indicator 'Number of pupils/students involved in project implementation (result)' for the individual target groups, so that the success rate in placement can be calculated.

The indicator 'Number of newly created educational programmes, out of which elementary and high schools, (output)' will be difficult to quantify, since it only monitors newly established programmes, while the project indicators used include innovated programmes, too. It will also be necessary to distinguish projects between those implemented at elementary schools and high schools. For the future, it is recommended that indicators that measure directly the desired values are used: 'Number of newly created educational programmes for high schools (V.0.0.0.0.098.0015)' and 'Number of newly created educational programmes for primary schools (V.0.0.0.0.098.0016)'

The indicator 'Number of teaching staff members who participated in further education programmes, out of which according to gender (men, women), according to age: aged 15-24, aged 55-64 (output)' will be difficult to quantify, since the relevant values in given categories are not measured. In order to monitor required values, it will be necessary to use the indicator 'Number of successful graduates...' See commentary regarding the indicator 'Employment prospects for high-school graduates, out of which according to gender (women, men),

according to position in the labour market (inactive persons - students, vocational training participants, employees) (result)'.

Linkages between indicators for measure 1.2

Eight indicators were identified for measure 1.2.

Five indicators, namely, 'Share of partnerships and development and innovation networks still in existence after the termination of OPE support (result)', 'Share of university graduates placed on the labour market (result)', 'Number of newly created educational programmes (output)', 'Number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS) (output)' and 'Number of partnerships and networks in research and innovations funded by OPE (output)' are linked well to project indicators and can be accurately cumulated.

Four indicators were not linked to projects and one indicator, namely 'Number of newly created educational programmes (output)' is already linked to projects through the indicator 'Number of newly created fields of study (result)'.

The indicator 'Share of universities that have increased their effectiveness and management quality through OPE (result)' will not be possible to monitor since the code-book of indicators does not list any project indicator that would measure numbers of universities offering management education⁴.

The indicator 'Share of research and development staff participating in further education out of which according to gender (men, women), according to age: aged 15-24, aged 55-64 (output)' will not be possible to monitor according to target groups. The indicators used so far do not monitor this. In order to monitor this, it would be necessary to use the indicator 'Number of successful graduates...'. See commentary regarding the indicator 'Employment prospects for high-school graduates, out of which according to gender (women, men), according to position in the labour market (inactive persons - students, vocational training participants, employees) (result)' in measure 1.1.

The indicator 'Share of research and development staff involved in international research projects (output)' is difficult to monitor, since it does not have any relevant project indicator⁵.

Linkages between indicators for measure 2.1

Four indicators were identified for measure 2.1.

Two indicators, namely 'Share of networks created during trainings for regions that are still in existence after the termination of OPE support (result)' and 'Number of newly created networks created during trainings for regions (output)' are linked well to project indicators

⁴ The required indicator was added to the code-book during the preparation of a call related to measure 1.2 and published on December 31, 2010.

⁵ The required indicator was added to the code-book during the preparation of a call related to measure 1.2 and published on December 31, 2010.

and can be accurately cumulated. Both indicators are linked, and the indicator of share will be calculated based on the indicator of number.

The indicator 'Number of supported further education programmes (output) does not present any difficulties.

The indicator 'Number of trainers who participated in further education programmes, out of which according to gender (men, women), according to age: aged 15-24, aged 55-64 (result)' is possible to measure but it will be difficult to monitor the categories of persons, since project indicators are not designed to monitor them in more detail.

Linkages between indicators for measure 2.2

Three indicators were identified for measure 2.2.

One indicator, namely 'Share of training programmes for further education of medical personnel (output)' is not difficult to monitor through project indicators.

The indicators 'Share of medical staff who remained in health system after completing further education programmes, out of which according to gender (women, men), according to age: aged 15-24, aged 55-64 (result)' and 'Share of medical staff who participated in further education programmes for medical personnel, out of which according to gender (women, men), according to age: aged 15-24, aged 55-64 (output)' is possible to measure but it will be difficult to monitor the categories of persons, since project indicators are not designed to monitor them in more detail.

Linkages between indicators for measure 3.1

Four indicators were identified for measure 2.1.

Two indicators, namely 'Number of pupils from MRC involved in educational programmes, out of which according to gender (women, men) (output)' and 'Number of formal education programmes for pupils from MRC (output)' are linked well to project indicators and can be accurately cumulated.

The indicators 'The share of placed graduates of formal education programmes for members of MRC, out of which according to gender (women, men), according to position in the labour market: inactive persons - students, vocational training participants (result)' and 'The share of placed graduates of further education programmes for members of MRC, out of which according to gender (women, men), according to age: aged 15-24, aged 55-64, according to level of education attained: primary education or lower secondary education (ISCED 1 and 2), upper secondary education (ISCED 3) (result)' is possible to measure but it will be difficult to

monitor the categories of persons, since project indicators are not designed to monitor them in more detail.

Linkages between indicators for measure 3.2

Six indicators were identified for measure 3.2.

Two indicators, namely 'Number of formal education programmes for pupils from SDE and pupils with special needs (output)' and 'Number of further education programmes for persons involved in social inclusion programmes for persons with special needs (output)' are linked well to project indicators and can be accurately cumulated.

The other 4 indicators (two measuring the share, two measuring the number) can be measured but it will be difficult to monitor the categories of persons, since project indicators are not designed to monitor them in more detail.

Linkages between indicators for measure 4.1

Four indicators were identified for measure 2.1.

Two indicators, namely 'Schools successful in repeated quality evaluation, out of which primary schools, high schools (result)' and 'The number of trainings for teaching staff (output)' are linked well to project indicators and can be accurately cumulated.

The indicator 'The number of newly created educational programmes, out of which primary schools and high schools (output)' will be difficult to quantify, since it only monitors newly established programmes, while the project indicators used include innovated programmes, too. It will also be necessary to distinguish projects between those implemented at elementary schools and high schools. For the future, it is recommended that indicators that measure directly the desired values are used: 'Number of newly created educational programmes for high schools (V.0.0.0.0.098.0015)' and 'Number of newly created educational programmes for primary schools (V.0.0.0.0.098.0016)'

The indicator 'Number of teaching staff members who participated in further education programmes, out of which according to gender (men, women), according to age: aged 15-24, aged 55-64 (output)' is possible to measure but it will be difficult to monitor the categories of persons, since project indicators are not designed to monitor them in more detail.

Linkages between indicators for measure 4.2

Six indicators were identified for measure 3.2.

Two indicators, namely 'Share of partnerships and development and innovation networks still in existence after the termination of OPE support (result)' and 'Number of partnerships and networks in research and innovations funded by OPE (output)' are linked well to project indicators and can be accurately cumulated. Both indicators are linked, and the indicator of share will be calculated based on the indicator of number.

The indicator 'Number of projects to support human resources in centres of excellence at universities and at the Slovak Academy of Sciences (SAS) (output)' does not present any problems.

The indicator 'Number of newly created educational programmes (output)' will be difficult to quantify, since it only monitors newly established programmes, while the project indicators used include innovated programmes, too.

The indicator 'Share of research and development staff participating in further education out of which according to gender (men, women), according to age: aged 15-24, aged 55-64 (output)' will not be possible to monitor according to target groups. The indicators used so far do not monitor this.

The indicator 'Share of research and development staff involved in international research projects (output)' is difficult to monitor, since it does not have any relevant project indicator.

Overall, it can be stated that:

- 20 indicators can be easily monitored
- 20 indicators will be difficult to monitor

Monitoring is difficult mainly because the project indicators used so far have not been adapted to more detailed monitoring of target groups.

It is possible to monitor numbers of project participants only through monitoring reports which are obligatory for the beneficiary. MA can request such data also ex-post and require it for the future.

Answers to evaluation questions

1. Do indicators at programme level (priority axis, measure) have indicators at project level defined in such a way that the final value can be calculated? What are the main problems when aggregating values of indicators from project level to programme level?

If the indicators 'Number of successful graduates...' are amended or divided into 'Number of successful graduates ... on the labour market' and 'Number of successful graduates ... in educational activities', it will be possible to calculate the final value of indicators. The indicators used so far, as they are now defined, do not make it possible to monitor almost half of measure indicators.

The indicators will be defined in the code-book in such a way as to make it possible to monitor cumulative values.

The main problem is to monitor cumulative values according to the individual categories.

2. Are the indicators in projects/ contracts linked to the objectives of a given call / direct award?

The indicators in projects/ contracts are linked to the objectives of a given call / direct award. See Annex no. 8 that shows linkages between project indicators on a sample of calls.

3. Does MA have a system for the collection of data regarding target groups, in accordance to the Annex no. XXIII of the implementation regulation?

Data collection according to Annex no. XXIII of the implementation regulation was first ensured by quarterly monitoring reports submitted by beneficiaries. In 2010 it was found out that required the data listed in the form as part of the monitoring report (the standard for which is published by CCA) was not processed adequately. MA asked CCA to amend the table. CCA decided to take out the table from the monitoring report and to submit information regarding target groups as a separate report titled 'Information on participants' which was introduced from version 4.1 of the SF and CF Management system. The report monitors categories required by Annex XXIII of the implementation regulation.

4. Is the system for data reporting from IBMA regarding contractual project indicators aggregated to programme level effective?

The system for reporting data from IBMA regarding contractual project indicators is effective.

8 Evaluation of indicators at the level of preparation of calls for AfNRF and direct awards

Indicators relevant to a call / direct award are defined in a special annex to a call / direct award. Indicators that applicants for NRF can use are entered directly into ITMS. When filling in the AfNRF, applicants select indicators that are suitable for their project.

Numbers of used indicators per individual measures as they were generated from ITMS.

Table no. 14

Measure	Number of used indicators
1.1	24
1.2	12
2.1	11
2.2	7
3.1	14
3.2	20
4.1	20
4.2	14

Source: Spread sheet generated by ITMS as of September 14, 2010 and Annex no. 6 of this report

Annex no. 6 lists project indicators used according to the individual measures and for the whole programme.

It is clear that both, MA and IBMA are making an effort to unify the use of project indicators.

Project indicators used so far in calls / direct awards that are not suitable for monitoring certain categories of persons involved in a project (See Annex no.6). Given the links between used project indicators and measure indicators listed in Annex no. 7, it will be possible to monitor cumulative values per measure as a whole. In order to monitor the individual categories of persons involved, it will be necessary to use a separate report titled 'Information about Participants'.

It will be possible to monitor total values of participants / successful graduates by adding the values of indicators that express numbers of persons involved in individual calls for a measure. However, it will not be possible to divide them into target groups.

We believe that one call should include projects for both, primary schools and high schools. In order to get total values for the individual types of schools, it will be necessary to check projects for one call and manually select them from the rest.

There are no indicators that would allow, by their definition, to separate different types of schools.

Separate calls for primary and secondary schools would make it possible to more easily get cumulative results needed for evaluation of measure indicators.

Answers to evaluation questions

1. Are the indicators defined in calls / direct awards relevant to the given call / DA?

The indicators defined in calls / direct awards are relevant to the given call / DA.

2. Are the indicators defined in calls / direct awards suitable for monitoring the given objectives of a call / direct award and their project objectives?

The indicators are suitable to monitor the given objectives. It will only be possible to get total values per call but not values for a more specific division according to categories required by the definition of measure indicators.

3. Can an applicant select an indicator outside a current call/ DA? If yes, what is the correction mechanism?

When defining a call and its indicators in the current ITMS set-up, the ITMS administrator assigns the call only to a priority theme and a measure. ITMS allows an applicant, who is submitting an AfNRF through the public portal, to select all project indicators from a relevant priority theme.

It is important to restrict the list of available indicators in the ITMS to those required by a call, so that an applicant does not include other indicators in his/her AfNRF.

4. Are the current definitions of indicators defined well/ in a comprehensive way for applicants / beneficiaries / MA/ IBMA?

The definitions of indicators are evaluated as satisfactory. Their wording is clear and comprehensible for the most part.

We suggest that indicators such as 'Number of successful graduates...'. be clarified. It would be useful to divide these indicators into 'Number of successful graduates.... on the labour market' and 'Number of successful graduates in educational activities'. Thus it will be possible to calculate the final value of indicators according to monitored groups the way it is stated in the definitions of measure indicators.

5. Are indicators from an application for NRF always incorporated into the Contract to grant NRF?

Yes, indicators from an application for NRF are always incorporated into the Contract to grant NRF.

9 Evaluation of Indicators in ITMS

Project indicators and their use are described in the CCA Guideline no. 3 regarding the creation and usage of project indicators and their introduction into ITMS 2007-2013, update no. 2. The Guideline also stipulates how the indicators can be updated in ITMS. A more detailed description of project indicators for OPE, listed in the ITMS database, can be found in Annex no. 6 of this report.

ITMS can be analysed from three points of view:

- Usage of ITMS by applicants
- Usage of ITMS by evaluators
- Usage of ITMS by MA and IBMA

Usage of ITMS by applicants

Introducing automatic submission of AfNRF through ITMS is considered beneficial from the point of selection of indicators. Project indicators are listed in table no. 12 and 15 of AfNRF (indicators of horizontal priorities). At the same time, the programme requires that the data from the table no. 15 be copied into the table no. 12; otherwise, it does not allow AfNRF be sent into the data centre.

We consider extremely important (from the point of follow-up checks) that an applicant should have an opportunity to select indicators only from pre-defined options when putting in indicators.

We suggest the following amendments:

It is pointless to manually copy the data from the table no. 14 to the table no. 12. If it is necessary for processing at the data centre, we suggest that HP indicators be automatically copied into Table no. 12 (e.g. when submitting an application). It is up to CCA to deal with this issue.

Sometimes it happens that it is not possible to select any indicator or that the list of available indicators is limited. This is due to technical problems with the equipment used. We suggest that, in cooperation with CCA, a thorough analysis be carried out to examine these problems and, if necessary, technical equipment be modernised.

It is important to restrict the list of available indicators in the ITMS to those required by a call, so that an applicant does not include other indicators in his/her AfNRF.

Usage of ITMS by evaluators

Evaluators examined the indicators entered into ITMS and their values in ITMS. It is practically impossible to generate a single spread sheet with indicators of calls and project indicators linked to them. It is only possible to search or to show indicators for individual projects, which would be too ineffective and time-consuming, since there are tens of projects. When trying to get the above-mentioned data in an interactive way, response-time is very long. The system of access rights does not allow getting information regarding all calls.

The evaluators, helped by MA employees, got the relevant data through a request to the data-centre, presented in an Excel sheet that contained 75,194 lines. When duplicates and data regarding other operational programmes were eliminated, the spread sheet contained 3,289 lines.

Data collected and 'cleaned up' regarding project indicators are listed in Annex no. 5. The annex also shows formal errors (typos) and duplicates that were identified. They are described in more detail in section 7.2 Use of Project Indicators.

We suggest the following amendments:

For the purpose of evaluation, the current version of ITMS is only useful in a very limited way. For further use, we suggest that a user guide for evaluators be created on how to get required data in the current software that would help generate, by a simple selection, the most frequent spread sheets, statistical lists and selections. It will decrease the workload for the employees at the data centre, eliminate delays when requesting data and, most importantly, evaluators will have more time for evaluation. It is up to CCA to deal with this issue.

To correct errors in project indicators entered in ITMS (to eliminate duplicate result and impact indicators and other irregularities according to Annex no.2) It is up to CCA to deal with this issue.

Usage of ITMS by MA and IBMA

According to MA and IBMA employees, ITMS does work fully as it should.

Using a filter, it is possible to view a code of an indicator and all projects that contain this indicator. At the same time, it is possible to filter the list according to call code - and then to identify relatively accurately the number of indicators per call. ITMS cannot, however, view these values in parallel. This is considered to be the biggest deficiency in OP evaluation at project level.

Another problem is late updates of data in ITMS. MA then does not have up-to-date data and its employees have to collect them 'manually'. This is also due to the fact that IBMA employees have a certain time allowance to process data.

Answers to evaluation questions

1. Does ITMS allow collecting data (values of indicators) from monitoring reports? If not, has MA/IBMA adopted an alternative mechanism for data collection?

Yes, ITMS allows collecting data (values of indicators) from monitoring reports.

2. Is the list of indicators (code-book) on the public ITMS portal transparent and relevant?

The list of indicators (code-book) on the public ITMS portal is transparent and relevant.

3. Is each framework activity of OP assigned a suitable indicator in the code-book?

Most framework activities are assigned suitable indicators in the code-book.

The following framework activities present certain problems during monitoring:

Facilitating the access to further education (2.1), Promoting diversification of funding granted to Further education (2.1), Improving the permeability between formal, non-formal and informal forms of education (2.1).

4. Are the employees skilled enough to fulfil the tasks related to monitoring and reporting? How could their skills be enhanced?

In our view, the employees are skilled enough to fulfil the tasks related to monitoring and reporting. The answer to this question stems only from personal interviews with the relevant MA and IBMA employees. A more precise and in-depth answer could be based on an evaluation report on administrative effectiveness.

5. Does ITMS enable to reliably enter and save achieved values of indicators?

ITMS enables to reliably enter and save achieved values of indicators. The user must keep the time limit (15 minutes), after which the system logs him/her out without storing any data.

6. Does ITMS enable monitoring of measurable indicators through analytical inputs? Does ITMS enable data to be aggregated to a higher level?

ITMS does not enable monitoring and data aggregation to a required level. (See the section 'Usage of ITMS by MA and IBMA').

10 Evaluation of the Cooperation between CCA and HP Coordinators during the Preparation and Use of Indicators

Cooperation, duties, competencies of MA, CCA and HP coordinators are described especially in systems of implementation coordination for the individual horizontal priorities and the Programme manual for OPE, part 2. Horizontal priorities.

The system for updating indicators and responsibilities of stakeholders are described in the CCA Guideline no. 3 regarding the creation and usage of project indicators and their introduction into ITMS 2007-2013, update no. 2

The evaluation is described in Annual reports on OPE implementation and in Annual reports for horizontal priorities which also point to irregularities identified.

MA is a member of 4 working groups for the individual HP: HP 'Marginalised Roma Communities' (HP MRC), HP 'Equal Opportunities' (HP EO), HP 'Information Society' (HP IS) and HP 'Sustainable Development' (HP SD).

Given the information stated in annual reports, it can be stated that coordination of activities and cooperation takes place in working groups for the individual HP. Working groups meet as needed and solve problems that occur in implementation.

Monitoring at programme level as identified the following deficiency:

From the beginning of 2009, when announcing direct awards for national projects and calls for demand-driven projects, MA and IBMA followed the CCA Guideline no. 3 regarding the creation and usage of project indicators and their introduction into ITMS 2007-2013 which took effect on December 1, 2008.

A major change that the Guidance has brought, is the declaration of contribution of projects to HP. Based on the written opinion from CCA (letter no. MVRP-2008-9923/72974-76), the rule described in point 13, letter h) of the Guidance 'Projects that declare contribution towards the achievement of HP objectives must use at least one result indicator relevant to the HP in ITMS', started to be applied for calls published after the date of publication of the Guidance, i.e. after December 1, 2008.

For this reason, projects with contracts concluded for calls and direct awards published before December 1, 2008 did not have to have a contractual indicator relevant to HP despite the fact that an applicant in his/her AfNRF declared a contribution to HP and selected an indicator relevant to HP.

During 2009 intensive communication took place between CCA, IBMA AMESRS and IBMA MHSR regarding the preparation of project indicators for the purposes of calls and direct

awards for national projects. Final version of project indicators, as well as each call and its annex was approved by MA. On a rolling basis and as needed, in compliance with Guidance no. 3, requests from MA were sent to CCA to amend the code-book of indicators in ITMS (to add new indicators or to assign existing indicators to priority themes relevant to OPE). CCA accepted all submitted requests to amend the code-book of indicators in ITMS.

In cooperation with coordinators of HP, CCA received requests to assign relevancy to existing indicators in the code-book for HP.

In 2009 an amendment was made to the file of indicators at OPE level, carried out in order to ensure that indicators are in compliance with monitored categories defined in Annex no. 5 of OPE, beyond the Annex XXIII of the implementation regulation (more information regarding the adoption of Annex no. 5 for OPE can be found in Chapter 2.7.1.3 of the Annual Report for 2009).

In 2009 CCA initiated an amendment to Annex no. 9 of NSF (indicators in relation to strategic objectives) and Annex no. 13 of NSF (indicators in relation to GDP) and a related amendment to indicators in the individual Systems of HP coordination and implementation.

In the second half of 2010, MA initiated an amendment to the result indicator relevant to HP into contracts and requested CCA to eliminate in ITMS relevancies of projects to HP.

The above-mentioned information shows that the CCA Guideline no. 3 should have been published earlier, before the first call was published. The delay caused inaccuracies in the set-up of obligatory indicators. It took several months to remedy this and caused additional workload for employees concerned.

Answers to evaluation questions

1. Are CCA guidelines published in a timely manner when it comes to the methodology of indicators and their reporting? Are they clear and comprehensible?

Given the problems with late publication with the CCA guideline no. 3, it can be concluded that guidelines are not published in a timely manner. The guidelines are written in a clear and comprehensible way.

2. Do CCA and HP coordinators offer trainings to MA and IBMA regarding monitoring and reporting of indicators?

Based on the data gathered from the Annual reports for the individual HP, it is possible to conclude that trainings on monitoring and reporting of indicators were carried out only for HP IS and HP SD. Most of the trainings were focused on more general areas, such as enhancing skills and improving the management system.

In order to improve the quality and the effectiveness in the area of monitoring and management, the employees coordinating the implementation of the individual HP took part in planned trainings listed in an annex to the Internal manual of procedures for trainings carried out by CCA, such as: updating the SF and CF Management System for the programming period 2007-2013, updating the SF and CF Financial Management System for the programming period 2007-2013, communication training, public speaking and presentations for the implementation of SF and CF, public procurement, evaluation in the public sector, Act no. 523/2004 J. of L. on the budgetary rules of public administration within the terms and conditions for SF and CF.

The data from Annual reports regarding HP show that, within the Technical Assistance, trainings were organised for MA and IBMA employees, on raising the awareness regarding equal opportunities in SF and CF. In 2009 the coordinator of HP EO published two user guides that were distributed to the competent bodies involved in the implementation of HP EO. Moreover, trainings titled Equal opportunities in SF were organised. Within the Technical Assistance - HP Information Society, HP Sustainable Development, trainings on monitoring and evaluation. were organised for MA/IBMA. Within the Technical Assistance HP MRC, educational activities in the area of SF and CF management and implementation were carried out (CCA, MA, HP coordinators).

3. Do HP coordinators offer guidance to MA and IBMA regarding indicators?

HP coordinators cooperate with MA and IBMA mostly in working groups for HP which can be seen as guidance.

4. Does CCA respond in a timely manner to requests and suggestions from MA regarding the need to improve monitoring of indicators?

It can be concluded that CCA did not always respond in a timely manner to requests from MA. Two problems in particular impaired the effectiveness of MA, namely reporting relevancies of projects to HP and a long process of amending relevancies to HP in ITMS.

5. Is the cooperation between MA and HP coordinators effective? Does their cooperation fulfil all the needs and requirements of MA?

Yes.

6. Is the cooperation between CCA, HP coordinators and MA effective? Does CCA and HP coordinators respond in a timely manner to the needs of MA when monitoring HP, i.e. are problematic areas solved well in advance?

The findings and the data from the 2009 Annual report on OPE implementation show that the cooperation is not always effective. CCA and HP coordinators do not always respond to the needs of MA in a timely manner. (For example, problems with the late publication of the CCA Guideline no. 3)

7. Do HP coordinators offer required help to the MA employees responsible for HP? Do HP coordinators act jointly when solving issues?

HP coordinators have their own responsibilities and competencies described in Coordination systems for the implementation of horizontal priorities. Coordinators act jointly when fulfilling their responsibilities. Given the active participation of parties involved in working groups for HP, it can be concluded that HP coordinators mostly act jointly when solving issues.

11 Evaluation of the System of HP indicators

Analysis of status quo

National Strategic Framework of the Slovak Republic for 2007-2013 defines four horizontal priorities that affect its objectives in a complementary way. Horizontal priorities are cross-sectional themes relevant to all priorities; they are respected in all projects / groups of projects of operational programmes regardless of a theme or a region in question. The objectives of horizontal priorities cannot be ensured only through one operational programme but require a coordinated approach across several specific priorities. Four HP were defined for NSF:

- Marginalised Roma Communities (MRC)
- Equal Opportunities (EO)
- Sustainable Development (SD)
- Information Society (IS)

The aim of each horizontal priority is to ensure that their defined objectives, related to several NSF priorities, are met. The objectives cannot be achieved only through one operational programme but require a coordinated approach across several specific priorities or projects.

All horizontal priorities are reflected in operational programmes and are centrally coordinated by the individual sponsors of horizontal priorities. Operational programme Technical Assistance will finance activities of HP coordinators within the scope of funds allocated to horizontal priorities of priority axis 1 titled 'Preparation, management, provision of information and strengthening administrative capacities in the area of structural funds and the Cohesion fund.'

HP Objectives

The objective of HP MRC is to increase the employment, level of education and living conditions of MRC members.

The objective of HP EO is to ensure equal opportunities for all and to prevent all forms of discrimination.

The objective of HP SD is to ensure that the final effect of all interventions financed under the NSF is to promote sustainable development in all its components, i.e. in the environmental, economic and social component, in accordance with the objectives and indicators of the renewed EU Sustainable Development Strategy.

The objective of HP IS is to promote greater effectiveness, transparency and quality of implementation of NSF priorities through the introduction and use of ICT.

Evaluation of indicators according to horizontal priorities

Indicators for Horizontal priority Sustainable Development

Table no. 15

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
14	14	0	100 % - highly satisfactory

Indicators for Information Society HP

Table no. 16

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
10	10	0	100% - highly satisfactory

Indicators for Marginalized Roma Communities HP:

Table no. 17

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
6	6	0	100 % - highly satisfactory

Indicators for Equal Opportunities HP

Table no. 18

Number of indicators	Number of indicators with a grade of 1 and 2	Number of indicators with a grade of 3 and 4	Evaluation
11	11	0	100 % - highly satisfactory

Measurable indicators of horizontal priorities of OP 'Education' is rated as highly satisfactory; the indicators are measurable, specific, achievable and in compliance with the objectives of OPE, NSF and SCI HP.

Answers to evaluation questions

1. Are the indicators of all HP applied universally in all direct awards and calls (especially indicators at result level)?

It can be concluded that HP indicators at result level are applied in all direct awards and calls.

2. Do all contracts concluded after the Update no. 1 of the CCA Guideline no. 3 took effect contain at least one result HP indicator in case that an applicant selected it when submitting an AfNRF and the project was evaluated as one having a contribution to HP?

From the beginning of 2009, when announcing direct awards for national projects and calls for demand-driven projects, MA and IBMA followed the CCA Guideline no. 3 regarding the creation and usage of project indicators and their introduction into ITMS 2007-2013 which took effect on December 1, 2008. The Guidance brought a major change to the declaration of a project's contribution to HP. Based on the written opinion from CCA (letter no. MVRR-2008-9923/72974-76), the rule described in point 13, letter h) of the Guidance 'Projects that declare contribution towards the achievement of HP objectives must use at least one result indicator relevant to the HP in ITMS', started to be applied for calls published after the date of publication of the Guidance, i.e. after December 1, 2008. For this reason, projects with contracts concluded for calls and direct awards published before December 1, 2008 did not have to have a contractual indicator relevant to HP despite the fact that an applicant in his/her AfNRF declared a contribution to HP and selected an indicator relevant to HP. In the second half of 2010, MA initiated an amendment to the result indicator relevant to HP into contracts and requested CCA to eliminate in ITMS relevancies of projects to HP.

It can be concluded that all contracts concluded for projects from calls / direct awards / written calls published after the Guidance took effect contain at least one relevant result indicator for a given HP (when there is a relevancy to HP).

3. Do IBMA regularly provide information to MA regarding contractual HP indicators?

Given the problems identified during the collection of data regarding achieved values of indicators and their aggregation from project level to programme level (measure and priority axis level), a mechanism was adopted by a MA guidance to send achieved values of indicators from IBMA to MA. MA has a table containing linkages between indicators used at project level and indicators used at measure and priority axis level.

The table is updated (based on current files and contracts concluded at IBMA) and send back from MA to IBMA to be used for submitting the data for half-year monitoring reports from IBMA.

Therefore, yes, IBMA regularly provides information to MA regarding contractual HP indicators. When solving issues regarding changes in implementation and indicators, representatives from MA and IBMA meet on a regular, bi-weekly basis, to share information regarding the status quo of implementation and issues that have arisen.

4. Are HP indicators properly set for the needs of monitoring by MA/IBMA or HP coordinators?

The indicators of the individual HP are in accordance with the objectives of the individual HP; they are specific, achievable, and measurable and are properly set for monitoring needs.

5. Is the linkage of HP indicators at project levels to HP indicators at SCI HP and NSF level clearly defined?

The objective of HP MRC defined in NSF is to increase the employment, level of education and living conditions of MRC members. In the OP 'Education', HP MRC is implemented mainly through the specific objective titled 'Education and vocational training' of the System of coordination of implementation of Horizontal Priority MRC. NSF and HP MRC focuses mostly on the effectiveness and sustainability of implemented activities, mainstreaming, and the overall implementation of the individual measures. The main objective of HP 'Equal Opportunities' is, according to Chapter 4.3.5 of NSF, 'to ensure equal opportunities for all and to prevent all forms of discrimination'. The objective of OP 'Education' is to eliminate barriers leading to isolation and exclusion of individuals from public, social and work life. OPE achieves this objective by following the specific objectives of the System of coordination of implementation of Horizontal Priority 'Equal Opportunities'. The main objective of HP 'Sustainable Development' defined in Chapter 4.3.5 of NSF is to 'ensure that the final effect of all interventions financed under the NSF is to promote sustainable development in all its components, i.e. in the environmental, economic and social component, in accordance with the objectives and indicators of the renewed EU Sustainable Development Strategy.' OP 'Education', within priority axes 1-4 contributes to the achievement of the following specific and partial objectives of HP SD defined in the System of coordination of implementation of HP SD: increasing economic prosperity (promoting research, development and education), social solidarity and inclusion (decreasing unemployment, empowering disadvantaged and marginalised groups of population, ensuring public health protection). The main objective of HP 'Information Society' stated in Chapter 4.3.5 of NSF is 'Promoting

greater effectiveness, transparency and quality of implementation of NSF priorities through the introduction and use of ICT'. This objective is achieved, within priority axes 1-4 of OPE, through the introduction and use of ICT in project activities. OPE fulfils this objective by following the specific objectives of SCI HP 'Information Society'. Therefore, it can be concluded that the linkage of HP indicators at project levels is in accordance with HP indicators at SCI HP and NSF level. A more detailed assessment of indicators is listed in Annex no. 9.

12 Irregularities and Recommendations

Responsibilities of MA

1. If values of indicators of NSF for OPE are to be measured according to the Eurostat methodology, it will not be possible to identify the exact contribution of a program to values of NSF indicators for OPE.

Recommendation:

To calculate the indicator 'Human resources expenditure (total public expenditure on education) as a GDP share' as follows:

The sum of costs for individual educational projects implemented for OPE per year / Total sum of GDP per year * 100

To calculate the indicator 'Share of population participating in life-long learning in 100 aged 25 – 64' as follows:

The sum of persons aged 25-64 involved in educational activities in the individual OPE projects per year / The total number of citizens of SR aged 25-64 per year *100

In order to establish the contribution of OPE to values of NSF indicators for OPE, it is necessary to monitor indicators that monitor financial value of educational projects and the number of persons aged 25-64 who participated in educational activities of projects.

2. It will be difficult to evaluate the effect of OPE on the values of context indicators. It is possible to assess the change in values of context indicators for the whole of Slovakia or for its regions but it is not possible to identify to what extent OPE has contributed to them.

Recommendation:

It would be useful to include a question whether a respondent participated in OPE activities in questionnaires used in Eurostat surveys to evaluate the context indicator titled 'Share of population participating in life-long learning in 100 aged 25 – 64'. It is, however, not up to MA to create Eurostat questionnaires.

3. During the evaluation of measurability of measure indicators through project indicators, the following has been identified:

- 20 indicators can be easily monitored
- 20 indicators will be difficult to monitor⁶

Monitoring is difficult mainly because project indicators are not used to monitor target groups in more detail.

Recommendation:

Monitoring the number of participants in projects according to target groups is currently possible through 'Information about Participants', obligatory for beneficiaries.

When the indicators 'Number of successful graduates...' are amended or divided into 'Number of successful graduates ... on the labour market' and 'Number of successful graduates ... in educational activities', it will be possible to calculate the final value of indicators according to target groups also through project indicators.

⁶ Project indicators linked to indicators of measure 1.2 'Share of universities that have increased their effectiveness and management quality through OPE (result)' and 'Share of research and development staff involved in international research projects (output)' were added to the code-book during the preparation of the call published on December 31, 2010, related to measure 1.2.

Responsibility of CCA

1. It is necessary to amend indicators listed in the code-book of project indicators.

Recommendation:

A more detailed evaluation is listed in Annex no. 2. It contains the irregularities identified and the recommendations to eliminate them. A relatively high number of indicators rated 3 and 4 is, in most cases, not due to a wrong wording of an indicator but because they were classed among impact indicators. We suggest that 77 indicators be reclassified to result indicators and discarded from impact indicators. The indicators that we recommend to discard completely are mostly those that monitor rates. These indicators are calculated from the number of participants or successful graduates and are not relevant for project level, especially not in demand-driven projects. The same indicator was classified both as a result and an impact indicator.

2. The following irregularities were identified in projects during the evaluation:

The Slovak wording of the indicator D.0.0.0.0.186.0005 ('Number of primary schools successful in repeated quality evaluation') has a spelling mistake.

The Slovak wording of the indicator SKIMP7016 ('Number of newly created / innovative education programmes used after project termination') has a spelling mistake.

12 duplicate indicators with the same definition (but different codes) were identified. The following indicators are duplicate: Number of employees involved in educational activities of the project (listed under the codes V.0.1.0.0.057.0010, SKRES7006), Number of employees using project results after its termination (listed under the codes D.0.0.0.0.050.0003, SKIMP7012), Number of pupils/students involved in project implementation (listed under the codes V.0.0.0.0.064.0006, SKRES7031), Number of innovative / newly created educational materials (listed under the codes V.0.0.0.0.093.0002, SKRES7019), Number of newly created / innovative education programmes used after project termination (listed under the codes D.0.1.0.0.093.0003, SKIMP7016, D.0.0.0.0.093.0003), Number of users of new or innovative services (listed under the codes D.0.0.0.0.050.0001, SKIMP7004), Number of schools involved in project implementation (listed under the codes V.0.0.0.0.045.0006, SKRES7005), Number of schools using project results after its termination (listed under the codes D.0.0.0.0.044.0002, SKIMP7014), Number of employees who have successfully passed an educational programme (listed under the codes D.0.1.0.0.159.0013, SKIMP7013), Improvement in level of education expressed in percentage (listed under the codes D.0.0.0.0.207.0005, SKIMP7024), Number of employees involved in mobility

programmes (listed under the codes V.0.0.0.0.057.0009, SKRES7007) and Number of introduced electronic services (listed under the codes V.1.0.1.0.092.0006, SKRES7016),

There is a difference between how many times indicators were used for men and women only. Given the fact that these indicators are of equal nature, they should be represented in projects for both, men and women. The following irregularities have been identified: Number of target group members involved in supported projects - men (used in 10 projects), Number of target group members involved in supported projects - women (used in 12 projects) and Number of men using project results (used in 2 projects), Number of women using project results (used in 4 projects).

The indicator 'Number of newly created / innovative educational programmes and fields of study' is listed in ITMS under the code SKRES7004, while in the code-book it appears under the code V.0.1.0.0.098.0012.

The indicator 'Number of employees using project results after its termination' is listed in ITMS under the codes D.0.0.0.0.050.0003 and SKIMP7012, while in the code-book it appears under the codes V.0.0.0.0.050.0003 and D.0.1.0.0.050.0003.

The indicator 'Number of newly created / innovative education programmes used after project termination' is listed in ITMS under the codes D.0.1.0.0.093.0003, SKIMP7016 and D.0.0.0.0.093.0003 and, at the same time, it does not appear in the selection of code-book indicators relevant for OPE according to priority themes.

Recommendation:

To correct formal errors and typos and to correct duplicates and incorrectly assigned codes of indicators in ITMS.

3. Project indicators stated in AfNRF are listed in table no. 12 and 15 of AfNRF (indicators of horizontal priorities). At the same time, the programme requires that the data from the table no. 15 be copied into the table no. 12; otherwise, ITMS does not allow AfNRF be sent into the data centre.

Recommendation:

It is pointless to manually copy the data from the table no. 14 to the table no. 12. If it is necessary for processing at the data centre, we suggest that HP indicators be automatically copied into Table no. 12 (e.g. when submitting an application).

4. Sometimes it happens that it is not possible to select any indicator or that the list of available indicators is limited. This is due to technical problems with the equipment used.

Recommendation:

To analyse the situation in cooperation with CCA.

5. For the purpose of evaluation, the current version of ITMS is only useful in a very limited way.

Recommendation:

For further use, we suggest that a user guide for evaluators be created on how to get required data in the current software that would help generate, by a simple selection, the most frequent spread sheets, statistical lists and selections. It will decrease the workload for the employees at the data centre, eliminate delays when requesting data and, most importantly, evaluators will have more time for evaluation.

6. Formal errors and duplicates were identified. Data collected and 'cleaned up' regarding project indicators are listed in Annex no. 5. The annex also shows formal errors (typos) and duplicates that were identified. They are described in more detail in section 7.2 Use of Project Indicators.

Recommendation:

In cooperation with CCA, to correct wrong assignments of project indicators in ITMS.

7. ITMS does not fulfil its mission when collecting data regarding the status of values of indicators. Using a filter, it is possible to view a code of an indicator and all projects that contain this indicator. At the same time, it is possible to filter the list according to call code - and then to identify relatively accurately the number of indicators per call. ITMS cannot, however, view these values in parallel. This is considered to be the biggest deficiency in OP evaluation at project level.

Recommendation:

To add the missing functions by amending the software.

13 List of Partial Inputs Created

Table no. 19

Description of partial input	Sources of partial input	Objective of partial input	Persons taking part in designing the partial input
To eliminate unnecessary data from other OP and duplicates from an Excel sheet generated by ITMS - assigned projects in ITMS according to calls.	Excel sheet generated by ITMS	To get 'clean' data only for OPE, so that each project and its indicators appear only once.	Blanka Rusková
To eliminate duplicate indicators that appear in the code-book for priority themes.	The code-book of project indicators which is listed as an annex to the CCA Guideline no. 3.	To find the exact number of project indicators relevant to OPE.	RNDr. Jozef Puskajler
Selection of all used indicators in OPE projects entered in ITMS.	'Cleaned' Excel sheet generated by ITMS	Identification of all used indicators.	RNDr. Jozef Puskajler

14 List of Persons Involved in the Preparation of this Report

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15 List of Abbreviations

CCA	Central coordination authority (Government Office of the Slovak Republic)
LLC	Life-long counselling
LLL	Life-long learning
EC	European Commission
ESF	European Social Fund
EU	European Union
GDP	Gross Domestic Product
HP	Horizontal priority
ICT	Information-communication technologies
IS	Information Society
ITMS	The information system developed and administered by CCA that stores the data regarding NSF, all operational programmes, projects, verifications, checks and audits in order to ensure effective and transparent monitoring of all processes related to the implementation of SF and the CF.
CF	Cohesion Fund
CmA	Comprehensive Approach
MEc SR	Ministry of Economy of the Slovak Republic
G	Guideline
MRC	Marginalised Roma Communities
ME SR	Ministry of Education of the Slovak Republic (original title of the ministry)
MESRS SR	Ministry of Education, Science, Research and Sport of the Slovak Republic,
MCRD	Ministry of Construction and Regional Development
MH SR	Ministry of Health of the Slovak Republic
NRF	Non-repayable funding
NSF	National Strategic Framework of the Slovak Republic for 2007-2013
OPE	Operational Programme 'Education'
OPRD	Operational programme 'Research and Development'
OP EaSI	Operationnal Programme 'Employment and Social Inclusion'
DA	Direct Award
MA	Managing Authority
EO	Equal Opportunities
SAS	Slovak Academy of Sciences
SCED	Standard Classification of Education
SCI HP	System of coordination of implementation of Horizontal priority
SCCI	Slovak Chamber of Commerce and Industry
IBMA	Intermediate Body under the Managing Authority
SR	Slovak Republic
HS	high school
SDE	Socially disadvantaged environment

SF	Structural Funds
SO SR	Statistical Office of the Slovak Republic
SN	Special needs
TA	Technical Assistance
SD	Sustainable Development
GO SR	Government Office of the Slovak Republic
AR	annual report
U	university
HTU	Higher territorial unit
PS	primary school
AfNRF	Application for Non-repayable Funding

16 Annexes

Annex no. 1 - Map of existing linkages between programme objectives, priorities and indicators

Annex no. 2 - Evaluation of indicators listed in the code-book of project indicators

Annex no. 3 - Evaluation of indicators of the global objective

Annex no. 4 - Evaluation of indicators of priority axes

Annex no. 5 - Indicators of the individual projects listed in ITMS according to calls

Annex no. 6 - Numbers and definitions of indicators used, according to measures

Annex no. 7 - Linkages between project indicators (used and recommended) to measure indicators

Annex no. 8 - Linkages between objectives of selected calls and project indicators

Annex no. 9 - Evaluation of HP indicators