



**Expert evaluation network  
delivering policy analysis on the  
performance of Cohesion policy 2007-2013  
Year 3 – 2013**

**Task 1: Job creation as an indicator of  
outcomes in ERDF programmes**

**Lithuania**

**Version: Final**

**Klaudijus Maniokas**

**Agnė Miseliūnienė**

**ESTEP**

**A report to the European Commission  
Directorate-General Regional and Urban Policy**

## Contents

Executive summary .....	3
1. The use of the indicator to assess outcomes in policy areas.....	4
2. Definition, methodology, data reporting and wider use of the indicator .....	6
Definition and methodology .....	6
Content of data .....	7
Wider use of indicator.....	11
3. Cost per job created .....	11
4. The indicator of job creation in evaluations and AIRs.....	13
5. Looking forward to the 2014–2020 programming period .....	15
6. Further remarks .....	16
References .....	17
Interviews.....	18
Annex.....	19

## List of abbreviations

- AIR           Annual Implementation Report
- CPMA        Central Project Management Agency
- CPOP        Cohesion Promotion Operational Programme
- EC           European Commission
- EGOP        Economic Growth Operational Programme
- FEIs         Financial Engineering Instruments
- FTE         Full-time Equivalent
- IA           Implementing Agency
- LBSA        Lithuanian Business Support Agency
- MA          Managing Authority
- OP          Operational Programme
- SFMIS       Structural Funds Management Information System

## Executive summary

The use of the indicator of job creation in the period 2007–2013 is considerably narrower as compared to the previous programming period. Total planned ERDF expenditure for measures where job creation is being used as an indicator accounts only for a quarter of the total planned ERDF expenditure. The number of jobs created is used as an indicator for 6 types of interventions in 3 broad policy areas: public RTDI development, investment in firms directly linked to RT&D, direct support for enterprises, improving the business environment, social infrastructure development and tourism development. The overall number of new/maintained jobs set as a target for all the measures is 6,498, of which 2,493 jobs have already been created/maintained. About 70% of the total number of jobs targeted and achieved was reported in the enterprise support area. Interventions in this area had the lowest unit costs of a job created, while public RTDI development – the highest.

The data on the total number of jobs created and their unit cost are not sufficiently reliable as the definition of the indicator and the guidance on data collection varies significantly. Managing Authorities (MAs) have made some attempts to improve the methodology for calculations and the consistency of the definition during the process of implementation of the measures, but there is still much room for improvement. The discussion of problems related to applying the definition and collecting data during 2014–2020 programming period is not relevant for MAs yet as they are at the very start of the programming process.

The impact of EU-funded interventions on creation of jobs cannot be captured by monitoring as it reports only gross job creation and does not take indirect effects into account. Therefore macro-economic modelling is being used as an appropriate tool to estimate net job creation.

## 1. The use of the indicator to assess outcomes in policy areas

There are two Operational Programmes (OPs) funded by ERDF in Lithuania – the Cohesion Promotion Operational Programme (CPOP) aimed at creating a more integrated society by reducing disparities and the quality of life, and the Economic Growth Operational Programme (EGOP) focused on the enhancement of the growth of the national economy in the long-term. Indicators of jobs created are used for monitoring outcomes of both of them in 3 policy areas:

- RTDI support
- Enterprise support
- Territorial development, namely *tourism* and *social infrastructure*

Table 1 shows (1) **total** planned ERDF expenditure and certified eligible expenditure by broad policy areas and (2) indicates the planned and actual expenditure **for only those measures where job creation is being used as an indicator** (a complete list of measures by broad policy areas is provided in Annex 1).

**Table 1 - Planned and actual ERDF expenditure by broad policy areas**

Policy area	Planned ERDF expenditure (EUR million and %)			Certified eligible ERDF expenditure (EUR million and %)		
	Total for two OPs		For measures with indicator of job creation	Total for two OPs		For measures with indicator of job creation
	EUR million	%	EUR million	EUR million	%	EUR million
RTDI support	534.2	16	442.0	180.7	9	150.5
Enterprise support including ICT	845.6	25	154.9	498.9	25	52.8
Transport	442.7	13	-	367.6	19	-
Environment	160.1	5	-	79.3	4	-
Energy	144.1	4	-	62.1	3	-
Territorial Development	1,315.3	38	294.1	768.7	39	198.1
Total	3,442.0	100	891.0	1,957.3	100	401.3

Source: data from the Structural Funds Management Information System (SFMIS), provided by Ministry of Finance (data extracted on 8 March 2013).

The three policy areas where job creation is used as an indicator are the most important in terms of total planned ERDF expenditure. Overall, the indicator of the number of jobs is used for a relatively small share of measures in ERDF-financed OPs. Planned ERDF expenditure for these amounts to 26% of the total planned ERDF expenditure for Lithuania (which is EUR 3,442 million). At the moment when the programme was designed, the indicator was set for even a smaller number of interventions (e.g. only for tourism and public RTDI support). Job creation was neither emphasised by the European Commission (EC) nor by Lithuanian institutions because unemployment was less of a concern at that moment<sup>1</sup>. The decision to use this indicator for a few measures only was also to avoid errors of the past programming period when the indicator was used too extensively including for measures with negative employment effects

<sup>1</sup> Interview with Ms Olga Celova, Head of the Structural Assistance Policy Division. Ministry of Economy, 14 March 2013.

(e.g. production modernisation activities)<sup>2</sup>. Because of the economic crisis and the increase in unemployment, job creation got more and more a policy objective and therefore the indicator was set for a broader range of interventions. However, it was done at the measure level rather than at the programme level (see Figure 1).

It should be noted that Financial Engineering Instruments (FEIs), as other measures aimed at SME development (in a form of grants) for sure contribute to job creation/maintenance. However, the indicator is not used for these so that their contribution to job creation is not monitored<sup>3</sup>. According to the officials interviewed, the main aim of these measures was to improve the access of SMEs to financing sources, which led to choosing other indicators (e.g. the number of supported enterprises, the amount of funds used to promote development, and private investments attracted) which reflect better this purpose<sup>4</sup>.

The overall number of new/maintained jobs set as a target for all measures at the time this paper was prepared (March 2013) was 6,498. 2,493 jobs have already been created or 38% of the target. Compared to the numbers reported in the 2011 AIRs, the targets and achievements by March 2013 are significantly different (see Table 2).

**Table 2 - Targets and achieved outcomes of indicator by broad policy areas**

Policy area	Targets set for the number of jobs		Achievement, i.e. the number of jobs created	
	Reported in 2011 AIRs	Situation on 8 March 2013	Reported in 2011 AIRs	Situation on 8 March 2013
RTDI support	876	920	133	201
Enterprise support including ICT	2,480	4,600	289	1,686
Territorial Development, of which:	920	978	131	606
<i>Tourism</i>	500	558	86	437
<i>Social infrastructure*</i>	420	420	45	169
Total	4,276**	6,498***	553 (13% of the target)**	2,493 (38% of the target)***

Source: data from the SFMIS, provided by the Ministry of Finance and AIRs for 2011.

Notes:

\* The number of jobs created in the social infrastructure area (2 measures: "Development of Infrastructure of Stationary Social Services" and "Development of Institutions Providing Services, Including Professional Rehabilitation Services, to the Disabled") is not included in the core indicator (1) "Jobs created" reported in 2011 AIRs.

\*\* The total number of jobs set as a target includes a target for the core indicator of jobs created indicated in AIR 2011 for EGOP (which is 3,356), a target for the core indicator reported in AIR 2011 for CPOP (which is 500) and targets foreseen for measures in the social infrastructure area (which is 420). The achievement includes the numbers indicated in the AIRs plus the number of jobs created in the social infrastructure area.

\*\*\* The total numbers (targets and achievements) include the targets and achievements of all measures where job creation was set as an indicator. It is presumed that the target in the 2012 AIRs should be 6,078 (lower by 420 jobs targeted for social infrastructure, which are excluded when calculating the core indicator).

<sup>2</sup> Evaluation of the Impact of the EU Structural Funds on Employment as a Result of Implementation of Lithuanian Single Programming Document for 2004 – 2006. Prepared by Ernst&Young at request of the Ministry of Finance, September 2011.

<sup>3</sup> The indicator of job creation is only set for ESF-funded FEI "Promotion of Entrepreneurship", which aims at creating conditions for micro and small enterprises, natural persons to start their business.

<sup>4</sup> Interview with Ms Olga Celova, Head of the Structural Assistance Policy Division. Ministry of Economy, 14 March 2013.

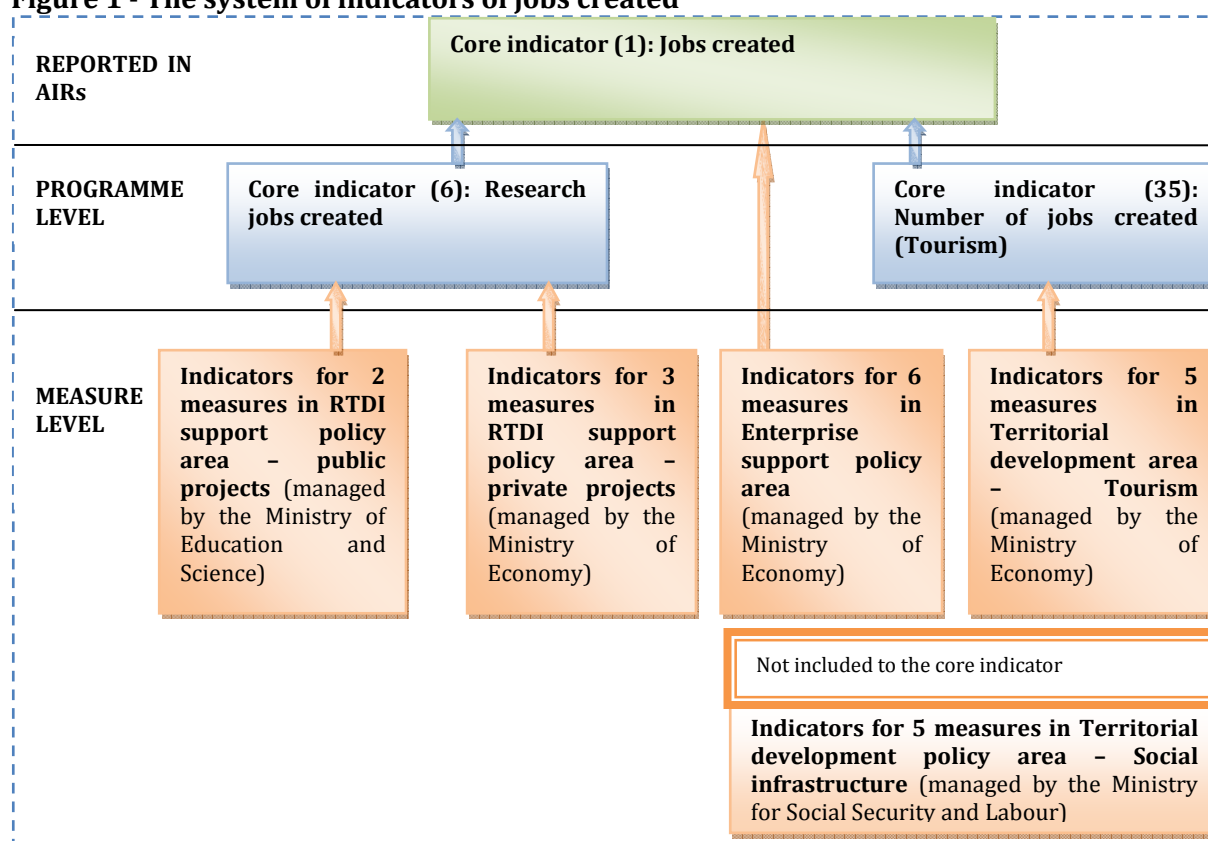
The targets for measure level indicators have changed since the end of 2011 as new measures in the area *Enterprise support including ICT* have been introduced and the targets for some of the measure level indicators have changed. The difference in achievements comes from the progress in implementing projects. For example, the number of jobs created in the tourism and enterprise area increased by more than 5 times.

## 2. Definition, methodology, data reporting and wider use of the indicator

### Definition and methodology

Indicators of the number of jobs created appear at programme and measure level. With regard to the EC's request in AIRs to provide as detailed information on achievements as possible, the information reported in AIRs on the achievement of core indicator No 1 "Jobs Created"<sup>5</sup> covers achievements of programme-level as well as measure-level indicators. The figure below shows the system of indicators of jobs created for monitoring and reporting the outcomes.

**Figure 1 - The system of indicators of jobs created\***



Source: EGOP, CPOP and Supplements to EGOP and CPOP approved by the Government.

Note:\* The figure shows the situation by March 2013 the moment this paper is being prepared, i.e. including 3 new measures in the enterprise support area and 1 measure in RTDI support area which have not been included to the core indicator in 2011 AIRs.

<sup>5</sup> A list of core indicators is presented in Annex 1 to Indicative Guidelines on Evaluation Methods: Reporting on Core Indicators for the European Regional Development Fund and the Cohesion Fund, Working Document No 7 approved by the EC in July 2009.

The OPs give only a very broad guidance on the collection of data on most of the indicators (not only as regards jobs created): “data on the achievement of indicators are collected in accordance with the bottom-up approach, using project-level information (from implementation reports)”.

A detailed definition and methodology for data collection are provided in documents regulating the implementation of projects, to be more precise, *funding conditions prepared for individual measures*. Detailed information on the definition of the indicator and methodology used for each measure is provided in Annex 1.

### Content of data

Given the fact that the definition of the indicator and the methodology for data collection are established at measure level and because there are no specific requirements for the measurement of the indicator, the content of the indicator varies according to the MAs, the policy areas as well as the interventions. Different definitions are used even for measures implemented in the same policy area and managed by the same authority. Still, several similarities may be found:

- Actual outcomes are reported (jobs created and not planned to be created) in all cases. In other words, the indicators only cover jobs from finished projects. Sometimes the AIRs provide additional information on the number of jobs expected from concluded contracts but these are not covered by the indicator.
- The data reported include only jobs created directly. The description of the indicators indicates that only jobs directly resulting from the project are taken into account.
- Jobs created during the construction stage of projects are not included in the data.
- The quality of jobs is not captured by these indicators.

The main differences in the calculation of indicators are as follows:

- At the beginning of the implementation of the programmes, the indicators of jobs created were defined simply in terms of number of jobs. However, as the implementation progressed, the definition changed, and now, for some of the measures jobs are expressed in Full-time Equivalent (FTEs) terms. Still, the practice remains very different (see Table 3).
- In most cases only permanent jobs are covered. The (typical) definition of a permanent job is a one that remains after the completion of the project (in some cases, the precise period for which the job must be maintained is specified). Temporary jobs are (intended to be) reported only for public RTDI support measures (see Table 3) and they are included into the total number of jobs created. A temporary job is defined as a job created for the implementation of the project or for a defined period of time, with a 40-hour working week and a period of at least 26 weeks. However, in practice almost all the research jobs created as a result of this kind of projects are permanent<sup>6</sup>.
- As a rule, only new jobs are covered by the indicator but in a number of measures in the enterprise support policy area the number of maintained jobs is also included (see Table 3).

---

<sup>6</sup> Interview with Mr Daumantas Gudelis, Head of the Division of Education Projects, Central Project Management Agency (CPMA), 12 March 2013.

**Table 3 - Differences in the content of data at measure level**

Measure	Defined in FTE or simply number of jobs	Temporary or permanent	Only created or created and maintained
<u>RTDI support</u>			
<i>MA - Ministry of Education and Science</i>			
Strengthening of General Infrastructure for Education and Research	Temporary - FTE; permanent – simply number of jobs	Temporary and permanent ( <i>remaining after completion of the project</i> )	Created only
Implementation of National Scientific Programmes and other High-Level Research and Technological Development Projects	Temporary - FTE; permanent – simply number of jobs	Temporary and permanent ( <i>remaining after completion of the project</i> )	Created only
<i>MA - Ministry of Economy</i>			
Intellect LT	Simply number of jobs/ Recently changed to FTE	Permanent (remaining at least 2 years after completion of the project)	Created only
Intellect LT+	Simply number of jobs	Permanent (remaining at least 2 years after completion of the project)	Created only
InnoCluster LT+	Simply number of jobs	Permanent (remaining at least 2 years after completion of the project)	Created only
<u>Enterprise support including ICT</u>			
<i>MA - Ministry of Economy</i>			
E-Business LT	Simply number of jobs	Permanent ( <i>remaining at least 1 year after completion of the project</i> )	Created and maintained
New Opportunities	Simply number of jobs	Permanent	Created and maintained
Invest LT+	Simply number of jobs	Permanent ( <i>the period after completion not defined</i> )	Created only
Invest LT-2	Simply number of jobs	Permanent ( <i>the period after completion not defined</i> )	Created only
Assistant -1	Simply number of jobs	Permanent ( <i>remaining at least 1 year after completion of the project</i> )	Created and maintained
Assistant -3	Simply number of jobs	Temporary and permanent	Created only
<u>Territorial development policy area - tourism</u>			
<i>MA - Ministry of Economy</i>			
Creation and Development of Infrastructure for Organic Tourism, Active Leisure and Health Improvement	FTE	Permanent ( <i>remaining at least 6 months after completion of the project</i> )	Created only
Complex Adaptation of Public Immovable Objects of Cultural Heritage for Tourism Purposes	FTE	Permanent ( <i>remaining at least 6 months after completion of the project</i> )	Created only
Tourism Projects of National Importance	FTE	Permanent ( <i>remaining at least 6 months after completion of the project</i> )	Created only
Development of the Public Tourism	FTE	Permanent ( <i>remaining at least 6 months after completion of</i> )	Created only



Measure	Defined in FTE or simply number of jobs	Temporary or permanent	Only created or created and maintained
Infrastructure and Services in Regions		<i>the project)</i>	
Development of Tourism Services/Products, Variety and Improvement of the Quality of Tourism Services	FTE	Permanent ( <i>remaining at least 6 months after completion of the project)</i>	Created only
<i>Territorial development policy area - social infrastructure</i>			
<i>MA - Ministry for Social Security and Labour</i>			
Development of Infrastructure of Stationary Social Services	Simply number of jobs	Permanent ( <i>remaining at least 1 year after completion of the project)</i>	Created only
Development of Institutions Providing Services, Including Professional Rehabilitation Services, to the Disabled	Simply number of jobs	Permanent ( <i>remaining at least 1 year after completion of the project)</i>	Created only

*Source: Funding Conditions for the measures approved by the Orders of Ministers.*

*Note: The Table summarises the main aspects of the data content according to which the main differences were identified. The table is prepared on the basis of the information provided in Annex 1.*

Another significant difference in the data relative to research jobs is that the indicators for public RTDI projects (managed by the Ministry of Education and Science) include only jobs for researchers, while in private RT&D projects (managed by the Ministry of Economy) support staff is also counted.

Double counting occurs most likely in the enterprise support and the RTDI support (investment in firms directly linked to RT&D) policy areas. According to representatives<sup>7</sup> of agencies responsible for reporting on the data, there may be potential cases where the same entity implements several projects under different measures and reports the same jobs created for more than one project. There are no instruments for controlling such cases and even rough estimation of the scope of double counting is not available.

Compared to the previous programming period, the data is now more reliable in that a new job is one which has an employment contract. In the previous programming period, a written statement of the project manager (a payment request or implementation reports) was sufficient.

There are a number of other problems in relation to data collection and reporting according to a number of agencies responsible for monitoring indicators<sup>8</sup>:

- Definitions and methodologies are amended and revised during the implementation of measures. As a result, indicators are calculated differently in projects under different calls for applications. For example, the last call for projects launched under the measure “Intellect LT”, the indicator of jobs created was defined in FTEs terms, while in previous calls it was defined in terms of the average annual number of jobs<sup>9</sup>.
- Projects are evaluated on the basis of the job creation indicator. But in a number of cases this is meaningless because some simply do not pursue to aim of creating jobs as such (e.g. measure supporting SMEs’ participation in international exhibitions, contact fairs, business missions, etc.). Consequently, beneficiaries initially tend to indicate in their applications a large number of jobs to be created by the project to receive additional “points”, but at the project implementation stage the number are often reduced.
- There is no clear guidance for project managers on how to identify jobs maintained.

The results of ESF interventions are measured by other indicators (based on the level of employment) than the number of new jobs. There are two ESF-funded interventions where the definition of the indicator is very similar to the definition of ERDF indicators. The FEI “Promotion of Entrepreneurship” which supports micro and small enterprises as well as natural persons reports the number of new jobs. Another measure, which supports employment of researchers in small and medium-sized enterprises, reports the *indicator of the number of researchers employed*. Jobs created by ESF and ERDF funded projects are counted separately.

---

<sup>7</sup> Interviews with Mr Karolis Balaišis, Acting Deputy Head of the Business Project Management Division, Lithuanian Business Support Agency (LBSA), 12 March 2013; Ms Jūratė Jakaitienė, Senior Project Manager of the RT&D Project Management Division, LBSA, 12 March 2013.

<sup>8</sup> Interviews with Mr Daumantas Gudelis, Head of the Division of Education Projects, CPMA, 12 March 2013; Mr Karolis Balaišis, Acting Deputy Head of the Business Project Management Division, LBSA, 12 March 2013; Ms Jūratė Jakaitienė, Senior Project Manager of the RT&D Project Management Division, LBSA, 12 March 2013.

<sup>9</sup> A specific procedure was being applied to calculate the average annual number of employees which appeared to be too complicated.

### Wider use of indicator

The aggregated number of jobs in the country is calculated by the Department of Statistics of Lithuania. The Department provides information on the number of job vacancies and the number of occupied posts. The difference in posts in different years suggests how many new additional jobs have been created minus the jobs eliminated. The number of jobs in 2012 increased by 27,182 compared to 2011. Still, this indicator shows the context of the country, but does not reveal the outcomes of national programmes that are being implemented. To capture these, national programmes include indicators for which the achievements are reported in the monitoring information system launched in 2012. The information system helps to measure the so-called “standardised indicators” relevant for the implementation of a number of programmes and indicators on particular programmes.

The indicator of job creation does not fall into the category of “standardised indicators” as it is related to particular programmes. Indicators of new jobs are established only for the monitoring of the Economic Growth and Competitiveness Improvement Programme carried out by the Ministry of Economy: (1) the number of jobs created as a consequence of the foreign investment attracted; (2) the number of new jobs in tourism. Other “job-related” indicators are established in the programmes of the Ministry of Social Security and Labour. They, however, measure the employability of people who participated in the programme rather than the number of new jobs.

According to the official interviewed<sup>10</sup>, only a very small share of programmes has a direct impact on the creation of new jobs and therefore there is no need to make it a “standardised indicator”. It should be measured at the programme level. Moreover, the aggregation of the data across programmes would be likely to cause the problem of double counting. For example, it would be difficult to eliminate jobs created in the same enterprise supported under different programmes.

### 3. Cost per job created

Below are provided the unit costs of a job created for all six types of interventions that use the job creation indicator to measure outcomes. The calculations are based on project-level data provided by the Ministry of Finance and consist to divide the payments for projects where jobs have been created by the reported number of jobs created (for the data and calculations see Annex 2). The type of intervention is also explained briefly.

---

<sup>10</sup> Interview with Mr Darius Sadeckas, Deputy Director of the Budget Department; Ministry of Economy. 14th March 2013.

**Table 4 - Unit costs of a job created for different interventions**

Type of intervention	<b>Public RTDI development</b>
Brief description	Intervention covers one Measure “Strengthening of General Infrastructure for Education and Research” under which research jobs have already been created. Support is provided for the creation of general, technological and information infrastructure in education and research institutions required for RDT projects.
Unit costs of a job	<u>For the type of intervention/ for the Measure:</u> <ul style="list-style-type: none"> <li>From all the sources – EUR 433,516; ERDF – EUR 368,489</li> </ul>
Type of intervention	<b>Investment in firms directly linked to RT&amp;D</b>
Brief description	Intervention covers two measures – “Intellect LT” and “Intellect LT+” under which jobs created have already been reported. The first one provides support for applied research and/or technological development required for innovative products, services and processes. The second one supports initial investment into the creation or expansion of the firm’s RT&D infrastructure.
Unit costs of a job	<u>For the type of intervention:</u> <ul style="list-style-type: none"> <li>From all the sources– EUR 105,335; ERDF – EUR 46,611</li> </ul> <u>For the Measure “Intellect LT”:</u> <ul style="list-style-type: none"> <li>From all the sources– EUR 99,017; ERDF – EUR 39,812</li> </ul> <u>For the Measure “Intellect LT+”:</u> <ul style="list-style-type: none"> <li>From all the sources– EUR 119,913; ERDF – EUR 62,300</li> </ul>
Type of intervention	<b>Direct support for enterprises</b>
Brief description	Support for enterprises is provided under four measures where jobs created have already been reported. The first measure “E-Business LT” supports the implementation of information technology in SMEs to create favourable conditions for increasing productivity and exports; the second measure “New Opportunities” supports activities to find foreign partners and increase sales in foreign markets (presentation of enterprises and their production in international exhibitions, contact fairs, business missions, etc.). These two measures are not directly aimed at job creation and it is planned to withdraw the indicator. The remaining two measures support direct investment of private foreign entities (Measure “Invest LT+”) and direct domestic investment (Measure “Invest LT-2”) into the launch and expansion of high value-added production and/or high value-added services businesses, thereby directly contributing to job creation. Therefore the unit costs of job creation for these two measures are estimated separately.
Unit costs of a job	<u>For the type of intervention:</u> <ul style="list-style-type: none"> <li>From all the sources – EUR 12,438; ERDF – EUR 3,829</li> </ul> <u>For the Measure “Invest LT+”:</u> <ul style="list-style-type: none"> <li>From all the sources– EUR 22,358; ERDF – EUR 3,764</li> </ul> <u>For the Measure “Invest LT-2”:</u> <ul style="list-style-type: none"> <li>From all the sources– EUR 13,852; ERDF – EUR 6,926</li> </ul>
Type of intervention	<b>Improving the business environment/Business support measures for SMEs</b>
Brief description	Support for services provided by associated business structures and public services to enterprises in relation to business start-up, growth, job creation and expansion of foreign markets (the services include organising events, hiring experts, conducting and presenting feasibility studies in international exhibitions, fairs, business missions).
Unit costs of a job	<i>No jobs have been reported yet</i>
Type of intervention	<b>Social infrastructure development</b>
Brief description	Establishing new or modernising the existing institutions that provide non-stationary social services. The main aim is to improve the provision of social services and increase their scope. However, it indirectly contributes to job creation. Expanding/new institutions create new jobs.
Unit costs of a job	<u>For the type of intervention:</u> <ul style="list-style-type: none"> <li>From all the sources – EUR 99,975; ERDF – EUR 84,709</li> </ul>
Type of intervention	<b>Tourism development</b>
Brief description	Support is provided for the development of public tourism infrastructure and investment of private entities into tourism infrastructure. Intervention covers four measures under which jobs created have already been reported. The

	most of them have been created under the measure “Development of Tourism Services/Products, Variety and Improvement of the Quality of Tourism Services” which promotes private investment into tourism infrastructure, i.e. hotels, conference centres, sanatoriums and active recreation, management of private cultural heritage objects. The unit cost of job creation for this measure is estimated separately.
Unit costs of a job	<p><u>For the type of intervention:</u></p> <ul style="list-style-type: none"> <li>From all the sources – EUR 414,588; ERDF – EUR 231,896</li> </ul> <p><u>For the Measure “Development of Tourism Services/Products, Variety and Improvement of the Quality of Tourism Services”:</u></p> <ul style="list-style-type: none"> <li>From all the sources– EUR 155,190; ERDF – EUR 67,623</li> </ul>

Source: data from the SFMIS, provided by Ministry of Finance.

The public RTDI development had the highest unit cost of jobs and direct support for enterprises the lowest. These results should be interpreted with caution. First, in most cases job creation was not the prime objective of the intervention. According to the intervention logic, measures focused on direct support for enterprises were expected to have the greatest direct impact on job creation (they had the lowest unit costs of a job). Secondly, the unit costs of a job created for different interventions also depend on the content of the data reported for the indicator. For example, more jobs were recorded in the implementation of private RT&D projects since the indicator equally includes jobs for support staff, while in case of public RTDI development projects only research jobs are counted (support staff for RT&D is not counted). The unit costs of a job were relatively reduced for direct support for enterprises by the fact that the indicator covers new jobs as well as the maintained ones.

It is also important to note, that the infrastructure is supposed to create jobs indirectly. Therefore the impact of the intervention cannot be captured in many cases by monitoring short term job creations. Macro-economic modelling as a method of evaluations is an appropriate tool in this case.

#### 4. The indicator of job creation in evaluations and AIRs

In 2009, the *Evaluation of the Impact of EU Support on the National Economy*<sup>11</sup> was carried out using macroeconomic modelling and the results updated in 2010<sup>12</sup> show a significant impact of the EU Structural Funds on indicators of the labour market.

##### **Textbox 1 - The impact of EU support used in 2000–2011 on net job creation**

According to the estimations, the EU funds created/maintained 111.5 thousand FTE jobs (or 9.1% of the total employed) until the end of 2011. The impact on employment will increase up to 154 thousand FTEs by the end of 2013. However, most of the jobs created by the EU funds are temporary (most of the temporary jobs are created in the construction sector). Therefore, in 2015 the impact will be down to 73.3 thousand FTE jobs. Moreover, the larger share of the permanent jobs are maintained, not created, e.g. the EU funds maintained 60.2 thousand FTE jobs until the end of 2011, and 87.5 thousand FTE jobs in 2013, which is more than half of the FTE jobs created and maintained.

<sup>11</sup> Evaluation of Structural Funds’ Impact on Gross Domestic Product (2004-2006 Programming period) commissioned by the Ministry of Finance, prepared by UAB BGI Consulting in collaboration with Dr John Bradley from EMDS (Economic Modelling and Development Strategies). September 2009.

<sup>12</sup> Impact Evaluation of the EU Structural Funds on the National Economy, forecast for economic growth until 2020, commissioned by Ministry of Finance, prepared by ESTEP. October 2011.

It is not possible to make any assessment on the reliability of achievements captured by monitoring indicators in the view of this evaluation due to several reasons. First of all, the evaluation analyses the impact of all EU funds (including ESF, ERDF and Cohesion Fund), amounting to EUR 4,740 million, absorbed in Lithuania in 2000–2011<sup>13</sup>. This report and AIRs, however, report only the jobs created directly by ERDF funds allocated and used in the period 2007–2011 (EUR 1,490 million). Another, even more important reason for which the data should not be compared is the fact that monitoring data provides micro-level information on jobs directly created/maintained by projects, while macroeconomic modelling aimed at assessing the aggregated wide-scope impact of public investment, taking demand and supply side effects into account. In other words, the results obtained cannot be compared with results of individual projects by simply putting them together and they can equally not be used to assess the difference between net and gross job creation.

Another evaluation<sup>14</sup> analysed the impact of the EU Structural Funds 2007–2013 in four sectors (RT&D, Business and Business Environment, Tourism and Energy) and attempted to estimate net job creation. Econometric modelling was used for macro-level estimations, while a counterfactual analyses for project-level assessments. The counterfactual analyses are based on surveys of beneficiaries and control groups. Its results were presented in a “qualitative way” without indicating the quantified the net impact. The main points of the evaluation are summarised in Textbox 2.

**Textbox 2 - Evaluation of the Impact of EU Structural Funds 2007–2013 on Job Creation in RT&D, Business and Business Environment, Tourism and Energy**

**Macro-level estimation**

Econometric modelling established that the number of new jobs in these four sectors supported by the EU Structural Funds increased by 8.6 thousand in 2009 and 17.9 thousand in 2010, peaking to 34 thousand in 2012. However, later and at the end of 2015, the additional number of the employed is falling drastically. Once the provision of the support is over the increase in permanent jobs is limited, amounting to 4–4.5 thousand. The largest share of the remaining permanent jobs was in the RTDI support area.

**Micro-level evaluation**

The results of the survey based on beneficiaries and a control group suggest that *direct support for enterprises* had a larger net impact on job maintenance rather than on job creation. Moreover, it contributed to the improvement of the quality of jobs – beneficiaries replaced less qualified employees with more qualified ones (this process was not captured in the control group).

*Investment in firms directly linked to RT&D* had a limited impact on the number of research jobs created. According to the results of the survey, 68% of the beneficiaries and 55% of the control group created research jobs.

This evaluation was mentioned in the 2011 AIR, but the number of net job creations was not reported. The aggregate results of macroeconomic modelling are used for planning support in 2014–2020.

<sup>13</sup> Amounting to EUR 4,740 million, of which EUR 1,760 million for the period 2004–2006 and EUR 2,980 million for the period 2007–2013.

<sup>14</sup> The evaluation of the conditions and changes in the economic sectors falling into the competence of the Ministry of Economy and funded by the EU Structural and National Funds, commissioned by Ministry of Economy, prepared by BGI Consulting. December 2011.

## 5. Looking forward to the 2014–2020 programming period

According to the officials interviewed<sup>15</sup>, the programming process has just started and people are working now on planning priorities and operations. The representatives of MAs responsible for preparing programming documents are familiar with the list of common indicators provided in the annex of ERDF regulation<sup>16</sup>, but still do not have a clear understanding of their definition and calculation method. IAs (which are responsible for monitoring the implementation of projects and which are therefore more familiar with the methodology for calculating indicators and the related problems) are not involved in the preparations for the new period yet.

Still, the “readiness” varies among MAs. The Ministry of Economy responsible for programming priorities in most of the job creation-related areas (RT&D activities in firms, enterprise support, and tourism) has already made a preliminary list of supported operations and their indicators. Indicator 8 “Employment increase in supported enterprises” and indicator 24 “Number of new researchers in supported entities” have not been included, because as seen by the representative of the Ministry, the operations planned are not directly aimed at job creation<sup>17</sup>. Meanwhile according to the representative of the Ministry of Education and Science (responsible for programming priorities in public RT&D infrastructure and activities area), the indicators have not been planned yet.

Monitoring of new directly created jobs may face certain challenges in the new period. In order to collect credible and sufficient data on jobs created as a direct consequence of project completion, the indicators should be set for all measures that can contribute to job creation. Otherwise, the information gathered will not reflect the full extent of the input of the Structural Funds to the direct job creation. In this respect, an important task is the determination of the proper intervention logic of the measures. Definition of the core indicators proposed by the EC should not cause any considerable difficulties for Lithuanian MAs since the definitions applied in the current programming period are in line with the concept of the proposed indicators in the new period. Definitions applied by different implementing bodies to different measures have to be harmonised yet with respect to calculating only new jobs, define them all in FTEs terms, etc. Moreover, there could be difficulties in identifying jobs as a direct consequence of project completion. Beneficiaries may take different approaches when interpreting the direct contribution of a project, therefore more detailed guidelines from the EC would be welcome. However, the employment effects of the interventions could be far better and easier assessed through evaluations.

---

<sup>15</sup> Interviews with Ms Olga Celova, Head of the Structural Assistance Policy Division. Ministry of Economy, 14 March 2013 and Ms Justė Sutkaitienė, Senior Specialist of the European Union Assistance Management Division, Ministry of Education and Science, 14 March 2013.

<sup>16</sup> Proposal for a Regulation of the European Parliament and Council on specific provisions concerning the European Regional Development Fund and the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006, EC, Brussels, 6.10.2011 COM(2011) 614 final.

<sup>17</sup> With regard to the EC’s request to choose a limited number of indicators, indicators that are directly relevant to tasks were chosen.

## 6. Further remarks

The issue of job creation came under the spotlight during the economic crisis. Since then, the use of the EU Structural Funds has become increasingly important in dealing with the unemployment problem. Better understanding of the impact of the EU Structural Funds on job creation requires adequate data and information. To this end, several aspects should be taken into consideration:

- The selection of indicators must be based on the intervention logic. It is crucial to identify which interventions may contribute to job creation. The current position of administrations suggests that MAs do not regard job creation as a major indicator for monitoring the performance of programmes. If no adequate indicators are established for measures that create jobs from the very start, the data collected during the implementation stage will not reflect the actual results of the support in this regard.
- Calculation methods must be standardised from the beginning of the implementation of measures. Changing methodologies have a substantial effect on the numbers reported and the interpretation of the achievements. The definition and method of calculation used in Lithuania are gradually approaching the definition proposed by the EC. Still, authorities administering measures in Lithuania should hold an agreed position on the calculation of these indicators: (1) recalculate them into FTEs, (2) carry out follow-up monitoring of the implementation of indicators to ensure that the jobs created are permanent, and (3) refrain from counting jobs maintained.

On the other hand, monitoring alone is not sufficient for measuring the impact of the EU Structural Funds on job creation as it shows only gross job creation. It is recommended that evaluations (macroeconomic modelling and counterfactual impact assessment) are used more widely for assessing the actual impact of the EU Structural Funds.



## References

### Evaluations and other relevant studies:

Evaluation of the Impact of the EU Structural Funds on Employment as a Result of Implementation of Lithuanian Single Programming Document for 2004 – 2006 commissioned by the Ministry of Finance, prepared by Ernst&Young. September 2011.

Evaluation of Structural funds' Impact on Gross Domestic Product (2004-2006 Programming period) commissioned by Ministry of Finance, prepared by UAB "BGI Consulting" in collaboration with dr. John Bradley from EMDS (Economic Modelling and Development Strategies). September 2009.

Impact Evaluation of the EU Structural Funds on the National Economy, forecast for economic growth until 2020, commissioned by Ministry of Finance, prepared by ESTEP. October 2011.

The evaluation of the conditions and changes of the economy sectors being in the competence area of the Ministry of Economy and funded by the EU Structural and National Funds, commissioned by Ministry of Economy, prepared by BGI Consulting. December 2011.

Evaluation of the Relevance of Lithuania's Legal and Financial System Created for the Establishment and Implementation of FEIs Financed from the EU Structural Funds to Promote SMEs, commissioned by Ministry of Economy, prepared by UAB "PriceWaterhouseCoopers", ESTEP and Tark Grunte Sutkiene. December 2010

### Other references:

Annual Implementation Reports of CPOP and EGOP for 2011.

Monthly Monitoring Reports of the EGOP and CPOP for 2011 and 2012.

EGOP, CPOP and Supplements to EGOP and CPOP, approved by the Government.

Funding Conditions for the measures approved by the Orders of Ministers.

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

Proposal for a Regulation of the European Parliament and Council on specific provisions concerning the European Regional Development Fund and the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006, EC, Brussels, 6.10.2011 COM(2011) 614 final.

Guidance document on monitoring and evaluation – European Regional Development Fund and Cohesion Fund – Programming Period 2014–2020, Concepts and recommendations, December 2012.

## Interviews

Mr Darius Sadeckas, Deputy Director of the Budget Department. Ministry of Finance, 14 March 2013.

Ms Virginija Krasauskaitė, Senior Specialist of the Monitoring and Analysis Division. Ministry of Finance, 6 March 2013.

Ms Olga Celova, Head of the Structural Assistance Policy Division. Ministry of Economy, 14 March 2013.

Ms Justė Sutkaitienė, Senior Specialist of the European Union Assistance Management Division, Ministry of Education and Science, 14 March 2013.

Mr Daumantas Gudelis, Head of the Division of Education Projects, CPMA, 12 March 2013.

Mr Karolis Balaišis, Acting Deputy Head of the Business Project Management Division, LBSA, 12 March 2013.

Ms Jūratė Jakaitienė, Senior Project Manager of the RT&D Project Management Division, LBSA, 12 March 2013.

## Annex

### Annex 1 - Definition and Methodology for Data Collection according to Measures

No	Measure	MA	Definition	Data collection (sources of information)
<i>RTDI support</i>				
1.	Strengthening of General Infrastructure for Education and Research	Ministry of Education and Science; CPMA	Research jobs are jobs for scientists and other researchers as defined in the Lithuanian Professional Classifier. The indicator shows permanent and temporary jobs. Temporary jobs are jobs created as a consequence of project activities, with a 40-hour working week and the employment period of at least 26 weeks. Permanent jobs are jobs created as a consequence of project activities and preserved after the project completion. The indicator calculates jobs created for scientists and other researchers during the implementation of project activities.	Primary sources: employment agreements, record books for employment agreements Secondary sources: payment requests
2.	Implementation of National Scientific Programmes and other High-Level Research and Technological Development Projects	Ministry of Education and Science; CPMA	The same as for No. 1	The same as for No. 1
3.	Intellect LT	Ministry of Economy; LBSA	Permanent jobs created for researchers and support staff (as defined by the Lithuanian Professional Classifier) within 3 years after the project completion. The indicator calculates permanent jobs created for researchers and support staff as a consequence of the project implementation (from the launch of the project and within 3 years after the project completion). Jobs must be expressed in FTEs.	Primary sources: employment agreements and other documents. Secondary sources: payment requests, follow-up reports. The achievement of the indicator is measured 3 years after the implementation of the project.
4.	Intellect LT+	Ministry of Economy; LBSA	Permanent jobs created for researchers and support staff (as defined by the Lithuanian Professional Classifier) within 3 years after the project completion. The indicator calculates permanent jobs created for researchers and support staff as a consequence of the project implementation (from the launch of the project and within 3 years after the end of the project). Jobs must be expressed in FTEs.	The same as for No. 3
5.	InnoCluster LT+	Ministry of Economy; LBSA	Jobs created for researchers and support staff in the research centres established. The indicator calculates permanent jobs for researchers and support staff in research centres as a consequence of the project implementation and within 3 years after the project completion.	Primary sources: employment agreements and other documents. Secondary sources: payment requests, follow-up reports.
<i>Enterprise support including ICT</i>				
6.	E-business LT	Ministry of Economy; LBSA	Jobs created or preserved by the project implementation. The jobs created must be preserved for at least one year after the project completion.	Primary sources: statements or documents confirming the number of employees during the project. Secondary sources: payment requests,

No	Measure	MA	Definition	Data collection (sources of information)
				follow-up report.
7.	New Opportunities	Ministry of Economy; LBSA	Jobs created and/or preserved during the project implementation.	Primary sources: statements or documents confirming the number of employees during the project. Secondary sources: payment requests, follow-up report.
8.	Invest LT+	Ministry of Economy; LBSA	Permanent jobs created as a consequence of the investment project – jobs created by investment-related activities, including jobs created as a consequence of the increasing use of capacities created by the investment. The indicator sums permanent jobs created during the project implementation within 3 years after the end of the investment.	Primary sources: statements or documents confirming the number of employees during the project. Secondary sources: payment requests, follow-up report.
9.	Invest LT-2	Ministry of Economy; LBSA	Permanent jobs created by investment-related activities, including jobs created as a consequence of the increasing use of capacities created by the investment. The indicator sums permanent jobs created as a consequence of the project implementation within 3 years after the end of the investment.	Primary sources: employment agreements and other documents. Secondary sources: payment requests, follow-up report.
10.	Assistant-1	Ministry of Economy; LBSA	Jobs created and/or preserved as a consequence of the project implementation in companies that participated in project activities. New jobs must be preserved for at least a year after the project completion.	Primary sources: a document supporting the survey conducted by the beneficiary (a survey report or a similar document with survey results), documents of the survey. Secondary sources: payment request, follow-up report.
11.	Assistant-3	Ministry of Economy; LBSA	Jobs created as a consequence of the project implementation.	Primary sources: a document supporting the survey conducted by the beneficiary (a survey report or a similar document with survey results), documents of the survey. Secondary sources: payment request, follow-up report.
<i>Territorial development policy area - tourism</i>				
12.	Creation and Development of Infrastructure for Organic Tourism, Active Leisure and Health Improvement	Ministry of Economy; LBSA	A new job (men/women) created as a consequence of the intervention of the Structural Funds. This job must be preserved for at least 6 months after the project completion. Direct jobs expressed in FTE (40-hour working week = 1 FTE).	Primary sources: employment agreements and other documents. Secondary sources: payment requests, follow-up report.
13.	Complex Adaptation of Public Immovable Objects of Cultural Heritage for Tourism Purposes	Ministry of Economy; LBSA	The same as for No. 12	The same as for No. 14
14.	Tourism Projects of National Importance	Ministry of Economy;	The same as for No. 12	The same as for No. 14

No	Measure	MA	Definition	Data collection (sources of information)
		LBSA		
15.	Development of the Public Tourism Infrastructure and Services in Regions	Ministry of Economy; LBSA	The same as for No. 12	The same as for No. 14
16.	Development of Tourism Services/Products, Variety and Improvement of the Quality of Tourism Services	Ministry of Economy; LBSA	The same as for No. 12	The same as for No. 14
<i>Territorial development policy area - social infrastructure</i>				
17.	Development of Infrastructure of Stationary Social Services	Ministry of Social Security and Labour; CPMA	New jobs for specialists, service staff, etc. (posts, not persons) in a supported company/division. The achievement of the indicator is measured one year after the project completion.	Primary sources: order of the head of the company on the approval of the company structure (together with a list of jobs) Secondary sources: payment requests, follow-up report.
18.	Development of Institutions Providing Services, Including Professional Rehabilitation Services, to the Disabled	Ministry of Social Security and Labour CPMA	The same as for No. 12	The same as for No. 13

## Annex 2 - Calculation of the Unit Cost of a Job Created

Intervention type	Number of jobs created	Payments made (EUR)				Unit costs (EUR)			
		Total	ERDF	National public Financing	Private financing	Total	ERDF	Public Financing	Private financing
Public RTDI development	29	12,571,964	10,686,169	1,885,795	0	433,516	368,489	65,027	0
Investment in firms directly linked to RT&D	172	18,117,543	8,017,046	1,250,794	8,849,703	105,335	46,611	7,272	51,452
<i>Measure Intellect LT</i>	120	11,882,058	4,777,456	1,250,794	5,853,808	99,017	39,812	10,423	48,782
<i>Measure Intellect LT+</i>	52	6,235,485	3,239,589	0	2,995,896	119,913	62,300	0	57,613
Direct support for enterprises	1,686	20,970,231	6,456,482	0	14,513,750	12,438	3,829	0	8,608
<i>Measure Invest LT+</i>	522	11,670,682	1,964,614	0	9,706,068	22,358	3,764	0	18,594
<i>Measure Invest LT-2</i>	84	1,163,575	581,787	0	581,787	13,852	6,926	0	6,926
Improving business environment	0								
Social infrastructure development	169	16,895,857	14,315,841	2,580,016	0	99,975	84,709	15,266	0
Tourism development	437	181,174,982	101,338,414	4,822,251	75,014,317	414,588	231,896	11,035	171,657
<i>Measure Development of Tourism Services/Products, Variety and Improvement of the Quality of Tourism Services</i>	261	40,504,531	17,649,529	0	22,855,002	155,190	67,623	0	87,567

Source: data from the SFMIS, provided by Ministry of Finance (extracted on 8 March 2013).