



**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**

Portugal

Version: Final

João Telha / Heitor Gomes

**CEDRU – Centro de Estudos e Desenvolvimento Regional
e Urbano, Lda.**

**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	5
Definition and methodology.....	5
Content of data.....	6
Wider use of indicator.....	7
3. Cost per job created	7
4. The indicator of job creation in evaluations and AIRs.....	8
5. Looking forward to the 2014-2020 programming period.....	9
6. Further remarks	9
References.....	10
Interviews.....	11
Annex.....	12

List of abbreviations

- AIR Annual Implementation Report
- ES Enterprise Support
- FTE Full-time Equivalent
- HR Human Resources
- IFDR Financial Institute for Regional Development
- MA Managing Authority
- n.a. not available
- NSRF National Strategic Reference Framework
- OP Operational Programme
- SEA Strategic Environmental Assessment
- SFC system System for fund management of DG Regio
- TD Territorial Development

Executive summary

All the ERDF Operational Programmes (OPs) use job creation as an outcome indicator. Although these indicators are used in almost all policy areas, they are mainly used to assess outcomes in enterprise and RTDI support as well as in the territorial development and environment areas. Also regarding the actual outcomes by the end of 2011, most of the created jobs result from interventions related to the enterprise and RTDI support policy area.

The definitions and collection methodologies of the indicators were harmonized at national level by a guidance issued in December 2011 by the Financial Institute for Regional Development (IFDR), the National Strategic Reference Frame (NSRF) Observatory and the Managing Authorities (MAs) of the OPs. For each indicator, this guidance specifies its respective measurement unit, definition, source, collection and reporting schedules, the entities responsible for its collection, and the OPs that use it. All the indicators are updated annually and collected by the MAs. The data is provided by the beneficiaries in the project's contract and final report.

The number of finished projects to which these indicators apply is still very small in all the OPs, thus most 2011 Annual Implementation Reports (AIRs) only reported the expected outputs for these indicators. All the AIRs clearly indicate in their tables of Core Indicators whether the data reported refer to expected (contracted) or actual outcomes. The reliability of the data submitted by the beneficiaries in the contract is not verified and, consequently, is not given much credit by programme managers. Since the data are provided by the beneficiaries, some MAs also admit that the definition of the indicators might not be clear to some of them.

The awareness of the difficulties associated with the collection and validation of job creation indicators in the NSRF OPs justifies that the outcome data reported in the AIRs are not generally highlighted in those reports, as well as in other reports produced by the central government at national level. In what concerns national programmes not co-financed by the funds, jobs created is not a commonly used outcome indicator.

The small number of finished projects by the end of 2011 makes it difficult to calculate an average cost per job created by type intervention, considering a significant array of projects.

The Evaluation of the Macroeconomic Impacts of the NSRF based on the results of two macroeconomic models is the only study that makes an estimation of the impacts of the NSRF on the economy. Without this type of information, it is difficult to make adjustments of the data reported in the AIR in order to improve their reliability. Despite all the limitations related to the collection and verification of job creation indicators, the values presented in the AIRs continue to be the most reliable figures available, considering that they roughly express the characteristics and outcomes of the actual projects that have been supported and concluded.

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

All the 9 Portuguese ERDF OPs use job creation as an outcome indicator. This includes the Core Indicator 001 – “Jobs created”, 002 – “Jobs created for men” and 003 – “Jobs created for women”, as well as the Core Indicators 006 – Research jobs created”, 009 – “Jobs created (gross, full-equivalent) (Direct investment aid to SME)” and 035 – “Number of jobs created in tourism”.

Although these indicators are used to different extents in almost all policy areas, they are mainly used to assess outcomes in enterprise and RTDI support, and also in the territorial development and environment areas. Its use by each OP is synthesized in Table 1:

Table 1 - Use of job creation as an indicator in the Portuguese ERDF OPs, by policy areas

ERDF OPs	Objective	Core Indicators					
		001	002	003	006	009	035
Competitiveness Factors	Convergence	ES+RTDI			ES+RTDI	ES+RTDI	ES+RTDI; HR
Territorial Valorisation	Convergence	Trans; Env; TD			-	-	TD
Norte Regional OP	Convergence	n.a.			n.a.	n.a.	n.a.
Centro Regional OP	Convergence	ES+RTDI; Env; TD			ES+RTDI	ES+RTDI	ES+RTDI; Env
Lisboa Regional OP	Competitiveness	ES+RTDI			ES+RTDI	ES+RTDI	ES+RTDI; Env
Alentejo Regional OP	Convergence	ES+RTDI; Env; TD			ES+RTDI	ES+RTDI	ES+RTDI; Env
Algarve Regional OP	Convergence (Phasing Out)	-			ES+RTDI	ES+RTDI	ES+RTDI
Açores Regional OP	Convergence	ES+RTDI			ES+RTDI	ES+RTDI	ES+RTDI
Madeira Regional OP	Competitiveness (Phasing In)	ES+RTDI; Env; TD			ES+RTDI	ES+RTDI	ES+RTDI

Note: Policy areas: ES+RTDI – Enterprise Support including ICT and RTDI support; HR – Human resources; Trans – Transport; Env – Environment; TD – Territorial Development; n.a. - not available.

In terms of the relative importance of the policy areas in which jobs created are used as indicator of outcomes (Annex Table A), enterprise and RTDI support is clearly the most important policy area, to which 30.5% of the planned expenditure and 28.1% of the actual expenditure are associated.

Most OPs have set targets for job creation indicators, but only the Algarve and the Azores OP have targets set for job creation by priority axis, namely associated with priority axis in the area of enterprise and RTDI support¹. In the other OPs, the targets are set for the entire programme and cannot be decomposed by policy area.

In terms of outcomes by policy area² (Annex Table B), enterprise and RTDI support is responsible for 52% of the total for 001 – “Jobs created”, 100% for 009 – “Jobs created (Direct

¹ In the Algarve OP Axis 1 – “Competitiveness, Innovation and Knowledge”, the targets set were 60 jobs for indicator 006 and 300 jobs for 009. In the Azores OP Axis VII – “Dynamisation of Wealth and Jobs Creation in the Azores”, the targets sets were 4,100 jobs for indicator 001, 25 jobs for 006, 4,000 for 009 and 600 for 035.

² The values presented in Annex Table B correspond to actual outcomes, i.e., the created jobs reported for finished projects by end-2011 (projects that were physical and financially complete and submitted their respective final report by that time). The indicators reported in the AIRs at programme level and submitted to DG Regio via the “the system for fund management” (SFC system) correspond to the sum of actual jobs created in the various policy areas.

investment aid to SME)” and 72% for 035 – “Number of jobs created in tourism”³. Other outcomes can only be clearly associated with the territorial development area (8% of 001 – “Jobs created”). Regarding the 490 jobs for which it was not possible to determine the policy area that supported their creation, it should be noticed that they were created under the Territorial Valorisation OP that comprises the areas of transport, environment and territorial development.

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

Definition and methodology

The definitions and collection methodologies of the indicators included in the NSRF system of physical monitoring were harmonized at national level by a guidance issued in December 2011 by the IFDR, in cooperation with the NSRF Observatory and the MAs of the OPs.

This guidance refers to the European Core Indicators but also to the Common National Indicators, the OPs’ Axis Indicators and the Strategic Environmental Assessment (SEA) Monitoring Indicators.

For each indicator, this guidance specifies its respective measurement unit, definition, source, collection and reporting schedules, the entities responsible for its collection, and the OPs that use it.

Therefore, the definitions and collection methodologies adopted by all the MAs and used within all the OPs are the following:

- **001 – “Jobs created”** – Gross direct jobs created, accounted as Full-time Equivalent (FTE). It sums the new job positions created as a direct result of the completion of the project. To be considered, the job position needs to be filled, to contribute for the increase of an organisation’s total number of jobs, and to be permanent.
- **002 – “Jobs created for men”** and **003 – “Jobs created for women”** – Same definition and methodology as in 001, only by gender.
- **006 – “Research jobs created”** – Sum of the gross jobs created to directly develop R&D activities, as a result of an ongoing or concluded R&D project. It is accounted as FTE, but, if the workload associated with R&D is less than 100%, it must be adjusted accordingly.
- **009 – “Jobs created (Direct investment aid to SME)”** – Sum of the gross direct jobs created in an SME, in FTE, as a direct result of a concluded project in that the project is led by the SME and it was supported by the Structural Funds (not including financial engineering instruments). Some joint projects’ typologies are also excluded.
- **035 – “Number of jobs created in tourism”** - Sum of the gross direct jobs, in FTE, created as a result of the tourism sector projects supported by the OP (and accounted in Core Indicator 034 – “Number of tourism projects”).

³ Jobs created in tourism are related essentially with enterprise support, but it is not possible to breakdown this figure because of the broad scope of the priority axis which also include RTDI support.

All the indicators are annually updated and collected by the MAs from the beneficiaries in two distinct moments: in the project's contract (contracted implementation/expected outputs) and in the project's final report (effective implementation/actual outputs).

Content of data

The number of finished projects to which these indicators apply, and for which the beneficiaries have submitted their final reports, is still very small in all the OPs. Therefore, most 2011 AIRs only reported the expected outcomes for these indicators, and these are only presented in the reports. The moment of collection of the indicators is always clear, since all the AIRs clearly indicates in their tables of Core Indicators whether the data reported refer to expected (contracted) or actual outcomes.

It should be noticed that expected outcomes are not reported to DG Regio in the System for fund management of DG Regio (SFC system): the indicators reported via SFC – and presented in Annex Table B – express only the actual outcomes, i.e. the number of created jobs reported by the beneficiaries in the final report of every finished project.

By definition, job creation indicators used in the NSRF 2007-2013 are referred to FTE jobs, created directly, not considering safeguarded jobs or temporary jobs created during the construction/implementation stage of the projects. In the final report forms made available by the MAs, beneficiaries are asked for the number of created jobs (total and by gender), and for how many of the created jobs are temporary or permanent – although only the permanent jobs are reported in the AIRs. In some cases, the beneficiaries report more information about the quality of the jobs – for instance, if they are “qualified jobs”, i.e., workers with a college degree, master or doctorate education.

Some MAs (Norte and Lisboa Regional OPs) opted for not including data for these indicators' outcomes in their respective AIRs, with the justification that these results could only be measured and reported based on finished projects, thus not reporting the expected job creation values. The Territorial Valorisation OP opted to present only the overall OP outcome and expected job creation based on the contracted values, without specifying the axes which the indicators are associated with. And others (Alentejo Regional OP and Competitiveness Factors OP) only present expected values of job created.

The reliability of the data submitted by the beneficiaries is not verified, and this is due essentially to three reasons. First is the fact that job creation was not a selection criterion for most of the projects. Secondly, it was considered that the extensive verification of job creation would increase the complexity of the verification process. Finally, job creation is not generally considered a major programme objective, and therefore its accurate measurement is not a priority for the MAs. Even in a policy area such as enterprise and RTDI support, the major objectives are considered to be the increase of business internationalisation, the increase of RTDI activities, the modernisation of production facilities and equipments, more cooperation between businesses and other innovation agents, and not job creation in itself.

Since the data are provided by the beneficiaries, some MAs also admit that the definition of the indicators might not be clear to some of them, and that the contracted values may include expected jobs created during the construction or implementation phase and other incongruence with the adopted indicator definitions.

Due essentially to the small number of finished projects with submitted final reports, MAs are still not much concerned with the verification of these indicators in particular, and no actions are programmed in order to proceed with their specific validation. Only in the cases where there is any reasonable doubt or evident discrepancies, the MAs may consider an additional request of information from the beneficiaries - but this practice has been exceptional.

Currently, the reported values of actual outcomes are only verified during the ordinary final procedures of verification of every project, by a personal contact of the MA technicians with the beneficiaries. Basically, the MA technicians rely on the word of the beneficiaries, and don't request any further evidence about the created jobs that were reported.

The monitoring information systems of the ERDF OPs have no direct connection with the ESF information system and no distinction is made between jobs created by the ERDF and by the ESF. This means that the ERDF OPs MAs do not verify if their beneficiaries also have operations supported by the ESF and if, in those cases, the new jobs that are reported were created under projects supported by the ERDF or the ESF.

Wider use of indicator

The awareness of the difficulties associated with the collection and validation of job creation indicators in the NSRF OPs is identified by the MAs as the main reason why the outcome data reported in the AIRs are not generally highlighted in those reports. In our opinion, the same factor is also determinant in the way these indicators are used in other reports produced by the central government at national level.

The 2012 NSRF Strategic Report produced by the NSRF Observatory presents, in its Annex III, a table with the total national outcomes of ERDF and Cohesion Fund Core Indicators. The values presented in this report correspond to the aggregation of actual outcomes reported by the MAs in the 2011 AIRs. Nevertheless, no other significant reference is made to those data in the report.

Being the entity responsible for the strategic monitoring of the NSRF, the Observatory has access to all the physical implementation data associated with the supported projects. However, with regard to job creation indicators, it does not carry out plausibility checks for the data reported by the different MAs.

In what concerns national programmes not co-financed by the funds, jobs created is not a commonly used outcome indicator. Implementation or evaluation reports usually focus on physical implementation indicators, such as the number of supported companies, the number of trainees, the number of supported self-employment projects, or other indicators, as for instance the employability (probability to gain an employment) of active employment measures beneficiaries.

3. Cost per job created

The small number of finished projects by the end of 2011 makes it difficult to calculate an average cost per job created by type intervention, considering a significant array of projects.

One typical type of intervention for which there are available data and a minimum number of finished projects to base this analysis is the Support Scheme to Innovation. This intervention is

essentially a scheme of loans to enterprises, managed by the Regional OPs (in the case of SMEs) and by the Competitiveness Factors OP (in the case of large companies). Eligible beneficiaries include companies in sectors such as industry, trade, energy, tourism, services, transports and logistics. The main objectives of this grant scheme are: a) to promote business innovation; b) to introduce technological upgrades and to reinforce business internationalisation; c) to stimulate qualified entrepreneurship and investment in new areas with growth potential.

By the end of 2011, there were 8 concluded projects under the Centro Regional OP. As it was reported in the AIR, these projects were responsible for a net creation of 59 full-time jobs, out of which 23 were qualified jobs (workers with a college degree, master or doctorate education).

The total investment associated with these projects amounts to EUR 2.4 million, with a total ERDF funding of EUR 1.5 million. This results in an average total cost per job of circa EUR 40,244, of which 25,628 are ERDF resources.

The utility and relevance of this kind of calculations is very limited and it is also questioned by the MAs, given the reliability issues described above. This case - in which the reported created jobs refer to net jobs instead of gross - can be a good example of the inconsistencies evidenced in the reported data for these indicators.

4. The indicator of job creation in evaluations and AIRs

The Evaluation of the Macroeconomic Impacts of the NSRF, completed at the beginning of 2011, is the only study that makes an estimation of the impacts of the 2007-2013 Structural Funds in the Portuguese economy. This study was developed by the Ministry of Environment and Land Use Management and it was based on the results of two macroeconomic models (HERPOR and MODEM). Its main results are the following:

- For each EUR 1 million of NSRF expenditure (total public expenditure), 35 jobs/year (FTE) were generated in the 2008-09 period;
- In the 2008-09 period, the NSRF had an impact of 1.0% in the total employment, equivalent to 46,000 FTE jobs per year;
- A positive impact of +0.5% in the total employment is expected for the implementation period (2008-2015), followed by a negative impact of -0.7% for the post-implementation period (2016-2050).

However, the results of this study are not comparable to the outcome indicators used in NSRF OPs, since they estimate the overall impact of the Structural Funds in the employment, including direct and indirect jobs.

Without an estimation of the direct jobs created by the NSRF, it is difficult to adjust the data reported in the AIRs in order to improve its reliability. Despite all the reliability issues and limitations related to the collection and verification of job creation indicators, in our opinion the values presented in the AIRs continue to be the most reliable figures available in terms of actual outcomes, considering that they roughly express the characteristics and outcomes of the actual projects that have been supported and concluded.

A rough estimate of the total number of direct jobs created up to the end of 2011 could be made taking by reference the contracted values associated with approved projects (as reported in the

2011 AIRs) and each OPs' implementation rates (validated fund expenditure/approved fund expenditure) at that particular time. Considering that the 2011 AIRs presented a total expected outcome of 32,805 jobs created (in 7 out of 9 OPs, as there are no such information reported for Norte and Lisboa), it could be estimated that, by the end of 2011, circa 12,700 direct jobs were created. However, this number could be closer to the total expected outcomes, if one considers that jobs are created in the beginning of the project and they are permanent.

5. Looking forward to the 2014-2020 programming period

MAs in general are still not familiar with the new definition of the common indicators for 2014-2020, as it was expressed in the interviews.

However, it is considered that the definitions for indicators 8 "Employment increase in supported enterprises" and indicator 24 "Number of new researchers in supported entities" are very similar to the definitions in place for the job creation indicators used in the NSRF 2007-2013.

6. Further remarks

The indicators of job creation are not considered by the MAs as a major indicator for monitoring the OPs performance and their use in AIRs and evaluation studies is, in general, almost limited to their presentation in the Core Indicators summary tables. Furthermore, they are not used in national studies and evaluations, in the NSRF context or in relation to other national public programmes.

It is clearly a case in which MAs feel obliged to collect and report these indicators in order to comply with the Commission information necessities, and don't consider it much useful for their own necessities as programme managers, or relevant from the programmes' accountability perspective. This contrasts clearly with the greater importance given in the AIR to the OPs' axis indicators, which are preferred to express the achievements and physical performance of the programmes, mainly because of its proximity with the intervention typologies of each OP.

One cause pointed out for the little importance given to job creation indicators in the NSRF is the difficulties found by the MAs to accurately monitor and verify these indicators and, consequently, the necessity they have to rely on the information provided by the beneficiaries. Paradoxically, little effort has been put by the MAs in order to overcome these issues.

Another more implicit cause of the limited importance given to this indicator is that job creation is not considered to be a direct objective of the ERDF OPs, but rather a positive effect of the support given by the Structural Funds in some policy areas, in particular enterprise and RTDI support and territorial development.

References

Azores Regional Government - Planning and Structural Funds Regional Directorate (2012) – 2011 AIR of the Azores OP for Convergence.

Azores Regional Government - Planning and Structural Funds Regional Directorate (2006) – Azores OP for Convergence.

DIAS, Mónica Costa; VAREJÃO, José (2012) – “Evaluation of Active Employment Policies”; Porto University Economics School

IEFP- Employment and Professional Training Institute (2012) – Synthesis of the Employment and Professional Training Programmes and Measures

IFDR (2011) – Evaluation of the Initial Implementation of Business Support Schemes in the Context of the Competitiveness Factors Agenda – Final Report.

IFDR (2011) – Guidance number 9/2011 on “Physical Monitoring”

Madeira Regional Government (2006) – Madeira Autonomous Region Economic Potential and Territorial Cohesion Valorisation OP.

Madeira Regional Government (2012) – 2011 AIR of the Madeira Autonomous Region Economic Potential and Territorial Cohesion Valorisation OP.

Madeira Regional Government (2012) – Interim Evaluation of the OP for Valorisation of the Economic Potential and Territorial Cohesion of the Autonomous Region of Madeira (INTERVIR+ Programme) - Executive Summary

MA of the Alentejo Regional OP 2007-2013 (2012) – 2011 AIR of the Alentejo Regional OP.

MA of the Alentejo Regional OP 2007-2013 (2012) – Mid-term Evaluation of the Alentejo Regional OP 2007-2013.

MA of the Algarve Regional OP 2007-2013 (2012) – 2011 AIR of the Algarve Regional OP.

MA of the Centro Regional OP 2007-2013 (2012) – 2011 AIR of the Centro Regional OP.

MA of the Lisboa Regional OP 2007-2013 (2012) – 2011 AIR of the Lisbon Regional OP.

MA of the Norte Regional OP 2007-2013 (2012) – 2011 AIR of the Norte Regional OP.

MA of the OP for Competitiveness Factors (2006) – OP for Competitiveness Factors.

MA of the OP for Competitiveness Factors (2012) – 2011 AIR of the OP for Competitiveness Factors.

NSRF Observatory (2007) – National Strategic Reference Framework Portugal 2007-2013.

NSRF Observatory (2009) – “2009 NSRF Strategic Report”.

NSRF Observatory (2010) – “2009 NSRF Strategic Report II”.

NSRF Observatory (2011) – “Overall Evaluation Plan for the NSRF and OPs 2007-2013”.

NSRF Observatory (2011) – “Evaluation of the Macro-economic Impact of the National Strategic Reference Framework 2007-2013”.

NSRF Observatory (2012) – “2011 NSRF Strategic Report IV”.

NSRF Technical Coordination Commission (2012) – “Indicadores Conjunturais de Monitorização – Boletim Informativo N.º14

NSRF Technical Coordination Commission (2012) – “Indicadores Conjunturais de Monitorização – Boletim Informativo N.º18.

Interviews

Dr. Joaquim Aranha – Technical Secretary of the Alentejo Regional OP MA.

Dr.^a Fernanda Costa – Head of the Information, Evaluation and Technical Assistance Unit of the Centro Regional OP MA.

Eng. Rui Monteiro – Head of the Centre for Policy Evaluation and Regional Studies of the Norte Regional Coordination and Development Commission / Norte Regional OP MA.

Dr. Pedro Mendes – Head of the Evaluation, Monitoring and Communication Unit of the Territorial Valorisation OP MA.

Annex

Tables

Annex Table A - Relative importance of policy areas in which “Jobs created” are used as an indicator of outcome, at end-2011

Policy Area	ERDF Expenditure			
	Planned (EUR million)	Planned (%)	Actual (EUR million)	Actual (%)
Multi area*	7,154.2	50.2	2,416.3	48.9
Enterprise support including ICT; RTDI support	4,342.3	30.5	1,389.3	28.1
Environment	0.4	2.9	156.7	3.2
Human Resources	0.0	2.0	59.7	1.2
Territorial development	1,200.7	8.4	463.4	9.4
TOTAL NSRF	14,257.9	100.0	4,941.5	100.0

Source: AIRs of the NSRF OPs, 2011.

Note: * “Multi area” includes expenditure of Norte, Algarve and Territorial Valorisation OPs, that use “Jobs created” as an indicator of outcome, but it was not possible to associate the indicators with the OPs’ priority axes and, therefore, with specific policy areas.

Annex Table B - Outcomes of job creation indicators, by policy areas, at end-2011

Policy Areas	Core Indicators			
	001	006	009	035
Multi area	490	0	0	15
Enterprise support including ICT; RTDI support	627	0	337	38
Territorial development	93	-	-	-
TOTAL	1,210	0	337	53*

Source: AIRs of the NSRF OPs, 2011.

Note: * The NSRF 2012 Strategic Report indicates that, by mistake, the data reported by the SFC system to DG REGIO included the planned outcomes of the Centro Regional OP (677 jobs) instead of the actual outcomes (17 jobs).