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MEASURING STRUCTURAL FUNDS EMPLOYMENT EFFECTS

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1. INTRODUCTION¹

In its communication on a renewed Lisbon strategy² the Commission proposes for the next generation of regional development, European Social Fund and cohesion programmes, a more strategic approach in an effort to ensure that their content is targeted on growth and jobs. On the other hand Regulation³ for the next period 2007-2013 sets up the objective for Structural Funds interventions of incorporating, at national and regional level, the Community's priority in favour of sustainable development by strengthening, among others, employment. As a result, the estimation of employment effects becomes even more important not only for assessing the impact of Structural Funds interventions but also for assessing their contribution to the Lisbon strategy objectives. A stronger guidance to estimate employment effects should help Managing Authorities in programming future Structural Funds interventions so that they are more targeted on jobs.

In despite of the guidance⁴ issued in 1997 there has been a variable use of it across Member States in estimating the employment impact of the current programmes 2000-2006. Therefore there is a need to review this guidance in order to increase its use by Member States for the next programming period.

Finally many evaluations of Structural Funds interventions have been performed since 1997. Therefore it will be also worthwhile to improve current guidance by drawing lessons from good practices in assessing employment effect in the current generation of programmes 2000-2006.

Purpose of this guidance

This document sets out revised guidance for measuring Structural funds employment effects. It is designed to provide a practical, step-by-step, guidance to measuring Structural funds employment effects using a 'bottom-up' approach. A 'bottom-up' approach to evaluating direct Structural funds employment effects involves using monitoring data on projects (preferably backed up by surveys and other research) to estimate direct employment effects.

The structure of the guidance is summarised in the following diagramme. Three key steps are suggested – setting targets and estimating gross employment effects, converting gross employment estimates into net effects, and an overall assessment. These broadly correspond with successive stages in the Structural Fund programming cycle.

This working document is supported by a Study on Measuring Employment Effects, June 2006, (made for DG REGIO by the Centre for Strategy & Evaluation Services) which is available from the INFOREGIO website and reference should be made to this for further information.

COM (2005) 24. Communication to the spring European Council. Working together for growth and jobs. A new start for the Lisbon Strategy. 02.02.2005

Article 3, "Objectives", 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

Directorate General of Regional Policy. Methodological document on "Counting jobs. How to evaluate the employment effects of Structural Fund interventions".

Overview - Key Steps in Measuring Structural funds Employment Effects

COMMON DEFINITIONS AND METHODOLOGICAL GUIDANCE					
STEP 1	STEP 2	STEP 3			
Setting Targets & Estimating Gross Employment Effects	Estimating Net Effects and Regional Impacts (Programme level assessment)	Overall Assessment & Contribution to Key EU Priorities (Programme level assessment)			
Step 1.1: Baselines and targets Step 1.2: Monitoring and reporting framework Step 1.3: Surveys and other research Step 1.4: Programme level assessment of gross employment effects	Step 2.1: Additionality Step 2.2: Displacement Step 2.3: Indirect/multiplier Effects	 Step 3.1: Key evaluation issues: Relevance, Effectiveness, Efficiency, Impacts, Community Added Value, Sustainability. Step 3.2: Contribution to EU policies and priorities 			

This document is completed with five annexes containing further guidance about: Key Definitions and Core Indicators, Structural Fund Intervention Logic and Jobs, Project Life Cycle and Measuring Employment Effects, Some examples of Intervention-specific Employment Effects and Bibliography.

2. MEASURING STRUCTURAL FUNDS EMPLOYMENT EFFECTS

2.1. Step 1: Setting Targets & Estimating Gross Employment Effects

The first step – setting targets and providing an estimate of gross employment effects – represents the minimum that those responsible for Structural Fund programmes should undertake.

Step 1.1: Baselines and targets

Step 1.1: Baselines and targets – at the beginning of the new programming period, baselines should be established and targets/forecasts prepared for the employment effects that should/are likely to arise from future interventions. This is a task for the ex ante evaluation exercise and should involve:

- Establishing the **baseline** situation in a region for employment, unemployment and other key job-related indicators;
- Based on this analysis, setting **targets** for what Structural Fund interventions should achieve over the lifetime of a programme;

• Using **cost per job** data derived from previous programming periods and **EU benchmarks** to help set targets and to check that they are realistic.

At the outset of a programming period, as part of an ex ante evaluation, a **baseline analysis** should be undertaken for key employment-related indicators. Baseline data refer to the initial value against which an indicator is subsequently measured. These data include rates/trends in employment and unemployment, productivity, and the sectoral, geographical and gender distribution of jobs and joblessness.

In the first instance, the baseline analysis should be aimed at helping to define/justify job targets by **identifying needs** and, if linked to projections (i.e. a 'dynamic' rather than 'static' concept of a baseline) giving an indication of what is likely to happen in the absence of Structural Fund intervention. Undertaking a **counterfactual analysis** (using macro-economic models) is a key task and necessary if Community added value is to be demonstrated.

Apart from being based on an assessment of regional needs and those of key target groups, the task of setting employment-related **targets** for new programmes should also be informed by evidence from previous periods on the average cost per job for different types of interventions.

Measuring cost-effectiveness: the Cost per job created

Calculating the cost per job for a Structural Fund programme provides a broad measure of financial efficiency and a basis on which the results likely to be achieved/achieved by different interventions can be compared. There are several ways in which the cost per job can be calculated:

- On the basis of an estimate of gross or net employment effects;
- Taking into account all expenditure and, if relevant, just the Structural Fund element.

Any benchmarks for the cost per job should be treated with caution. In particular, no two interventions or the circumstances in which they take place are exactly the same. For example, more investment will be needed to create permanent jobs through business support measures in a region where SMEs have a high failure rate than in other regions where good survival rates exist.

It is also important that cost per job benchmarks from earlier periods are reviewed because circumstances may have changed. For example, if there has been a change in economic conditions in a region and benchmarks may therefore no longer be relevant.

Ideally, baseline data should be reviewed at a later stage in the programming period: the **time-lag in the availability of statistics** for some indicators means that when a programme is being prepared, the available data may be several years out of date. If this is the case, an updated analysis (for example, as part of on-going evaluation activities if Member States decide to do this) may suggest that the original job-related targets should be revised to reflect a more accurate and up-to-date understanding of the situation that prevailed when they were originally set. This could of course have implications for the continuing relevance or otherwise of key objectives.

Step 1.2: Monitoring and reporting framework – during the implementation period of a programme, it is important that information on the gross job outcomes generated by projects is systematically monitored. The key steps are:

- Providing clear **definitions and guidance** together with a common template for beneficiaries and intermediary bodies to use in collecting and reporting project data on jobs;
- Developing the necessary **monitoring systems** at a programme level so that jobs data on projects can be stored and analysed;
- Periodically carrying out an **aggregation of job data** at the programme level so that progress against targets can be monitored.

In the 2007-13 Structural funds programming period, national and regional authorities are only required to provide the Commission with monitoring information at a Priority ('Priority axis') level. As such the tasks summarised above with regard to monitoring and reporting systems are the solely responsibility of national and regional authorities and should reflect their needs⁵.

Taking the first point, direct beneficiaries of Structural Funds support (from now on beneficiaries) and intermediary bodies should be provided with **common guidance on definitions**⁶ and procedures to ensure that the information from many different sources can be combined in a consistent way. Some flexibility in the format for reporting jobs data from project is however needed. For example, where beneficiaries have multiple funding sources and hence multiple reporting obligations, flexibility is needed to avoid a situation where data on jobs needs to be reproduced in varying formats at different points in time for different authorities.

At a programme level, job data generated by project monitoring systems should be periodically collated, analysed and aggregated, and comparisons made with targets so that performance can be assessed and, if necessary, corrective action taken. The Structural Funds have supported the development of monitoring systems in all Member States through technical assistance. There is a need for these systems to be further improved so that employment effects can be more accurately monitored.

Key Steps - Monitoring Employment Effects

• Forecasting - beneficiaries should be asked to forecast the eventual job outputs/results from a project at the application stage;

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For instance in 2005 French Authorities carried out on their own a specific research on employment effects at national level as complement of the compulsory updating of mid-term evaluation of Structural Funds programmes.

⁶ See Annexe I about common definitions.

- *Updating* at agreed points in the project lifecycle, beneficiaries should provide an update on actual expected job outputs/results. Monitoring systems should be designed in a way that is versatile enough to handle revisions to the forecasts.
- Comparison with targets the updated monitoring data on jobs should be checked periodically against targets.
- Quality checks checks should be occasionally undertaken to ensure that project data on job outputs/results is accurate, e.g. there is no double or triple counting.

Step 1.3: Surveys and other research

Step 1.3: Surveys and other research – in addition to routine monitoring, surveys and other research should be undertaken to examine Structural funds employment effects in more depth. Priorities in this respect might include:

- Examining in more detail the extent and nature, quality and duration of Structural funds employment effects;
- Helping to develop/refine the parameters needed to estimate net employment effects;
- Investigating the employment effects arising from Structural Fund interventions where quantification is otherwise difficult;
- Checking the accuracy of employment estimates based on monitoring data.

The **timing of research activities** is important. Ideally, research to investigate Structural funds employment effects in more depth should be undertaken on an on-going basis throughout the programming period. In the past, there has been a tendency for such research to only be undertaken as part of interim and/or ex post evaluations. Experience suggests that this can, however, make it difficult to obtain good quality information.

In many cases, **responsibility for carrying out surveys and other research** will be contracted out to consultants. However, there is a strong case for encouraging beneficiaries to also carry out surveys and other research as part of a self-evaluation of their activities. For this to be possible, the contracts with beneficiaries should ideally make adequate financial provision for such research, and also allow enough time for it to be carried out, but this may not always be feasible.

Whilst it is likely that the focus will be on Structural Fund programmes, research involving purely nationally-funded schemes can also be relevant (e.g. by helping to develop the parameters for estimating net employment effects).

Examples of In Depth Research

- In a German Objective 1 region, SMEs were surveyed to investigate the durability of jobs created by Structural Fund assistance. This suggested that that some new jobs (albeit only 2% of the total) 'claimed' earlier no longer existed.
- A review was undertaken by the National Audit Office in the UK of domestic Regional Grants' evaluations identified parameters used to estimate net jobs additionality (45 to 48%), displacement (24 to 33%) and indirect effects (1.18 to 1.29). Projects

- creating jobs were found to demonstrate higher additionality than those safeguarding existing jobs.
- In the Emilia Romagna Objective 2 region of Italy, a panel of jobseekers was interviewed over a 12-month period to track destinations after completing their ESF-supported training and to establish the impact on **employability**, in particular how many jobseekers had found jobs (the estimate arrived at was 50% of job-seekers had found jobs).

Step 1.4: Programme level assessment of gross employment effects

Step 1.4: Programme level assessment of gross employment effects – at the mid point and towards the end of the programme, an estimate should be made of the scale and quality of employment effects actually achieved. This should involve:

- Analysing monitoring data to estimate the number and quality of jobs created, jobs maintained, etc and providing an analysis (where relevant) by gender, age, size/sector of undertaking and other key variables, e.g. area; number and type of "green" jobs created;
- Aggregating the various types of gross employment effects at the priority, programme level and NSRF level;
- Comparing actual employment effects with the original targets so that the programme's performance can be assessed.

The focus in the case of the **ERDF** should - as suggested earlier - be on quantifying permanent full-time equivalent⁷ jobs that are created directly by Structural Fund interventions. It is suggested that no attempt to quantify 'jobs maintained' should be undertaken except in the case of major 'productive investment' projects and/or unless safeguarding employment is a key aim of a programme and a reliable estimate can be provided.

In relation to **ESF**-supported interventions estimates should be made for the number of people having achieved positive outcomes due to interventions (finding employment) some time after the intervention (usually 6 months) and of those whose qualifications have increased due to intervention leading to better quality of jobs they undertake. These estimates should be preferably broken down by employment status on the labour market, educational achievement, gender and age.

In addition to quantifying Structural funds employment effects, there should be an assessment of **job quality**. Assessing job quality is not easy to do because quality is a multidimensional concept and depends on a number of components which interact with one another. It is the balance - and the relative weight of each component in a given situation - which determines the degree of quality. In 2001, the Council⁸ agreed to assess

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See Annexe I about conversion parameters of temporary job into job-year and part-time job into full-time equivalent (FTE).

⁸ Council conclusions on the Employment Committee report on indicators of quality in work. *Adopted on 3rd December*.

progress using a set of indicators on quality built on the ten dimensions of quality in work identified by the Commission⁹. As far as these indicators are, on the one hand, relevant for measuring structural funds employment effects and, on the other hand, are coherent with a bottom-up approach, it should be possible to provide a broad estimate of the contribution using those quality indicators. For instance some indicators on "gender quality" dimension could be used. On the contrary assessing job quality in terms of the level of remuneration and/or qualifications and skills, are very demanding in terms of data and may not be workable on a large scale although this will depend on the sophistication of monitoring systems. Even if monitoring data are not available an estimation of gross employment effects can be carried out throughout the conversion of jobs into gross added value¹⁰ by using, if available, official data on average wages broken down by sector, gender, skills and qualifications.

If appropriate programme monitoring systems are in place (see Step 1.2), the collation, analysis and **aggregation of data on Structural funds employment effects** should be relatively straightforward. Aggregation will involve a 'bottom-up' process, starting with the aggregation of project data at the Measure level and then moving upwards through priorities to provide a global estimate of employment effects at the programme level. This exercise should be undertaken around the mid point in a programme's implementation as part of a possible on-going evaluation and towards the end (programme closure and ex post evaluation). At the same time, it is clearly important to compare the actual employment effects that can be attributed to Structural Fund programme with the original targets so that performance can be assessed.

It needs to be recognised that there will be some **delayed Structural funds employment effects** which may not become fully apparent during the programming period itself. This may be because projects start relatively late and/or due to the nature of in the interventions themselves. In these circumstances there are two basic options: firstly, to forecast eventual employment effects by drawing on the project's targets and any available evidence of progress so far; and, secondly, to ask beneficiaries to continue to provide monitoring data beyond the point when Structural funds support ends.

The latter option is preferable but may be more difficult to achieve since beneficiaries will have no obligation (unless written into grant agreements) to provide data on an ongoing basis once their funding comes to an end. An alternative is for follow-up surveys to be undertaken that focus on projects where Structural Fund assistance has stopped. In the case of the ESF, the practice of tracking destinations (e.g. of young people who have completed training courses) is quite common.

2.2. Step 2: Estimating Net Effects and Regional Impacts

An assessment of Structural funds employment effects undertaken on a purely gross basis can be misleading in terms of the scale of impacts thereby it is necessary to estimate net effects and regional impacts. The second step, undertaken at a programme level, involves adjusting gross employment estimates to take additionality, displacement and indirect effects into account. This step is likely to require the input of external experts and will

Communication from the Commission: "Employment and social policies: a framework for investing in quality". COM(2001) 313 final

This conversion is also needed for estimating income multipliers (see below under Step 2.3).

usually only be undertaken towards the end of a programme or afterwards. The formula¹¹ for estimating net effects is:

NET JOBS = GROSS JOBS X (1– DEADWEIGHT) X (1 – DISPLACEMENT AND SUBSTITUTION) X (1 + SUPPLIER MULTIPLIER + INCOME MULTIPLIER)

Step 2.1: Additionality

Step 2.1: Additionality¹² – an assessment should be undertaken of the extent to which employment effects can be attributed solely to Structural Fund intervention. The possibilities are:

- **Absolute additionality** i.e. a situation in which none of the employment effects would have occurred without Structural Fund intervention;
- **Partial additionality** namely, in the absence of Structural Fund intervention, projects would have proceeded but the employment effects would have been on a reduced scale or occurred at a later stage;
- No additionality ('Deadweight') i.e. a situation where all the employment effects associated with Structural Fund interventions would have occurred anyway because projects could have proceeded with support from other sources.

An assessment of additionality involves establishing a causal relationship between Structural Fund interventions, projects and employment effects ('attribution'). The **key question** to be asked is: what would have happened to the project if Structural Fund assistance had not been available? Because this is a hypothetical question, additionality is difficult to assess.

Additionality can be assessed by obtaining **survey feedback from beneficiaries** and asking them what would have happened in the absence of assistance. A survey-based approach of this sort is the most common but runs the risk of giving biased responses.

Another approach, generally considered to give the most accurate results, is to make **comparisons between assisted and non-assisted groups** (the so-called 'quasi-experimental approach') to establish the difference that a Structural Fund intervention may have made to beneficiaries. This approach has the merit of minimizing the risk of bias from beneficiary feedback but is a more complex and potentially costly methodological option.

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In this formula: deadweight, displacement, substitution, supplier multiplier, income multiplier, are not expressed as percentages but as proportions.

The concept of Additionality used in this document is different from the concept of Additionality used in article 15 of the Council Regulation (EC) No 1083/2006. The latter is, of course, the principle that "Contributions from the Structural Funds shall not replace public or equivalent structural expenditure by a Member State".

A further possibility is to examine what happened to **rejected applications** for Structural Fund aid: if the projects concerned nevertheless went ahead, then this could point to relatively low additionality (assuming the schemes that were rejected are similar to those that were accepted). An alternative to empirical methods for assessing additionality is to obtain parameters from other **existing research**. Further guidance on the most appropriate methods to use can be found in the full study.

Estimates of additionality can vary enormously depending on the type of Structural Fund intervention. For example, grant aid for entrepreneurs in the process of setting up a business will generally demonstrate high levels of additionality because alternative sources of assistance are often not available and financing is a key input to the formation of an undertaking; however, the same type of support provided to an existing SME may well be far less critical to its development because many other factors will affect performance. Similarly, the additionality demonstrated by interventions that create jobs will usually be higher than where jobs are maintained. Some broad parameters are provided at the end of this section.

Step 2.2: Displacement and Substitution effects

Displacement effect – Effect obtained in an eligible area at the expense of another area. The extent to which positive employment outcomes that can be attributed to Structural Fund interventions are offset by negative side effects affected by displacement should also be assessed.

Substitution effect - Effect obtained in favour of a direct beneficiaries but at the expense of a person or organisation that does not qualify for the intervention..

There are several considerations in this respect:

- There could be displacement between ERDF target groups and non-assisted organisations/projects;
- In the case of the ESF, there may be both displacement and substitution effects arising from interventions;
- From a regional/spatial perspective, displacement between eligible and non-eligible areas is also possible but less relevant in the new programming period since there will no longer be a 'zoning' approach.

Displacement occurs if the totality or part of the jobs in a sector/target area would have been created anyway, without support, but not by the assisted entities. Substitution occurs at a firm level if an assisted entity substitutes one activity for a similar one (e.g. recruiting a jobless person while another employee looses a job).

In an **ERDF** context, an example of where displacement might occur is where SMEs are given assistance that results in improved performance at the expense of competitors. Another example would be investment in business premises that leads to occupancy rates elsewhere in the area falling. Project appraisal criteria can reduce the risk of displacement by ensuring that assistance is used to support businesses/projects that are under-represented in the region since these are likely to be non-displacing.

Displacement effects of this type are difficult to measure. From a methodological perspective, the first option is to undertake research, for example to establish the extent

to which ERDF-assisted SMEs are competing directly with other businesses in their areas. However, although research to investigate displacement effects could form part of a wider exercise (see Step 1.3), it is unlikely to be justified as a research project in its own right. Given this, the second option is to rely on **standard parameters for displacement and substitution** based on existing research and this approach is recommended.

In the case of the **ESF**, the training of employees in one undertaking can 'displace' workers in another if the training improves the performance at the expense of a competitor. ESF interventions in favour of those out of work can have substitution effects if unemployed people gain work at the expense of those already in jobs or others who are unemployed but who do not receive assistance. As with ERDF displacement effects, these are also difficult to measure and parameters from existing research may have to be used to arrive at an estimate. **Displacement will typically be in the range of 10% to 30%.**

Displacement can be positive. For example, by promoting adaptability and occupational mobility, the Structural Funds can support economic restructuring by helping to transfer from non-competitive sectors to more competitive ones with higher long-term growth potential. The quantification of displacement effects (negative or positive) should reflect these different types of effects.

Step 2.3: Indirect/multiplier Effects

Step 2.3: Indirect/multiplier Effects – to fully estimate net effects, it is necessary to also assess the extent to which the (additional, non-displacing) employment outcomes directly attributable to Structural Fund interventions have further indirect effects. These will arise from a combination of:

- **Income multipliers** where job creation leads to additional incomes that are spent in local economies which leads to an increase in demand for goods and services, in turn creating further jobs;
- **Supplier effects** i.e. where an assisted business or project increases leads to additional order for local goods and services, again resulting in second-round job and wealth creation effects;
- Other indirect employment effects arising, for example, from developments that enhance the attractiveness of an area to business; "green" jobs created.

Indirect effects can be defined as 'effects which spreads throughout the economy, society or environment, beyond the direct beneficiaries of the public intervention' (e.g. the number and type of "green" jobs created). The way in which additional expenditure arising from Structural Fund-supported activities works its way through a local economy is complex and only a rough approximation is feasible in the context of a 'bottom-up' approach (the alternative is to use econometric modelling techniques).

See 'Evaluating Socio Economic Development' www.evalsed.info/frame_glossary.asp a INFOREGIO website.

<u>Income Multipliers</u>: in the case of income multipliers, a 'bottom-up' approach involves estimating the number of net additional non-displacing jobs, average remuneration and disposable incomes, and the amount of local expenditure needed to create new employment indirectly.

If the approach advocated earlier (Step 1.4) of assessing gross employment effects through a sectoral analysis of Structural Fund employment effects is adopted, and this is combined with official data on wages and assumptions are made about disposable incomes, then a reasonable 'bottom-up' approximation of induced income effects is feasible. The wider an area is defined (provided it remains small relative to the total national economy), the higher will be this income multiplier. For most activities, local multiplier effects are probably fairly small: estimates are generally around 1.1. **Regional multipliers may be larger and in the range 1.2 to 1.5.**

<u>Supplier Effects</u>: with supplier effects, estimates are even more methodologically complex and the necessary information less readily available. Here, a 'bottom-up' approach involves obtaining an indication of the value orders for goods and services placed by businesses or projects with local suppliers, the extent to which this procurement is additional, and then the indirect employment effects likely to be generated by increased turnover in supplier businesses. The local content of purchases may be higher than the proportion of purchases from local suppliers but is nonetheless rarely much more than 5 to 10%. **Estimates of supply multipliers, in terms of the effects on employment in local labour markets have ranged from around 1.05 to 1.11.**

A number of factors will influence the scale of supplier-related effects: the industrial structure in a region may, for example, mean that relatively specialised services and goods can only be procured from external sources; or the small size of the region may increase the likelihood of inter-regional 'leakages'. These considerations apply to especially supplier-related effects where procurement focuses on goods (services, for example labour for a construction project, are more likely to be recruited locally). With income-related effects there can also be leakage if, for example, direct job creation benefits people who commute in from outside the area and spend their disposable incomes elsewhere. As with displacement, indirect effects are difficult to research and it is preferable therefore to rely on standard parameters based on existing research.

Other Indirect Effects: there may be other, less easy to quantify indirect employment effects. For example, the development of a prestigious business facility (premises, conference facilities, etc) will directly benefit users but could attract other businesses to the area; or ESF-supported capacity building in addition to helping those directly involved should have benefits for voluntary groups, local communities, etc, that could in turn generate indirect employment effects (e.g. helping to reintegrate women returners to the labour market).

There are a number of considerations that are likely to have a bearing on scale of the gross/net adjustments needed. Thus, the extent of additionality at a project level will be strongly influenced by the level of **public funding** (national and Structural Fund funding) – where this was low, it is more likely that projects could have gone ahead even without assistance. Likewise, the **nature of the beneficiaries** is relevant: where actions are designed primarily to safeguard jobs in undertakings in declining sectors, displacement could well be relatively high. Conversely, where the focus is on promoting SMEs in growth sectors, additionality is likely to be high, especially if start-ups rather

than existing SMEs are targeted, and the risk of displacing jobs in non-assisted firms – at least from the same region – will tend to be low.

Examples – Estimates of Net Employment Effects

- The ex post evaluation of the 1994-99 **Objective 2 programmes** estimated that the 1.2 million gross additional jobs created translated into 770,000 net jobs. The parameters needed for the conversion were derived from a series of case studies additionality [(75%), displacement (10%) and indirect effects (20%).'jobs saved' were adjusted for additionality (50%), displacement (30%) and indirect effects (10%)].
- In the Merseyside (UK) Objective 1 programme evaluation, the parameters used (deadweight 35%; displacement 35%; multiplier for indirect effects 1.25) meant that some 29,082 jobs created were converted into 15,400 net jobs. Evidence from stakeholder interviews was used to estimate parameters.
- A recent OECD report containing a detailed review of factors involved in estimating the net employment effects arising from **ALMPs** argues that deadweight and substitution effects may be substantial (70-90% of the gross number of jobs

Existing studies suggest that additionality, displacement and indirect effects tends to fall into certain ranges. The following table summarises these parameters:

Indicative Parameters for estimating Net Employment effects

Job effects	Additionality	Displacement	Indirect Effects
Jobs created	High (70-80%)	Low (10-15%)	High (1:1.5+)
Jobs saved	Low (20-20%)	High (60-70%)	Low (1:1 or lower)
Training	High (50-60%)	Medium (40-50%)	Medium (1:1.1 to 1.5)

Worked Example - Estimating Net Employment Effects

Financial inputs	Euro 10 million			
<u>Outputs</u>	100 SMEs receive assistance			
Results	500 gross jobs created of which 400 are permanent and 100 temporary (let's assume that the length of each temporary job is up to six months)= 450 gross FTE jobs created			
Cost per gross job	Euro 20,000 per gross job (Euro 10 million/500 gross jobs)			
<u>Impacts</u>				
Additionality	50% of the SMEs would not have gone ahead with their projects without the Structural Fund assistance. Net additional jobs = $225 (450 \times 50\%)$			

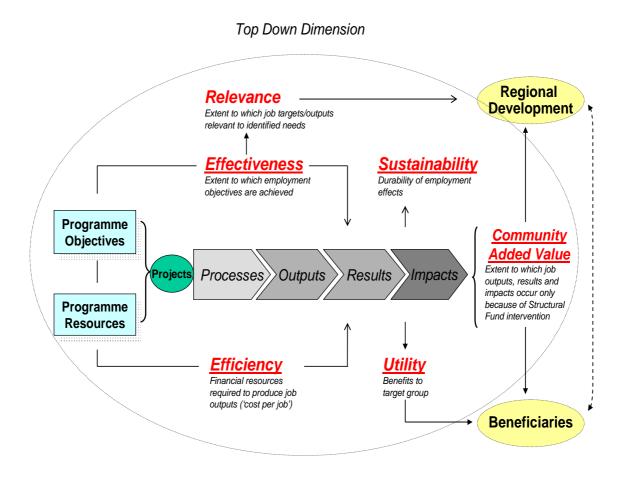
Displacement	20% of the net additional jobs created by the SMEs displace jobs in non-assisted firms. Net additional non-displacing jobs created = $180 [(225) - (225 \times 20\%)]$
Indirect effects	Income multiplier of 1.3 means that in addition to the 180 directly created additional non-displacing jobs, a further 54 jobs $(0.3x180 = 54)$ are created indirectly. Supplier effects of 1.1 lead to further indirect effects equivalent to 18 jobs $(0.1x180 = 18)$.
Net jobs created	252 net jobs (225 net additional – 45 displacement + (54 + 18) indirect
Net cost per job	Euro 39,680 (Euro 10 million/252 net jobs)

2.3. Step 3: Overall Assessment & Contribution to Key EU priorities

The final step, to be undertaken at a programme level as part of ex post evaluations, should involve an assessment of wider questions relating to Structural funds employment effects.

These include: key evaluation issues that apply to Structural funds employment effects; how employment effects contribute to wider labour market and regional development trends; and the contribution of Structural Fund interventions to the employment and related aspects of key EU policies, particularly in relation to the Lisbon Strategy, the Sustainable Development Strategy and enlargement.

3.1: Key evaluation issues – during the programming period and at the ex post stage, a number of key evaluation issues should be examined as part of the overall assessment of Structural funds employment effects. The diagramme below summarises the scope of such an assessment.



Step 3.1.1: Relevance – i.e. the extent to which Structural Fund interventions relating to jobs benefit/are likely to benefit regions/targets groups and to address their needs ('utility').

Bottom Up Dimension

Steps 1.1 and 1.4 in the guidance, in particular the comparison between regional needs and the Structural Funds employment effects actually achieved, should provide a basis for assessing relevance.

This presupposes, however, that a programme's outcomes are analysed not only in terms of the number of jobs but also the nature of the beneficiaries. As argued earlier, a sectoral definition of employment effects, in particular 'jobs created' (employment status and educational achievement classification of individuals assisted in the case of the ESF) is important in this respect. The **key issue** here is the extent to which Structural Fund interventions generate employment effects in sectors (and/or occupational groupings)

that are important to a region or target group's development needs as identified in the baseline assessment and programme's targets.

Other factors that should also be considered in assessing the relevance of Structural funds employment targets/outcomes include Community aims relating to the promotion of **gender equality**; addressing the needs of **disadvantaged groups** (young people, those who are long-term unemployed, ethnic minorities, etc); and improving employment prospects in disadvantaged areas and communities (e.g. those in areas affected by urban decline, geographically isolated or peripheral areas).

Relevance - Some Key Questions

- Are jobs being created (or maintained) by the ERDF in sectors that are identified in the baseline assessment as important to regional development?
- How relevant are ESF interventions to the needs of target groups (businesses, those who are out of work, etc)?
- To what extent are Structural Fund interventions relevant to the aims of the Lisbon Strategy and other key EU policies including the European Employment Strategy and the Sustainable Development Strategy?

Step 3.1.2: Effectiveness –the extent to which expected effects have been obtained and the targets for jobs set at the outset of the programming period (or as subsequently amended) have been achieved, and whether this has been done in the most effective way possible.

Structural Funds employment effects can be relevant to the needs of regions and target groups but this does not necessarily mean that targets are achieved in terms of **scale and timing**. Moreover, an assessment of effectiveness should go beyond simply establishing whether or not a target has been accomplished (e.g. creating 20,000 net jobs) and examine whether this has been achieved in the most effective way (e.g. *Could more effects have been obtained by organising the implementation differently?*).

For example, it may be that Structural Fund interventions to support business start-ups with the aim of creating jobs demonstrate high additionality but more could have been done to reduce displacement or that different types of intervention (e.g. focusing on a particular types of SMEs) could have led to higher quality jobs. A further question is to what extent to which some Structural Fund interventions which do not have jobs as an aim nevertheless lead to positive (or negative) employment effects? From a slightly different perspective, the question is: what types of Structural Fund interventions tend to be the most successful/least successful in achieving their employment aims ('relative effectiveness')?

Effectiveness - Some Key Questions

- Have the Structural Fund targets with regard to employment effects been achieved?
- If employment targets have not been achieved, why was this (e.g. were the target too ambitious and/or the programme simply under-performed)?
- How do different types of Structural Fund interventions compare in terms of their effectiveness in generating positive employment effects?

Step 3.1.3: Efficiency – the relationship between financial inputs and employment outputs, i.e. 'cost per job' and value for money.

Linked to an assessment of effectiveness in achieving targets for physical outcomes is the question of efficiency, i.e. the extent to which the employment outcomes were achieved at reasonable cost given the level of the financial resources made available by the Structural Funds (e.g. Could more effects have been obtained with the same budget? or Have other interventions obtained the same effects at a lower cost?).

Put another way, an evaluation is needed of whether the same financial inputs could have had led to even greater employment effects or, conversely, whether the same effects could have been achieved with reduced financial inputs (value-for-money).

The starting point is to calculate the **gross and net cost per job** and to then to compare the results with internal programme benchmarks (e.g. other priorities) or external benchmarks (EU, previous programmes in the region, etc). Comparisons of this sort will enable a judgement of efficiency to be made although it needs to be borne in mind that the circumstances in which the programme/comparator(s) operate may be different.

Efficiency - Some Key Questions

- Is the number of jobs created or maintained reasonable given the level of ERDF financial inputs or could more have been achieved with the resources available?
- How does the cost effectiveness of different types of Structural Fund interventions compare and what factors explain any differences?
- In the case of the ESF is there a difference (e.g. between areas/target groups) in the cost of the training required to help those who are unemployed obtain jobs? In the case of the ERDF is there a difference, for example, between different types of SMEs?

Some of the literature on programmes to help those who are unemployed argues that apart from additionality and substitution effects, an estimate of net effects should take into account savings to public authorities arising from a combination of lower unemployment payments and highest income tax receipts. However, given the complications in arriving at an accurate estimate of these net cost savings, it is unlikely that this calculation will be appropriate in the case of most ESF programmes.

Step 3.1.4: Impacts – the scale and nature of longer term (net) Structural funds employment effects on a target group or region.

At the outset of the 2007-13 programming period, Member States have been asked to quantify their strategic objectives (generally at a NSRF level). This is likely to involve the use of macro-economic models.

At a regional level, bottom-up methods can be used to estimate of net Structural Funds employment effects. An estimate of net Structural Funds employment effects should – by taking into account additionality, displacement and indirect effects – provide an indication of regional impacts. However, the specific impacts attributable to Structural Funds interventions should also be related to wider regional trends. Indicators that are especially relevant include trends in employment and unemployment, productivity,

and the sectoral distribution of jobs – in particular the extent to which Structural Funds interventions have contributed to jobs and growth in knowledge-intensive activities.

As a starting point to an analysis, a comparison should be made for key indicators between the baseline situation in a region (see Step 1.1) and the situation at the end of the programming period. The question to be answered is: what contribution has Structural Funds employment effects made to any positive trends (or to slowing down/stopping any deterioration)? A 'bottom-up' approach to addressing this question can only provide a very rough indication of the impacts. For example, job creation should have an impact on unemployment rates but the relationship is not 1:1 because those filling the new job opportunities created by Structural Funds' interventions may already be in work and simply transferring from other positions. It also needs to be borne in mind that many impacts on regional trends will be of a longer term nature and only occur after the programming period.

Impacts - Some Key Questions

- To what extent have jobs been created in sectors that are important to regional competitiveness and growth?
- Have ERDF interventions to maintain jobs helped to stabilise the labour market?
- Has ESF training for employees helped to develop skills needed by businesses and the local economy generally?
- What effect has ESF-supported training and other assistance had in helping the jobless into work, and what contribution has this and ERDF job creation made to reducing unemployment rates?

Step 3.1.5: Community Added Value –the extent to which Structural Fund interventions achieve employment effects, which go beyond what could be achieved through purely national or regional initiatives.

As part of an impact assessment, the Community added value of Structural Fund interventions that lead to employment effects should also be considered. The **key question** that should be addressed is: to what extent have Structural Funds-supported interventions helped to achieve outcomes that would have been difficult/impossible to achieve through purely national/regional schemes? (i.e. a counterfactual analysis). Two aspects or levels need to be considered – the programme and region.

Taking the first of these aspects – the **programme level** - Community added value will be linked to factors associated with the Structural Funds (e.g. a multi-annual approach to funding which is often seen as one of the merits of Structural Fund operations compared with national schemes). But there may also be factors that have a more specific bearing on employment. The availability of additional financial resources from the Structural Funds to invest in job-related measures will clearly be a significant factor and linked to this, leverage effects (e.g. Structural Fund grants may help lever funding from the private sector for schemes that would not be made available otherwise, i.e. for purely national initiatives).

However, Community added value may well lie in less tangible factors. For example, the strategic orientation of Structural Fund programmes, with the overlay of Lisbon

Strategy's priorities relating to the knowledge economy, may help to raise awareness of the need to promote employment growth in particular sectors in a region; or the Structural Fund programming process and framework could encourage adoption of innovative approaches to job creation.

At a **regional level**, Community added value lies in the difference between the Structural Fund-assisted employment impacts actually achieved and the counterfactual. The baseline analysis (see Step 1.1) should have included a projection of trends ('dynamic baselines') in key indicators to the end of the programming period based on a hypothetical situation in which Structural Fund assistance was not made available. A comparison with actual trends will point to the added value of Structural Funds.

At both the programme and regional level, counterfactual analysis is likely to be as much a question of opinion-based judgment as it is on 'hard' statistical data on trends. Ex post evaluations should therefore seek the opinion of informed observers as part of an assessment.

Community Added Value - Some Key Questions

- What would have happened with regard to regional trends in the absence of a Structural Fund programme, i.e. what difference did the interventions make?
- What is added value of Structural Fund programmes compared with purely national schemes (e.g. additional resources, multi-annual programmes, transfer of know-how between countries)?
- What types of Structural Fund interventions tend to demonstrate the highest/lowest added value?

Step 3.1.6: Sustainability – the durability of employment effects, i.e. the extent to which they are likely to last beyond the period of Structural Fund intervention.

The benefits of Structural Fund interventions will be limited if employment effects are not sustainable in the longer term.

Step 1.4 should provide a useful input to an assessment of sustainability: in the first place this will provide an estimate of **permanent jobs** as opposed to temporary employment effects¹⁴. Here a distinction needs to be made between temporary jobs created during the implementation phase of projects (e.g. construction jobs), on the one hand, and jobs that may be temporary in the sense that they do not involve continuous employment throughout any single year but which nevertheless provide periodic employment in the longer term throughout the operational phase of a project (e.g. seasonal jobs), on the other. Secondly, if the earlier proposition is accepted, an assessment of sustainability should involve examining the extent to which employment effects are concentrated in **growth sectors** since this should shed light on the degree of permanence and the likelihood of these effects lasting beyond the programming period.

See Annexe I for further guidance on temporary/permanent jobs.

As noted earlier, many Structural funds employment effects may not become fully apparent until some time after a project/programme comes to an end. This will be especially the case with projects that start towards the end of a programming period or with some types of intervention where the effects are delayed.

Sustainability - Some Key Questions

- How sustainable are Structural funds employment effects –can these effects be tracked beyond the period of intervention?
- What sort of ESRF and ESF Structural Fund interventions tend to produce the most/least durable employment effects and why is this so?
- What can be done to maximise the sustainability of employment effects?

Step 3.2: Contribution to EU policies and priorities

Step 3.2: Contribution to EU policies and priorities – in addition to examining issues that relate specifically to regional development, there should be an assessment of how Structural funds employment impacts contribute to other EU priorities.

Job-related aims are central to EU policies across a wide spectrum of Community competences and the being able to measure Structural funds employment effects is important in demonstrating the contribution being made to these wider aims and priorities ('external coherence'). Relevant EU policies include those on the European Employment Strategy, the Lisbon Strategy, the Sustainable Development Strategy and capacity building tasks in relation to the Community 'acquis' generally.

The **European Employment Strategy** (EES) provides the framework for actions at an EU and national level to promote three overarching objectives - full employment, quality and productivity at work, cohesion and an inclusive labour market. Progress towards the objectives set out in the EES is measured using 40 indicators. Assuming Structural funds employment effects can be aggregated at a NSRF level, it should be possible to provide a broad estimate of the contribution to a number of the key EES indicators including: raising employment rates and reducing unemployment (in both cases, gender and age analysis being important); and employment in newly formed enterprises.

Structural Fund priorities in respect of the **Lisbon Strategy**'s 'growth and jobs' agenda include investing in areas with high growth potential where national funds are insufficient to realize development opportunities, and investing in the drivers of growth and employment - human and physical capital including physical and ICT infrastructure, research capacity and innovation, education and training and adaptability of workers.

<u>In addition to considering synergies with other EU programmes/policies, an overall assessment should examine the relationship between the Structural Funds and national/regional programmes.</u> The key question is: what the nature and extent of Community added value, i.e. how do Structural Fund programmes add value to purely national or regional schemes?

Co-financing requirements mean that there is often a close relationship, at a project level, between the Structural Funds and purely nationally/regionally supported schemes However, in the past there has often been a less close relationship at a strategic level.

The relationship has also varied across EU Member States and across the Structural Fund priority objectives (for example, whereas Objective 1 has usually been closely integrated with national initiatives, the more fragmented nature of Objective 2 programmes has often made this more difficult to achieve). There have also been complications at an operational level given differing programming cycles, monitoring and reporting requirements, and implementation structures.

ANNEXE I KEY DEFINITIONS AND CORE INDICATORS

It is important that estimates of Structural funds employment effects are based on **a set of common definitions/indicators**.

Commission guidance¹⁵ for the 2007-13 programming period suggests that the focus should be on using a relatively limited number of **core indicators** to monitor and evaluate Structural Fund programmes. The use of a set of common minimum core indicators is also advocated to facilitate comparisons and aggregations across Programmes, Priorities or Measures. Working Document No 2 on monitoring and evaluation indicators specifies what are the core indicators and the common minimum for the ERDF and the Cohesion Fund and for the ESF respectively (see § 4.5 of the above mentioned Working Document).

The number of (gross) jobs directly created by Structural Funds assistance is one such indicator. The working document argues that while output indicators deliver information on physical effects, more emphasis should be placed on using **results indicators** since these focus on social-economic factors and are the basis for evaluation of impacts. Employment effects generally fall into the category of results and impacts.

The focus on a more limited range of indicators also reflects the more **strategic orientation of programmes** in the 2007-13 period since it is envisaged that expected 'results' will be defined for each Priority and that monitoring and evaluation activities will concentrate on assessing progress against targets at this level using a common set of core indicators.

The definition of some types of jobs (e.g. part-time jobs) and the employment effects may vary according to the priorities from one country to another. Beneath we suggest, for different types of employment effects, either common definitions or examples of definitions which have to be adapted in accordance with the priorities of the programmes. **Key definitions** and indicators derived from them are summarised in the following box: The first two categories of Structural funds employment effects relate mainly to ERDF interventions and the last two categories are examples that relate to the ESF.

Core Indicators for Employment Effects

• **Number of jobs created** – new jobs that are created directly by Structural Fund intervention within three years of the completion of the works. These may be temporary or permanent;

• **Number of jobs maintained** – existing jobs that are at risk and would be lost without Structural Fund intervention;

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See Commission working document: 'Indicators for Monitoring and Evaluation: A Practical Guide' August 2006

- Number of beneficiaries finding employment due to interventions number of beneficiaries that have found employment within some time after the completion of the intervention (usually 6 months after but other time spans are also possible)
- Number of beneficiaries whose qualifications have improved due to interventions
 people that benefited from the interventions and upgraded their qualifications leading to better quality of jobs they undertake

The priority with regard to the ERDF for most programmes should be on measuring permanent full-time equivalent (FTE) **jobs created** directly by Structural Fund interventions. An effort should be made to identify the number of and type of "green" jobs created. These are likely to account for the bulk of employment effects and are also likely to have the largest impact. In addition to this, other types of employment effects can be difficult to measure accurately.

It is important to distinguish between **permanent jobs**¹⁶ – sustainable (or durable) employment (i.e. jobs resulting from an intervention which will continue in the absence of public support) and **temporary jobs** – employment of transitory nature (i.e. jobs which cease to exist when the funding stops). Temporary jobs are usually created during the implementation phase of projects while permanent jobs are usually created during the operational phases of projects. For example, a project to build a new road or power station will create (or possibly maintain) jobs during the period of construction. These will be mostly of a temporary nature (see definition below). However, once the new road or power station becomes operational, this should lead to a number of permanent jobs being created to help operate and maintain the facility. If aggregated figures of temporary and permanent job creation are to be produced then, rather than simply counting the number of jobs that are created by an intervention, it is more accurate to use expected **job-years** as unit of measurement.

A further distinction should be made between **full-time** and **part-time** jobs. A job can be defined as part-time if it provides employment for less than half the working week. Part-time job estimates should be translated into full-time equivalents (FTEs).

The distinction between direct/indirect employment effects is also important. The category of **direct employment effects** can be defined as those where causality is clear, i.e. there is a direct and immediate relationship between Structural Fund interventions and the creation, maintenance or improvement of jobs. These are job 'outputs' and they mainly occur in the organisations that benefit directly from assistance (e.g. grant aid to an entrepreneur leading to the launch of a business that takes on employees).

Conversely secondary or **indirect employment effects** occur when jobs are created as a consequence of interventions, which have not an explicit and immediate employment objective. For instance when ESF support for the training of unemployed people leads to them obtaining work indirect job creation occurs.

Although being able to quantify employment effects is the starting point, there should be an assessment of **job quality** to fully understand Structural Fund outcomes. In the past, this consideration has tended to be neglected largely because of the difficulties involved

It is suggested that only jobs created within three years of completion of the works are counted and attributed to that intervention of Structural Funds.

in assessing quality on an objective basis. However, looking ahead – specifically with the Lisbon Strategy objective in mind of not just creating 'more' jobs but also 'better' ones - it is clear that this shortcoming has to be addressed.

ESF interventions can help improve the prospects of those already in work and enhance the contribution they make to the performance of undertakings that employ them. A key indicator for the ESF programmes could therefore be 'number of beneficiaries whose qualifications have improved due to interventions' (another term could be 'jobs improved'). As noted earlier, the ESF can also help those who are out of work to improve their chances of obtaining a job through training/other measures through their improved employability. The result indicator for ESF effects of this type could be described as the 'number of beneficiaries finding employment due to interventions'. There could also be jobs maintained through ESF measures, for example wage subsidies.

Previous experience suggests that there are major difficulties in estimating jobs maintained with, more often than not, all the jobs in an undertaking being counted as safeguarded rather than just those at risk. This has generally led to highly inflated estimates of employment effects for whole programmes. However, in the new 2007-13 Structural Fund programming period, an estimate for jobs maintained will still be needed for certain types of intervention, in particular, major projects in the productive investment field. But with the exception of major projects of this kind, it is suggested that no attempt should be made to estimate jobs maintained for a programme as a whole unless this is an important aim of a project (or group of projects) and it can be clearly demonstrated that only the jobs directly safeguarded have been counted.

Last but not least, it is important that Structural funds employment effects are assessed on both a **gross** and **net** basis to provide an accurate estimate of impacts. To do this, estimates of gross employment outcomes should be adjusted to take into account **additionality, displacement, substitution** (in the case of the ESF) and indirect effects (defined before). Experience suggests that there can be a significant difference between gross and net employment effects, and taking the above factors into account is therefore important.

ANNEXE II STRUCTURAL FUNDS INTERVENTION LOGIC AND JOBS

Structural funds employment effects should be seen in the context of the overall intervention logic. In relation to all the types of effects defined earlier, there is a distinction between:

Primary Results = primary (direct) employment effect – the number and type of gross jobs created, saved, improved, etc, which have been financed and accomplished with the direct support of Structural Funds (e.g. jobs created during the implementation phase of physical infrastructure projects);

Secondary Results = secondary (indirect) employment effect – the number and type of gross jobs created, saved, improved, etc, at the end of actions supported by the Structural Funds but where the output did not involved any direct employment effect (e.g. jobs created during the operational phase of a project or ESF support for the training of unemployed people leads to them obtaining work);

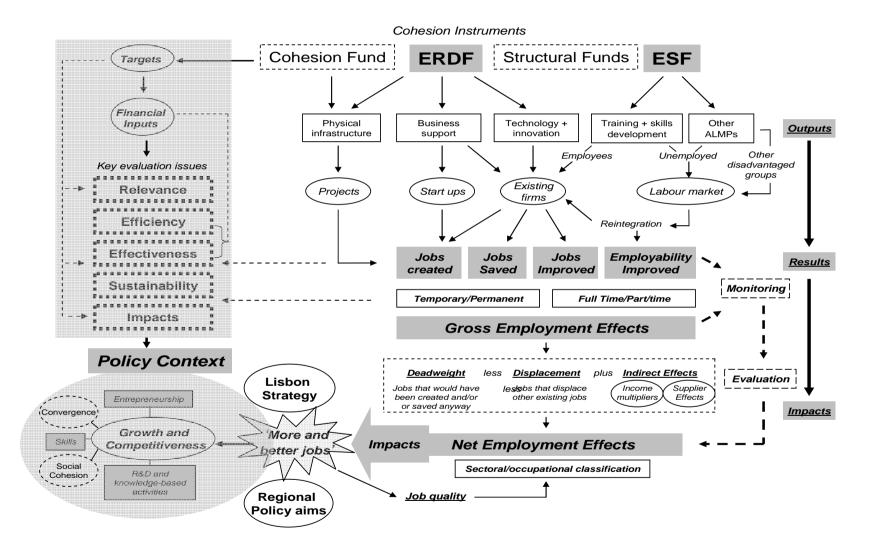
Impacts = mid/long term employment effect – net employment effects and the impact on labour markets and the socio-economic situation generally in a region following the completion of Structural Funds intervention (e.g. employed created in the mid/long term by the economic growth entails by Structural Funds actions).

The basic Structural funds intervention logic as applied to jobs is summarised in the next diagramme. The diagramme traces basic 'outputs' through to 'results' and 'impacts' (highlighting the link between gross and net effects in the process). Key evaluation issues (examined before) and aspects of the overall EU policy context are also highlighted.

Structural funds intervention supported by the **ERDF** can be used for a variety of purposes of which the three highlighted in the diagramme account for the bulk of funding – investment in physical infrastructure, business support facilities and services, and innovation, R&D and technology transfer. Basic 'outputs' include new facilities and services leading to new business activities, the improved performance of existing firms, etc. Higher levels of economic activity should then generate new jobs or help to maintain existing ones ('results').

In majority of the cases the ESF interventions do not directly create job places. However, some active labour market policies supported by the ESF may include subsidies to employment (self-employment or direct financial support to employers) which entail direct job creation.

Moreover, the majority of the ESF interventions can help to improve the prospects of those already in work and enhance the contribution they make to the performance of undertakings that employ them. By helping to improve employability, e.g. through training that leads to a qualification ('outputs') ESF measures should not only directly benefit the target groups assisted, e.g. by helping an unemployed person obtain a job (results), but also feed through to other positive economic and social impacts including key aims of the European Employment Strategy (EES).



ANNEXE III PROJECT LIFE CYCLE AND MEASURING EMPLOYMENT EFFECTS

Structural funds employment effects will vary according to the stage in the project life cycle:

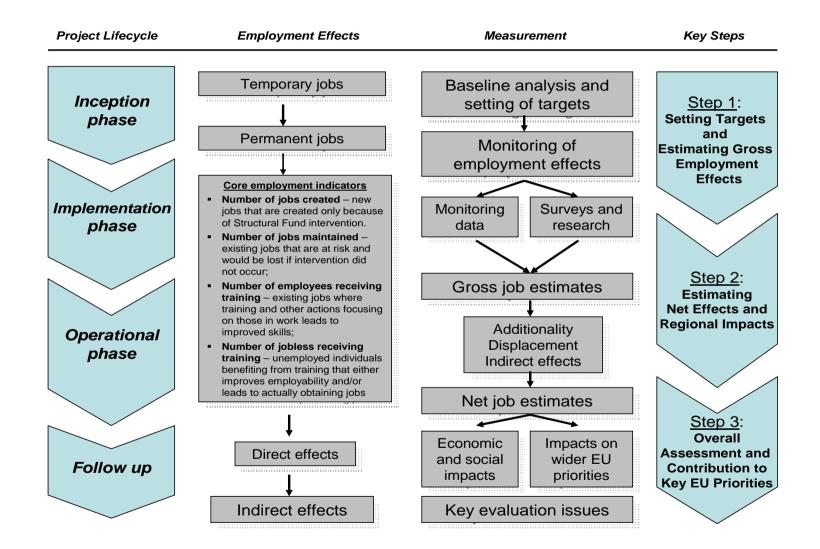
- Temporary jobs will be created during the inception and implementation phase (some of these may become permanent);
- Once a project becomes operational, this should lead directly to more permanent employment effects;
- Direct employment effects will have a number of indirect effects.

It is important that the methodological steps outlined in this guidance are closely linked to this project life cycle. Given that the life cycles of different projects making up a programme do not coincide, this means that data on employment effects will inevitably be collected at different points for different projects.

A choice therefore exists – whether to base estimates on forecasts for all projects at the inception/implementation stage (and then checked at the ex post stage in a programme) or, alternatively, to monitor and combine employment effects on different projects on a more continuous basis using real data. Ideally, these two approaches should be combined with forecasts being made and periodically updated using real data on projects: firstly, at the outset of a project, there should be a forecast for the number of jobs that are likely to have been created, maintained or improved at different points in the project's lifetime; and, secondly, periodically checking progress against the forecasts and as the project becomes operational, if necessary revising the forecast for the number of jobs likely to be eventually created or saved.

This approach presupposes, however, that monitoring systems are flexible enough for adjustments to be made as new project data on forecast/actual jobs becomes available (see Step 1.2). In addition, there should be periodic checks to ensure that project data on actual jobs is accurate.

Project Life Cycle and Measuring Employment Effects



ANNEXE IV SOME EXAMPLES OF INTERVENTION-SPECIFIC EMPLOYMENT EFFECTS

The nature of employment effects will vary according to the nature of Structural Fund interventions. As part of an overall assessment, an analysis should be undertaken of intervention-specific effects. Ideally, the overall assessment will draw on thematic and other research carried out during the course of the programme (see Step 1.2). Below, they are focused the interventions that are most likely to have significant employment effects.

PHYSICAL INFRASTRUCTURE

In the short-term, the project implementation process will lead to 'outputs' in the form of direct, temporary, construction-related jobs. These can be converted into full-time equivalent jobs so that aggregation/comparisons with other types of (permanent) employment effects can be made. If the construction workforce comes from the same area as the project, there will also be indirect, income related multiplier effects whilst the procurement of goods and services for the construction process should generate supplier effects.

In the longer-term, the operation of new physical infrastructure facilities will generate both direct and indirect employment effects. Direct effects will usually be limited to jobs created to operate the facility ('results). Indirect effects will arise in undertakings than benefit from the facilities ('impacts').

Summary - Physical Infrastructure Employment Effects

Primary Results = primary (direct) employment effect – project implementation leads to temporary, construction related job creation. There may also be some outputs associated with the management of a new facility;

Secondary Results = secondary (indirect) employment effect - the operational phase of project leads to direct job creation in organisations that benefit from using the facility.

Impacts – wider employment effects arising from operation of the facility, e.g. improved trade that benefits businesses and creates jobs in the area generally.

BUSINESS SUPPORT

Interventions (grants, risk capital, advisory support, etc) to promote entrepreneurship/start-ups should lead (apart from jobs created to operate the scheme – 'outputs') to new 'jobs created' as enterprises grow and take on workers ('results'). Additionality should be high and usually displacement will be low (especially if start-ups are in growth sectors). Similar with employment effects from interventions aimed at existing SMEs additionality is likely to be lower and displacement higher. Support to existing undertakings threatened by closure should lead to 'jobs safeguarded'.

It needs to be borne in mind, however, that interventions to improve competitiveness and productivity can also lead to job losses in the undertakings concerned. At a Priority and

programme level this means that it is important to estimate the net position with regard to employment impacts, i.e. the sum of job gains and losses.

Summary – Business Support Employment Effects

Primary Results = primary (direct) employment effect – project implementation leads to temporary, construction related job creation (e.g. construction of the infrastructure for a business incubator).

Secondary Results = **secondary** (**indirect**) **employment effect** - jobs created or maintained to operate business support measures. Business start-ups and SME expansions should lead to direct job creation; other interventions may have 'jobs maintained' as a result.

Impacts – in addition to direct job creation there will be further indirect employment effects as a result of supplier and other indirect effects.

Training and skills development

Interventions of this kind will not directly create jobs as 'outputs' but should help those out of work to fill vacancies and existing employees to retain their jobs and/or increase their skills as a 'result'.

In both cases, particularly the latter, improved employability and skills enhancement will be an important outcome. Interventions aimed at helping the unemployment into work could have a 'churning' effect with existing employees, or other jobless, being effectively displaced. A redistribution of jobs through 'churning' should, however, reduce long term unemployment.

In the case of interventions aimed at those already in jobs, apart from helping to secure jobs (e.g. through wage subsidies), a key aim is usually to improve skills. As noted above, this should lead to improved productivity and increase business competitiveness with direct employment effects in the form of 'improved jobs' and further indirect effects arising from improved performance.

In addition to direct employment effects of this sort, interventions may also have some indirect effects, e.g. creating new jobs for trainers, although the scale of such effects is likely to be limited.

Summary – Training Related Employment Effects

Primary Results = primary (direct) employment effect – there will be no direct job outputs from ESF training and skills development measures but employability should be improved, e.g. by obtaining qualifications. But some jobs could be created for trainers.

Secondary Results = secondary (indirect) employment effect – the jobless obtaining work and existing employees retaining their jobs and/or increasing their skills.

Impacts – further indirect effects arising from enhanced employability, e.g. increased consumer expenditure leading to secondary job creation.

SUPPORT FOR R&D, TECHNOLOGY TRANSFER, INNOVATION, ETC

These interventions could lead to direct job creation as an 'output' (e.g. by enabling a new R&D project to go ahead or an existing R&D facility to expand).

In the case of Structural Funds measures aimed at promoting innovation and technology transfer, employment effects are likely to be indirect and will be associated with improved business performance as productivity is improved and/or innovation leads to new products and services which help to make firms more competitive and capable of growing faster, leading to job creation as a 'result'.

Summary – R&D, Technology Transfer, Innovation Employment Effects

Primary Results = primary (direct) employment effect – there may be some jobs created directly to help implement a project, e.g. developing a new product.

Secondary Results = secondary (indirect) employment effect – investment in R&D and innovation, etc, should enhance competitiveness and growth in assisted organisations leading to additional job creation.

Impacts – in addition to direct job creation there will be further indirect employment effects as a result of supplier and other indirect effects.

The absorption of new technology (e.g. ICT) may not, however, have labour-intensive effects. Indeed, if ICT is used to improve productivity, this could lead to a reduction in employment on a scale that on a net basis outweighs any positive effects at a Priority and programme level. If, on the other hand, ICT is used to help sell products and services, and to expand the market generally, then there could be similar effects to those described above for business support measures. Employment effects should therefore be assessed more in terms of job quality rather than just in a numerical way.

COMMUNITY ECONOMIC DEVELOPMENT AND SOCIAL ECONOMY

Interventions aimed at community economic development and promotion of social economy typically include support for entrepreneurship and social enterprises, investment in physical infrastructure (e.g. community centres) and services (e.g. councillors) providing advice and practical support to those wishing to (re) enter the labour market (e.g. young people, women returners, the unemployed), and small-scale grants to support local projects.

Community economic development measures are likely to have mainly direct employment outputs, for example paying for the recruitment of volunteers to provide advisory services; creating employment in business start-ups; or helping people who are unemployed find work ('results').

Summary – Community Economic Development and Social Enterprise Employment Effects

Primary Results = primary (direct) employment effect – there may be some jobs created directly to help implement a community scheme, e.g. to run a community resource centre.

Secondary Results = secondary (indirect) employment effect – CED measures should lead to new economic activities, e.g. setting up a social enterprise, which creates jobs or improves employability for disadvantaged groups.

Impacts – in addition to direct job creation there will be further employment effects as a result of other indirect effects.

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