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EMPLOCTOOL – Evaluating local commitment for employment

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EmplocTool

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EmplocTool:
EVALUATING LOCAL COMMITMENT FOR EMPLOYMENT –
Towards a realisation of the European Employment Strategy

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Preface by the European Commission

The project EmplocTool is part of a long-standing and wider effort the European Commission has undertaken since the early eighties for enhancing understanding and improving knowledge of local employment, disseminating best practice throughout the Union and encouraging all actors to develop local action plans for employment.

It is one of a total of 52 projects that the Commission supported in the years 2001 to 2003 aimed at developing and testing new methods in the field of local employment development.

The programme was decided, for the first time in 2000, by the European Parliament and implemented by the Commission.

Most of the projects were trans-national and all were based on a strong partnership approach. Hundreds of partners from all Member States were involved in activities demonstrating the potential for employment and job creation at a local level within the framework of the European Employment Strategy.

The *policy responses to the challenges* brought about by economic and social change need to take account of the local and regional level, as the mobilisation of local actors is a sine qua non condition for the successful implementation of EU and national policies. The promotion of social inclusion, employment, equal opportunities – none of these goals can be effectively pursued without the citizen's support and democratic participation at local level.

It is for this reason that the EU has devoted an increasing interest in the role of local action, networking and partnership between all actors involved. Fostering this partnership has been a particular focus of the European Employment Strategy. The European Social Fund in particular, but also the other EU Structural Funds, have provided substantial funding to the development of these locally-based initiatives.

The *European Employment Strategy*, which has been in place since 1997, addresses the need for co-operation in Europe on employment issues through the creation of a European framework and common objectives. It supports, at the same time, the need for continuous decentralisation and policy implementation at local level. Although these are two political dynamics which seem to move in opposite directions, they do give the right result – European planning, common objectives, local implementation.

The European Employment Strategy placed, since the beginning, a strong emphasis on local employment action. Mobilisation of all actors, including regional and local authorities, was essential, according to the successive annual Employment Guidelines, for promoting a high level of employment by identifying the potential of job creation at local level and strengthening partnerships to this end.

Today, European employment and cohesion policies are facing substantial challenges: an abrupt increase of regional disparities due to enlargement, and an increased exposure to social and economic restructuring.

Enlargement will present a major challenge for the competitiveness and internal cohesion of the Union. Regional disparities will substantially increase. Significant employment gaps will persist according to age, gender and the level of qualifications and skills.

The process of social and economic restructuring is likely to accelerate at an unprecedented pace. It will put economic and social cohesion under stress, even outside the regions lagging behind. This is a consequence of many factors: technological change and the advance of the knowledge economy and society, adjustment to the enlarged single market, demographic changes, the necessary reform of social security systems, especially pensions, the pressure of trade liberalisation, and the need to better integrate the protection of the environment in public policy.

Thus achieving economic and social cohesion in the new, enlarged Europe of 25 is a tremendous challenge for all, new and current Member States alike.

Economic and social cohesion cannot come about through government action only. All actors – national, regional and local authorities, social partners, NGOs, business and others are necessary. It is necessary also to work together in some form of *partnership* in which individual efforts are co-ordinated through an action plan based on an objective assessment of regional and local needs.

There can be no doubt about the increasing role and importance of the local and regional level: the actors are identified, the positive factors and obstacles are known.

It is now that the actors should consider *a more strategic approach* for the implementation of local employment. The local level is requested to play a pro-active role, the national level is required to make available information on the European Employment Strategy and give flexibility and support to the relevant partners.

The project *EmplocTool* will be a success if it can contribute to better define the role of local actors through effective dissemination mechanisms and to develop a more strategic concept of local employment strategies.

This would be a very concrete contribution to the effort for more and better jobs for all and we welcome it.

Preface by the Project Coordinator

The effort invested in planning and evaluation can be significantly reduced when support is provided by appropriate tools. This is an important result of the European *EmplocTool Project – Evaluation Tools in Support of Local Commitment for Employment.* The present book documents the knowledge that has been gained in this direction. EmplocTool has developed a tool for the evaluation of employment projects and initiatives. Through its use, project operators and decision makers are provided with an instrument for putting their own ideas and actions to the test. They are able to set priorities and to monitor their project and initiative on the basis of these priorities. The use of EmplocTool contributes to transparency and accountability through this.

In 2001 the European Commission published a call for the submission of employment project suggestions. EmplocTool was selected in competition with numerous other partnerships. The results of this project are now available after the completion of two years of work.

The development of an instrument of this kind requires broad practical and theoretical access. Partners from six countries worked on EmplocTool: Austria, Belgium, Germany, Ireland, Italy and the Netherlands. A total of eight partners were in the working group, these included both academics and practitioners. This ensured that the practical aspects were taken into account on the one hand, while the theoretical demands were catered to, on the other.

The academic team represented the disciplines of: sociology (University of Cassino), economics (Instituut voor Toegepast Economisch Onderzoek, Limburgs Univeritair Centrum - ITEO/LUC), regional economies and software (OWP Research) and system analysis (Studienzentrum für internationale Analysen – STUDIA).

The partners on the practical side are active in regional development, they initiate and manage projects at a regional level: W.O.R.D. County Wexford, Ireland; REGINA Region Neumarkt in the Oberpfalz, Germany; and the Regional Forum Steyr-Kirchdorf, Austria. In addition to these, the inter-regional educational institution, SPES – the "Centre for the Study of Projects for the Renewal of Structures", is a partner in this project. The academic partners were also involved in the organising of interviews and surveys on location. The result of this was a positive exchange between the different approaches.

This publication is a common effort of all the partners. The practitioners, Yvonne Byrne, Eileen Dake, Doris Hagspiel, Gerald Warter, and Gero Wieschollek mostly contributed to the description of the practical requirements (chapter 2). Manuel Anselmi, Fransesco Battisti, Geert Clijsters, Raf Sluismans, and Maurice Oude Wansink also

contributed to this section. The scientific conception (chapter 3) has been set up by Wolfgang E. Baaske, Geert Clijsters, Ludo Peeters and Maurice Oude Wansink.

Most of the programming work has been done by OWP Research, so Maurice Oude Wansink is the author of chapter 4, supported by Gerald Warter and Olanrewaju Fashina for the "manual". The field testing again has been described by the authors of chapter 2, supplemented by Antonella Caruana Mansueto. Wolfgang E. Baaske gave the description of the results of the empirical work and the evaluation in chapter 5. The benefits for the users have been described by the WORD-partners (Chapter 6), and the potential for further development (chapter 7) by the partners of Regina, STUDIA, ITEO/LUC and OWP Research. Antonella Caruana Mansueto did the work of collecting and merging all these different contributions.

The EmplocTool partnership believes its efforts have resulted in the creation of an instrument that will find ready application. It was developed so as to have a practicable use. The test results have been widely observed and attracted considerable attention in the regions. In some cases the work has been headline news in the regional newspapers. In addition to this the public has also been consulted with two academic publications and a contribution to an international conference in Orlando/USA.

A model for evaluation and benchmarking has been developed and this has been put to use in over one hundred employment projects and initiatives across Europe. The software required is also available and is supported by the project partners in the relevant countries. We would be pleased to extend the evaluation work to further regions and projects. The present book should provide the reader with an insight into the utility and benefits of EmplocTool evaluations. We look forward to establishing contact with anyone who requires these benefits for his / her own purposes and the purposes of an employment related project.

We want to thank cordially Ms. Christa Kammerhofer from the EC, DG Employment and Social Affairs, for her confidence and excellent support throughout the project as well as for her contribution to the preface.

Wolfgang E. Baaske, Director of STUDIA
Bettina Lancaster, Head of Project, STUDIA

Chapter 1 Introduction

The European Union is currently enhancing its orientation so as to meet the needs and requirements of the regions in its employment policy. The "Employment and Social Affairs" Directorate General responsible for this policy area, is seeking to strengthen the commitment of local institutions and actors. This gives them a share in the responsibility, of creating jobs and the conditions for their creation in the locality. The B-5030 Program Line "Preparatory measures for a local commitment to employment" provides support for precisely this regional approach. The book presented here has been written within the framework of this European Program.

1.1 The European Employment Strategy

The European Employment Strategy (EES) that was already decided upon in the Luxembourg Jobs Summit (November 1997), forms an important background to this strategy. The EES was arranged around four "pillars" or headings – employability, adaptability, entrepreneurship, and equal opportunities. The EU revises its objectives on a yearly basis (see EC, *Employment Guidelines*). 2002 e.g., these guidelines address (2002/177/EC) issues like youth unemployment, long-term unemployment, benefits, taxes, training systems, active ageing, lifelong learning, job matching, entrepreneurship, the knowledge base, regional and local actions, work organisation, gender mainstreaming, gender gaps, reconciling work and family life, and many others.

It follows from this that employment is seen as a complex phenomenon. A number of reasons lead to problems in the area of employment and a successful employment strategy must take numerous factors of influence into account. The logical consequence is that employment cannot be controlled on a purely centralized basis. In fact, the EES initiated a new working method at EU level, which was to become known as the "*open method of co-ordination*", based on the five key principles subsidiarity, convergence, management by objectives, country surveillance and an integrated approach.

Strong involvement at a regional level represents an opportunity for a simplification of the issue proceeding hand-in-hand with targeted action. The *subsidiarity principle* has a clear mandate here: in accordance with this principle decisions should be made at the lowest level, if possible. Regional responsibility for employment is also derived from this principle. At a regional level both the opportunities and the problems are transparent, the actors can work together in a comprehensive cross-sector manner, they know

each other, can develop a relationship of trust, create common projects and check the success achieved.

A secondary issue is the fact that the workers are only *mobile to a limited extent*. Despite the advantages of modern transportation commuting is only possible within a narrow radius. Work and living belong together spatially, not least from an ecological perspective. Places of work must thus be created in close proximity to the communities where people live.

A third reason why the regional level is significant is the *equality principle*. The European regions differ considerably when compared and contrasted in terms of prosperity and the employment prospects they offer. The principle of regional convergence is intended to provide the guarantee that inhabitants of different regions will all have equal opportunities on the employment market.

If European and the regional levels are to function together by delivering just development of the regions, it is essential that information must flow both from the top downwards as well as from the bottom to the top (2-way accountability). It must be possible to assess the situation of the regions at a regional level.

An effective European employment strategy can only be implemented when the objectives are fully transparent. Decision makers and actors must know how their actions are to be classified within the objectives of the employment strategy. This means that additional effort must be invested in strategic planning, observation and evaluation. This effort will pay dividends when the projects become more effective and the means available are distributed more fairly.

1.2 Evaluation for the Local Level

The local level is very important for establishing sustainable jobs. In March 2000, the Lisbon European Council created a strategy stressing the importance of a *"fully decentralised approach, applied in line with the principle of subsidiarity in which the Union, the Member States, the regional and local levels, as well as the social partners and civil society will be actively involved, using variable forms of partnership"*. Local development has become a focus of the European Employment Strategy (EC 2003) as well as a topic of international studies and conferences that today already account on the evaluation of regionally and locally related measures (OECD 2001, 2002 and 2003).

As an indication for the relevance of that process, territorial employment pacts (TEPs) have been established all over Europe in the last decade (EC 2001). These pacts are agreements on employment related issues, established between the social partners, en-

terprises, governments and educational institutions. Contents of these agreements are the allocation of funds towards specific target groups, actors, sub-regions and sectors. Formal and informal relationships between the actors and their institutions build the basis for a well-functioning pact with positive impacts on employment, participation and education. Experiences gathered within EmplocTool in Italy, show that territorial employment pacts increasingly gain public attention. Studies already evaluate the effects and impacts of these pacts (Casavola 2002, Giguère 2003, ZSI 2000).

EmplocTool focuses on the level below that of territorial employment pacts, which is most often a provincial level, on level 2 of the Nomenclature des unités territoriales statistiques – NUTS (EUROSTAT 2003). EmplocTool is designed for the regional / sub-regional or even local / communal level, referring to the levels 3 or 5 of the NUTS system.

The societal system is more integrated on that level than on the provincial, meaning that there are probably strong interactions between the local decision makers of different public and private sectors. There is some empirical evidence that the interactions and social innovations on that regional / local level strongly effect employment. This has been studied e.g. for Austria's communes and political districts with reference to impacts of the "regional actors' density" and "regional co-operations" on the unemployment rate (Baaske 2002, 1996, Weiß 1999).

Both, project promoters as well as administrative decision makers should profit from a more strategic approach to decisions on regional projects. Such an approach would make it necessary to have a common, comparative framework of indicators on regional employment issues. Evaluations on that level will have to take into account the regional dimension of programmes, projects and institutional frameworks.

The European Union continuously improves its indicator list to monitor the Employment Guidelines (EC – Employment Committee, 2004). Recently, a study on regional indicators has been finalized (Brunhes 2003a/b), focusing on relevance, comparability and availability of such indicators. Mostly these indicators describe the key issues of employment in regions as well as the socio-economic context. With its focus on effects of projects and initiatives, EmplocTool could provide a complementary contribution. The EmplocTool evaluations enable one to relate projects and initiatives to those targets that are – among others – derived from that comparative framework of indicators on regional employment issues.

1.3 General Description of the Project

The EmplocTool project consisted in developing, testing and assessing an evaluation tool for local employment.

The project created and proved a method that is applicable both on a European and local level. The Tool supports local actors, by promoting transparency and transferability. It will facilitate the establishment and the implementation of local action plans for employment, based on best-practice experience of territorial public and private bodies. It determines how local employment strategies interact, the processes used and how results can be forecasted. The evaluation tool sets out an operating manual for evaluation and benchmarking, a software support, a documentation of piloting tests, and a "social implementation plan" (SIP).

1.4 Main Objectives of the Project

The main objectives of the EmplocTool project have been:

- development of an integrated evaluation tool in support of local action plans for employment, consisting of an operating manual, lists of required data, and a software support for evaluation and benchmarking (CD-ROM, Internet);
- piloting tests of the evaluation tool, including tests in all countries represented by the consortium and covering several regions / local sites of each country. This objective also promotes two-way accountability between local players and regional and national bodies, identifies quantitative and qualitative impacts of strategies, and provides answers to the question of what works and does not work;
- dissemination of well-known best-practice models of local employment strategies, legitimising them by transparent comparative data sets, as a basis for benchmarking;
- a social implementation plan (SIP) addressing governments and administration bodies as well as social partners, public employment services and NGOs. It contains recommendations on how to implement the developed methods on regional, national and European levels.

1.5 Detailed Description of the Project

Situation

Local action plans should maximise the contribution of the local groups and organisations to the National action plans for employment, to further develop the European Employment Strategy. In practice, these local action plans are not yet installed commonly. Local organisations often promote employment without being integrated horizontally (on the local level) nor vertically (with respect to national bodies) to other initiatives.

Each organisation may act efficiently on its own, but constraints may hinder the success of a strategy without local co-operation. As a results, these initiatives may be underestimated with regard to their achievements, and could suffer from less public acceptance and access to resources.

Malfunctions could be eliminated by applying EmplocTool – EVALUATION TOOLS IN SUPPORT OF LOCAL COMMITMENT FOR EMPLOYMENT. These tools could monitor local projects, evaluate and benchmark them. This would in turn: strengthen the accountability and scope of these projects; and improve communication among the local partnerships at regional and national government levels. By benchmarking, local actors could learn from best-practice models using all-over European experience, and therefore improve their project performance.

These evaluation and benchmarking tools do not exist previously. A convenient and cost-effective way to cope with the different approaches and levels of actor integration is not yet established. EmplocTool therefore could contribute a necessary measure to fulfil the aims of the European Employment Strategy.

Approach and Methods

The project used a multidisciplinary approach, incorporating the knowledge base of the project partners as well as experiences in test-sites and of other national partners, especially best-practice models.

The consortium comprises experts of local development and evaluation. They applied their knowledge and experience to conceptualise the evaluation and benchmarking tool and applied it to specific regions within their country.

Such test regions were selected in advance, and included well-known best practice models as well as different types of employment initiatives. The evaluation tool was apply within the selected regions. Thus producing the first test results for the software's database, for further benchmarking.

The results of the tool application were then calibrated, meaning that a comparative analysis yielded the best-performing initiatives due to the agreed measurement concept. The software tool developed, is based upon this data. A final assessment considered how the results of the project can best be incorporated into strategies of public and private bodies, aiming at an integrative local development and commitment to employment.

Special methods applied are:

- Experts' surveys and consultations;
- Surveys, questionnaires, statistical data and analytical methods: (1) Quality Function Deployment and (2) Input-Output Analysis;
- Group intervention techniques.

In short, the evaluation methods applied within this project are innovative:

Quality Function Deployment (QFD) is a tool for increasing customer satisfaction. "Customers" regarded as the stakeholders of the regional employment systems: core employees, employers, trainers, employment market mergers, regional administration and social workers etc. QFD investigates overall demands on these stakeholders, and compares them with the means to meet those demands (QFD-matrix). Bottlenecks and strategies are then identifiable on a local basis;

Input-Output technique represents a high quality method of accounting for economy and labour effects on national levels. Their adaptation to regional and local employment strategy issues is a new technique.

Geographical Areas Covered

The following geographical areas have been covered

Austria

Districts of Kirchdorf and Steyr, NUTS-3 region Mühlviertel, LEADER region "Mühlviertler Alm", province of Vorarlberg, province of Burgenland, city of Vienna;

Belgium

Belgian province of Limburg, city of Genk, community of Maasmechelen, city of Dendermonde;

Germany

District (Landkreis) Neumarkt in der Oberpfalz, district of Cham, district of Höxter, south-east Lower-Saxony, Vogtlandkreis;

Ireland

LEADER+ region County Wexford in the south-east of Ireland;

Italy

Province of Frosinone and Latina (region of Lazio), province of Campobasso (region of Molise);

The Netherlands
Dutch province of Limburg, city of Maastricht, various other project areas

Results and Outputs

The results of the project have been successfully met. The details of the results are described in this publication.

In summary the main achievements and findings are:

- A model has been created for benchmarking local commitment to employment with 158 demands/goals and 315 indicators and fulfilments, serving as parameters;
- A software tool (written in Visual Basic, and supported by R-Gui elements), for evaluation and benchmarking, including a manual and a glossary has been produced;
- Various data sets: Empirical test results consisting of 106 regional employment projects and pacts, from 12 experts' questionnaires, and 75 pact documents and measures;
- A social implementation plan (SIP) addressing governments and administration, social partners, public employment services, NGOs, etc.;
- Public dissemination: Press conferences in all six partner countries; a scientific presentation on an international conference "Adapting QFD for Evaluating Employment Initiatives" (Orlando/USA, QFDI-Institute); a scientific paper titled "The Economic Score of an Employment Project"; a web site www.EmplocTool.com with general information; and this publication.

The partners expect various impacts beyond the direct outputs and effects. On a local level, they may result in an increased consciousness concerning regional needs and strategic planning. In a broader context a greater understanding of regional employment issues; a clearer perception of problems and possible solutions and a more adequate seizing of opportunities for strategic actions.

EmplocTool should make it easy to check one's own project or initiative. On a regional, provincial or national level EmplocTool could provide a system to increase the effectiveness of employment related investments, to attain a just distribution of funds, and to avoid social exclusion.

EmplocTool now constitutes both a tool that assists in planning and clarifying goals and objectives as well as a tool that may serve as a standard evaluation tool for a multiple use.

Chapter 2 Practical Requirements

Why is there a need for an "evaluation tool for local commitment to employment"? What do the practitioners demand? As practitioners we understand that persons are responsible for employment projects and programmes on a local or regional basis. Practitioners initiate, execute, promote or control such initiatives. Their view to practical requirements is most important when the instrument should be used by them.

The EmplocTool partnership provided an analysis of demands stemming from practitioners; the empirical basis has been a set of interviews with officers and managers responsible for regional employment developments and projects in each country. This was supplemented by an analysis of some documents and reports.

2.1 Austrian Practitioners

Like other European countries, Austria had to translate the guidelines set up by the European Employment Strategy (EES) into a national action plan for employment. As well as that national action plan, nine Territorial Employment pacts (TEPs) on a provincial basis and four regional pacts, were created.

The basic objective of these plans is to encourage widespread regional partnership in order to:

- identify the difficulties, ideas and objectives that all regional protagonists are facing with respect to employment policies;
- mobilize all available resources in favour of an integrated strategy, which is accepted by all protagonists, based on their real needs and entrenched in a formal commitment – the Territorial Employment Pact;
- improve the integration and coordination of job-creation measures;
- implement measures that could help boost employment.

There is a considerable commitment to, and dynamic in, the development of local employment partnerships in Austria. The future can be built on both the strengths of recent experiences and the lessons we can learn from the various ways that the different partnerships have operated in recent years.

The following recommendations can be derived from a recent OECD study (OECD 1999, www.pakte.at) on local partnerships in Austria:

"Greater congruence may be required between the objectives set at the federal level for local partnerships (e.g. NAP implementation) and those envisaged and pursued by the local partnerships themselves. Partnerships should consider how to make a wider, more systematic

contribution to economic development and labour market issues. The federal government should consider the establishment of a terms of reference or guidelines within which partnerships could be established and developed. The terms of reference for partnerships should provide guidance on their membership, the means whereby their active participation can be stimulated and sustained.

Consideration should also be given to the most appropriate level at which partnerships should be established. Sub-regional levels seem to be propitious to the development of an integrated approach to development and labour market. However, a number of criteria need to be taken into account, such as the position in resource and policy terms, and the choice between strategic and operational roles.

Consideration could be given to the establishment of strategic partnerships at the operational (=provincial) level to co-ordinate employment and economic development policy, and operational partnerships at sub-regional (group of districts) level designed to deliver policies through programmes and projects. Close connections could be established between the two with the former providing the policy framework for the latter, which would have substantial operational/budgetary discretion to take actions in accordance with local needs.

Alternatively, a looser arrangement would be one which established co-operative links between strategic bodies at the operational level and partnerships at the sub-regional level. It may be desirable to establish measures to encourage building relationships between the partners should partnerships be formed at the sub-regional, group of district level.

More direct connections could also usefully be made between economic development, labour market and skills issues, in local partnerships in order to develop a more integrated approach. This would require a more strategic approach, the direct co-ordination of economic development and labour market actions.

It may be useful for financial incentives at municipal level to become more congruent with partnership arrangements, so that the focus and responsibilities of the partnerships reflect local needs.

The government could establish partnerships as a nation-wide component of a territorial system for labour market policy and economic development. They would also need to provide a management framework to develop strategy, targets, performance review and evaluation. A range of capacity building measures would also enhance the capability of partners and partnerships, for example, the development of a network of partnerships to exchange know-how and the establishment of a permanent secretariat to advise and oversee their development. Furthermore, regional management organisations and similar bodies could be directly involved in the partnerships, and the consulting organisations could be further encouraged to transfer their know-how to the partnerships. Partnerships could also develop the participation of other groups outside the traditional social partners, in particular NGOs."

Most pacts also comprehend evaluation procedures, but most of them only refer to individual projects and are not capable of comparing or benchmarking different projects. Furthermore they are not capable of handling economic background information or overall regional goals.

Additionally, other institutions like provincial or national audit courts also conduct their own evaluation with regard to cost efficiency.

Local actors in employment pacts are mostly experts in concrete actions. For the more strategic dimensions in planning a sustainable employment plan is necessary. Local actors need to know more about the economic effects and the outcomes of their projects and the general conditions in the employment system. Interviews with local actors in Austria showed a big interest to look not only at direct project results, but also to aspects for a midterm-strategy including economic conditions, qualification needs and connection to regional development.

Evaluation tools should be easy to handle even by non-scientific personnel like local actors. The answers created by this evaluation process will enable local actors to act more specifically and with a broader understanding of conditions and influence factors in the employment system.

Therefore, the evaluation software EmplocTool will be a support for local actors in developing a higher strategic level of actions and plans.

2.2 German Practitioners

All over Europe, the labour markets are facing big changes. The globalisation, the technical progress and the "lifelong learning" are only three aspects, which have big impacts on the labour markets.

In Germany additional effects influence the labour market: In East-Germany the transition from the socialistic system to a capitalistic system, has not finished yet. A lot of people lost their jobs in the last decade and many of them leave or left their regions and go west and hope to find a job.

Talking about change-management the modification of the German "Bundesanstalt für Arbeit"(Federal Institute for Labour), is a good example for the difficulties of complex governmental institutions in the industrialised countries: In times of flexibility and technology these big institutions are no longer able to support people because of their old-fashioned and inflexible structures.

The measures and tools of these institutions are obviously not efficient enough to help unemployed people to get a job. This means that the instruments currently applied by the organisation are not (always) useful or fine tuned enough, for the special cases.

Therefore in the last years a lot of initiatives have been founded or implemented: Territorial pacts coming from EU or regional networks with the regional and local stakeholders like district administration, chamber of commerce, social departments of administration or other institutions.

But looking on all these instruments, initiatives, pacts and projects, one realises that a lot of questions may be left out: do they reach the targets they are aimed at? Are local actors really involved? What do these measures cost? etc.

To come closer to realistic answers, instruments need to be applied with respect to find the best-practice examples, and the right approaches to achieve the targets. Especially in the case of Germany, where around 38 million people are employed and 4.5 million unemployed, all efforts must be undertaken to decrease unemployment. EmplocTool fills a niche in the field of instruments that are able to successfully evaluate projects and programs. It is a sophisticated instrument for the analysis, benchmarking and evaluation of labour-market projects. The following aspects show the reasons for the need of an "EmplocTool":

Customer Oriented Approach

Not to talk from the scientific method but the practitioners view supports the approach of QFD (Quality Function Deployment), which means that the employees and unemployed people are seen as customers and so far they are in the centre of interest. That means the needs are important and not only a technical registration of unemployment expressed by figures.

Data-Base

For the practitioners it is an added value to get a technical environment to be used as database for the labour-market-projects. For the regional monitoring and evaluation process this means a facilitation in management of the projects.

Mirror for the Local / Regional Actors

All the collected data together with the objective and benchmark function give the local actors the opportunity to use the tool like a "mirror", in which the projects can be proved and compared. Therefore a better orientation in the ongoing project or for future projects supports the labour market-work.

Support to Decision Makers

The main function of EmplocTool should be to support decision makers. With all data collected, the analysis, comparison etc. one gets a good basis for future decisions and target oriented projects.

User-friendliness

From the practitioners viewpoint one element is extremely important: a complicated software is rejected and ineffective for its users, but the creation of EmplocTool eliminates this hindrance. The advantage of EmplocTool is the easy-to-use attribute. As a result, the software Tool enables a clear and easy application and holds together development of the team/actors.

2.3 Irish Practitioners

It is W.O.R.D.'s belief that the characteristics of the EmplocTool are of benefit to the region of Wexford as well as to other Irish regions in the following manner. EmplocTool

- supports local actors in making decisions as well as to secure their effectiveness in the long term,
- is adaptable to different regional requirements as it is built on the experience of different European countries,
- is based on sound scientific background because the development work has been undertaken by an interdisciplinary group of specialists (economists, systems analysts and sociologists),
- has reliability as it is calibrated not only by external employment experts but also by practical experience on test sites, and finally:
- EmplocTool is easy to apply as it comes as a self-explaining software with a manual.

This tool will be attractive to those involved in employment issues within Ireland and in particular those in the South East, which has the following characteristics;

Unemployment

Unemployment has traditionally been high – in early 1990's Wexford had the third highest employment figures in the country. In 1998 unemployment was 8 %. Agriculture, Forestry and Fishing account for 17.7 % of employment compared to 10.2 % nationally and 5 % in the EU. There are at present 4,000 active farmers in Wexford – this is a high dependence on a declining sector. Average net income for farmers in 1997 was €19,230.

Education

Two problems in particular stand out; early school leaving and relatively low levels of educational attainment. Although a number of ad-hoc mechanisms have been devel-

oped to address these educational issues this has not happened at a coordinated level between the different actors which have an educational remit.

Traditional Industries in Decline

Our overall reliance on traditional industries needs to be addressed with urgency. Possible solutions include a better mix of industrial sectors with more representation in modern segments such as pharmaceutical, information technology and international trading services. An illustration of the decline in the traditional sector can be seen by the following statistics; three companies closed in last two years employing approximately 1,000 people in the county; low skilled workforce, which can't compete in an international market and 2,000–3,000 people expected to leave the farming sector in the next five years.

To address the above mentioned issues a number of strategic employment plans were introduced:

Bacon Report – In 1996 the County Council commissioned the Bacon Report which was a study into the economic picture of the county;

Task Group – Established in 1998 with cross agency representation; its aim was to solve the high unemployment and low income/low educational status of the workforce. The "Wexford Enterprise Initiative" was published and the economic policy was further developed in "Remodelling the Model County". Yearly regional reports are also published by FAS. Recommendations from the Report included establishing a third level college; Decentralisation of public services through the relocation of the Environmental Protection Agency and Department of Agriculture from Dublin to Wexford; Foreign Direct Investment targeted at Wexford and New Ross; Industrial land workspace to be purchased for small units and the promotion of Rosslare EuroPort.

Considering these problematic situations concerning employment, EmplocTool serves as a useful tool to develop and evaluate projects. This is particularly appropriate as the County Development Board has been established and produced a strategy document called "Remodelling the Model County". This embraces a large number of local actors who are working together to address these economic and social issues.

2.4 Belgian Practitioners

The Belgian employment policy is an excellent example on the way in which policy in general is shred over different layers and institutions. Inherent to the division of authorities is the danger of launching competing measures, which pay insufficient at-

tention to the specific needs of the labour market in each region. For this reason there is the explicit need to harmonize vocational training, employment-finding and employment programs.

On the *interregional level* a common point of view for a differentiated policy as regards the federal government should be developed. Framed in flexible federal environments, each region should be able to execute its policy, which is based on singularity.

Also the *sub-regions* hold important keys for their own dynamics and growth. This conclusion puts important responsibility to the sub-regions. Employment as a theme deserves a tailor made and focused approach. This task of strengthening employment in the sub-region is only possible by offering individual solutions.

One level below the sub-regions, the *local authorities* have to link their policy to the sub-regional framework. Local communities are the place where different measures (European, federal, regional, sub-regional) come together and are translated into concrete projects. This however is also the place were inconsistencies between the different policy levels are encountered. Without co-ordination on a local level, the effects of the different measures are shred. Besides this, a huge part of the available budgets are spent on overlapping and contradictory measures. Policy measures have to be flexible to the extent that they leave enough space for local interpretation and steering.

Besides the above-mentioned democratically elected policy levels, the field for employment is characterized by a multitude of actors, each with their own finality, task and interest.

- VDAB – the Flemish service for employment mediation. They offer mediation on the Flemish labour market;
- Private intermediaries – besides the VDAB, also private intermediaries have taken their place on the labour market;
- Administration – this is the office of the entitled minister. They prepare policy measures as regards an integrated Flemish labour market policy. Their goal is to permanently improve the quality of policy execution;
- Social partners – these are the labour unions which play an activating role in the elevation of the employment rate and guaranteeing qualitatively labour;
- Local governments – this is the policy level which is closest to the citizens. They are confronted with unemployment and the demand for an efficient approach. Because employment policy is not social or economic but socio-economic, local authorities can make this link expressly;
- Non-governmental organisations – the so-called 'third parties' are active on the local level to develop and manage policy for specific groups. From their experience and competencies, they have always striven for offering optimal opportunities to groups with lower capabilities to also integrate them in the labour market.

This inventory of the Belgian situation as regards labour market policy demonstrates different policy levels with different authorities. Although each is working on the general goal, in their overlap different measures are contradictory or difficult to translate to the next policy level. As a consequence one can hardly speak about a horizontal (in relation to other local plans) or vertical (European, federal, regional, sub-regional and local) integration of the different initiatives. The risk for interference and competition between different projects is considerable.

For this reason an instrument allowing to follow-up local projects, to evaluate them and to compare them to best practice models is desirable. This benchmarking would allow local players to learn from successful models and their experience in the creation of employment throughout Europe. This instrument could help in translating general policy indicators to specific project goals. In this manner, both top-down and bottom-up labour market initiatives can be translated and communicated from one policy level to another.

2.5 Dutch Practitioners

From the Dutch perspective, EmplocTool could serve as an evaluation tool in response to two recent major developments in the organisation of local employment projects. Both developments have either been initiated or supported by the establishment and implementation of the European Employment Strategy in the Netherlands.

First, regional and sometimes even local employments pacts have been formed, dealing with a diversified set of employment projects and initiatives. To some extent, the regionalisation of labour market policies has been an answer to a growing interest of specific organisations, attached to the regional labour market, to solve problems at a lower than national level. Especially policies regarding specific business sectors or types of occupations can be implemented easily at the regional level, resulting in concrete actions at the local level.

Activating the commitment of partners at the local level, partners who know each other in person, has been a successful strategy in the Netherlands so far. This major change has resulted in the adoption of sets of employment projects and initiatives by local and regional pacts, requiring some methodology or supportive instrument for defining and evaluating choices at the pact level. In the direct neighbourhood of Maastricht, the residence of the Dutch EmplocTool partner OWP Research, active employment pacts like the one for the province of Limburg and the one for the area of Zuid-Oost-Brabant were observed. Most of the labour market problems faced in these

two regions refer to the declining business activity in the manufacturing sector, as well as to the decrease in the supply of technically skilled workers accommodating a still existing demand for these type of workers.

In addition, in Limburg, much attention is paid to the demographic evolution and its consequences for the labour market in the future. The population is currently ageing, and the number of people in the active labour force (employed and unemployed persons) is decreasing. This is not a unique phenomenon for the Limburg province: the rest of the Netherlands and many European regions will be faced with the same type of development in the near future.

In summary, specific occupational bottlenecks and the consequences of increased international competition in the manufacturing sector are the two main labour market issues to deal with.

By regionalizing labour market policies, a demand has been created for a tool that provides the employment pacts with ideas and structures for designing local employment projects. In this respect, EmplocTool plays an important role. On the one hand, users of EmplocTool can structure their ideas by means of (structured) questions regarding the specific goals to be achieved by the projects.

On the other hand, the database structure of EmplocTool provides regional managers with alternative designs and ideas, helping them to solve their own regional or local labour market problems. Furthermore, as discussed in more detail below, EmplocTool's possibilities to evaluate the setup of projects both from the ex ante and the ex post perspective, yield caveats for establishing qualitative judgements regarding the different projects within one employment pact and facilitating the process of decision about them.

The idea of a database structure of regional and local employment initiatives has recently been incorporated in the website of the Dutch Ministry of Employment and Social Affairs. Over 300 different regional and local projects have been entered so far, and its number is still growing. The database contains short descriptions of the projects, contact information, results and financial aspects. Before being registered as successful and interesting employment project, a first scan of the scope and (expected) results is made by the Ministry itself. The database aims at providing an overview of finished and ongoing regional and local projects, such as to establish a central database for information about employment projects.

With respect to the evaluation of these projects, no action has been undertaken so far. *This is where EmplocTool fits in the picture.* By using the information of the database on the Ministry's website, EmplocTool can reach a higher quality of evaluation measures, both from the qualitative and economic perspective. In return, the feedback from EmplocTool yields a possibility to classify existing employment projects in other ways

than from a search perspective. Incorporating employment projects from this database results in a richer information supply to regional and local managers of employment pacts. At this moment, more than 40 finished Dutch employment projects have been included in the EmplocTool database.

In conclusion, there's a need for EmplocTool in the Netherlands for three reasons.

- First, EmplocTool facilitates regional and local employment pacts to *structure their ideas* in a logical way.
- Second, EmplocTool yields opportunities for the *exchange of information* about new projects and ideas.
- Third, EmplocTool makes it possible to *evaluate employment* projects both on ex ante and ex post basis, supporting decisions, qualifications and classifications of employment projects at the regional and local level.

2.6 Italian Practitioners

EmplocTool Usability as Viewed by Italian Community Leaders:

The proposal of a tool for employment, EmplocTool, has been received with great interest by community leaders (politicians, persons socially and politically involved, community representatives, etc.). The name "tool for employment" also implies some thing that can immediately be used for local policies favouring employment.

Italy is a country facing some severe employment problems. Thus the idea of a helpful tool for employment initiatives is considered as valuable to the Italian labour market. The following points address the main issues regarding employment in the Italian context and are meant to give a transparent picture of the Italian situation in relation to the EmplocTool.

Community leaders regard the following primary employment issues as being very urgent:

Youth (less than 30 years old) Employment

For years youth unemployment has been an issue in Italy, especially in Southern Italy. In Naples a political movement, called "Napoletani disoccupati organizzati" (Organised unemployment for the people of Naples) has been active for years, by organizing political and street rallies. Political parties and community leaders find a greater consensus and interest on the part of young unemployed people searching for a solution to their own problems;

Re-hiring of Unemployed Persons

There are nation wide situations of mass dismissals of adult workers due to enterprise failure or restructuring. In the case of larger enterprises, the dismissal of workers and the modes of re-hiring become the focus of local politics. In local communities it may happen that the unemployed persons are relatives or friends of local community leaders. Each of these unemployed adults is representing a whole family (main breadwinner). Pressures are exerted on political leaders in order to give priority to the employment of the jobless people;

Employment of Adults without a Job (More than 30 Years Old)

These are single adults excluded from the job market between 30 and 40 years old, both males and females. Some of these are young professionals who have just terminated their studies and are entering the job market (e.g. engineers and physicians). Other adults have just delayed the assumption of a steady occupational role. There is an expectation on the part of the community that these single adults will be given an occupation and an income in order to set themselves up and to marry and to start a family;

Employment of Weak Categories (Handicapped, Ex Addicts, etc.)

In every small town there are a number of special cases, due to handicap, addiction or problems with justice, which need special attention. The social services of the town are faced with the problem of finding an occupational role for these people.

There are other employment issues which are felt as being less urgent by community leaders:

Women Employment

Family is considered to be the basic social unit of society. Traditionally masculine employment is a priority in comparison to female employment, as it is the role of the man to bring economic resources to the family. Thus female employment is not considered a priority unless there is a single parent family. This view is especially shared by political parties of the centre, especially the Christian Democrats;

Employment of Immigrants

Immigrants are not considered citizens. They are considered as a complementary labour force within Italian society. Their employment is functional to the labour market. If there is no need, no employment policies are directed to immigrants. This view is clearly shared by some xenophobic political forces such as the Northern League party and Alleanza Nazionale (National Alliance), whose political ideas shift to the right wing.

Employment of Professionals

There is very little connection between small industries, local communities and the world of science and the university. So there is little understanding about new opportu-

nities offered by science and technology. Employment of new professionals is not considered a priority or a factor of growth and transformation within the community. So these professionals are often directed to find an employment in larger urban centres.

Considering these problematic situations concerning employment, EmplocTool serves as a relief. It provides a structure of pacts and projects, that serve for comparisons and benchmarking. It adopts a holistic approach towards organizing one's project, including primarily: the allocation of financial resources, stating well-defined objectives, prioritising the objectives and what actions are necessary to achieve the objectives.

In Italy, EmplocTool gained the reputation of a tool for expanding employment. The Tool was highly welcomed by local and provincial leaders, when presented to them during the testing phase. They were extremely interested in the Tool, because it provides evaluation of projects and pacts. The Italian community leaders considered EmplocTool as a fundamental aid to monitor and evaluate employment projects. It is a tool that can serve as a guidance at a strategic level because it gives outright figures that measure performance in a scientific way. Evaluating performance of employment pacts and projects seems to be important for both the national and provincial government.

The success or failure of these projects produces an impact on the image of the government and of the regional organisation. It is imperative to publish results of the employment pacts and analyse its achievements and/or failures. The results of an employment pact are attacked from a political aspect and also addressed heavily by the media. Consequently, local actors and regional administrators carry the responsibility to deliver successfully each objective of the project.

Proving the achievements of a project may be a burden. This is usually carried out by publishing statistics, portraying the increments and the positives or negatives impacts. EmplocTool moves a further step by calculating an index i.e the E-score and the Q-score. The scores indicate the overall performance of a project, not just stating numbers. It takes into account the context of the project, integrates all factors of the project and comes out with a general score of performance. As a result, EmplocTool is considered to fit precisely in such a context.

Chapter 3 Scientific Conception

Basically, two scientific methods have been applied in order to get a suitable system for evaluating employment projects and pacts: Quality Function Deployment (QFD), a method systematically promoting the view of the customer while designing and creating a product or a service, and Input-Output-Analysis (IO), a well-known econometric method for calculating indirect effects, such as e.g. the impact of an expansion of a company on the employment of its customers or suppliers. This technique is based upon IO-tables, which are generally present in national accounting systems, and of which regional derivates can be calculated.

3.1 Application of QFD within EmplocTool

Quality Function Deployment is a method of designing products and services that satisfy customer demands. Well known in industry since the late 60s, QFD is applied in a variety of sectors in order to avoid costs of maintenance, complaints, repair, and re-design. Quality Function Deployment orients processes to highly satisfy customers and stakeholders wants and needs.

"QFD is (briefly) a way to convert customer demands into product characteristics." (Streckfuss, 2001) "The QFD approach detaches customer needs – represented by demand side requirements – from the customer satisfaction – represented by the specification of the technical solution to cover those demands." (Trogisch, 2001)

Why is Quality Function Deployment (QFD) Needed?

One of the most decisive business processes is new product development. Without new products, an organisation becomes out of date, removed from its customers, and may be forced to compete by lowering prices on existing products. Regarding work force as entrepreneurs at least at a low level, they will also need to supply new products and services. Education and qualification training are the means to support such adaptations, institutions like schools and universities manage them, labour market services, trade unions and employees lobbies organise the market forces, and employment pacts set the framework.

But still the question remains, if these institutions fulfil their missions related to their purposes and the needs of their "customers", e.g. the work force. When labour market related institutions fulfil their goals and objectives, this commonly requires delivering services that solve key problems of these customers, create valuable opportunities, or enhance their well-being.

In case of employment initiatives this could mean to decrease unemployment, to create new jobs, improve the quality of work or to qualify people so that are able to better adjust themselves to the labour market demands. It could also mean to strengthen the effectiveness of employment related institutions, to use regional synergies, to improve co-operation between different levels of the administration and across boarders.

These actions normally are done in order to accomplish goals set by the organisation itself, or by superior levels like the provincial or national government or the EU. In case of employment issues, a cascade of such goals may be set: incorporating the European Employment Strategy, the National Employment Plan or Pact, and regional and local level employment goals and pacts, regardless they are explicitly or implicitly known and perceived. To deliver these goals, enough of certain clients have to be satisfied. To satisfy these clients, services with a sufficient value have to be developed. To deliver this value, it must be understood, what "value" means to those clients. This is the basic rationale of QFD (see: Mazur 2003).

How Does QFD Work?

There are several tools and techniques of QFD, allowing to interlink customer needs and product / service features. Survey techniques, document and report analyses as well as visits to the "work floor" (where a service is provided and problems may occur) are useful to find out customer needs, the priorities attached to them, the satisfaction, and the value of certain solutions. Nonetheless, not all solutions can be obtained by direct empirical analytical work; structuring and synthesis are necessary in order to acquire a comprehensive view. QFD strongly determines a quantified view of "values" – both, the demands of the customers and the features of possible solutions (in terms of employment initiatives and programmes) should be encountered in a verifiable way.

Within EmplocTool QFD is being developed towards the evaluation of measures for the local labour market. Therefore, the following questions have to be answered:

What are business goals of the project?

For employment issues this can be related to the European Employment Strategy, the national and regional employment strategies, the reduction of labour market costs.

Who are the customers of the project?

For employment issues these may be the enterprises, employees, trainees or unemployed persons, affected by the project or measure – it may very well also be the institutions promoting the adaptation of labour market supply and needs, e.g. a labour market service or a qualification supplier.

What are the customer needs?

For employment issues these may be finding or maintaining a job, increasing work satisfaction and career perspectives, increasing productivity, reducing the time to find a job.

How may the customer needs be detected?

For employment issues these may be drawn out of documents or directly surveyed by interviews or questionnaires; additionally it must be foreseen that some needs are only implied, others are missing or possible.

How important are the customer needs? How do customers prioritise their needs?

Within EmplocTool this rating of customer needs is individual, and thus supported by the software tool – any applicant of the EmplocTool software may individually choose his / her priorities to demands.

How can we measure fulfilments of customer demands?

Within EmplocTool three "layers" of fulfilment measurement have been applied, creating indicators for employment related demands with different levels of subjectivity and availability.

How may customer needs be met

Within EmplocTool different employment related projects all over Europe have been compared – showing good practises (Q-score, E-score) as well as different ways to meet customer demands.

Which alternatives do we have to set up or improve a certain employment project?

For employment projects the data base created by EmplocTool may serve as a utility, furthermore: the EmplocTool software supports a "playing" with the fulfilments and the observation of the Q-score and the E-score according to changes in the fulfilments.

Three basic notions have to be identified for a QFD application:

- a profile of customer demands (what are the needs of the customer?),
- a profile of measurable fulfilments (characteristics / features of a solution / indicators to measure whether the customer demands are fulfilled), and thirdly,
- a matrix of the relationships between demands and fulfilments (the so-called QFD-matrix, indicating in how far a certain indicator measures the fulfilment of a demand).

In the case of EmplocTool, QFD furthermore is proposed to be used for identification of best practice examples of local employment initiatives and plans.

Putting QFD into Practice for Employment Issues

Within EmplocTool the questions described above have been answered successively. The QFD framework has been set up based upon information obtained from many personal interviews and visits in the 6 countries involved in the project, from 75 employment reports stemming from these countries, and from a survey of 17 labour market experts from the same countries. Furthermore, 106 projects have been analysed according to the elaborated scheme.

EmplocTool aimed at supporting the evaluation of local and/or regional employment initiatives. In addition, priorities are explicitly made transparent in the tool, stimulating the creation of commitment of associated local actors. This implies that the selection criteria for activities identified by the tool cannot only be chosen to aim at the selection of good practices, but also depend on the creation of transparency of priorities. This is possible by means of the tool, but should also be made possible by the user of the tool him/herself.

As a consequence, the identification of activities is determined by an exhaustive list of goals (demands, as they are called in the QFD framework), which cover aspects of all four pillars of the European Employment Strategy: employability, entrepreneurship, adaptability and equal opportunities. Elements of all four pillars were included and implemented in the framework.

As a method of identification of those activities, an analysis of a multitude of employment reports and projects in the partner countries, was carried out. By means of careful reading and listening, a list of selection criteria (refer to the goals) with over 500 entries was compiled. After aggregation, a list of 158 criteria was obtained. Related to this list, another list of associated indicators (over 316) was compiled, in order to make it possible to evaluate the activities in our tool.

Demands (customer needs oriented)

- are related to local / regional employment plans studied in EmplocTool,
- result from a text analysis as well as from experts' interviews in 6 European countries,
- form – all together – a list of 158 selected demands.

Demands may be chosen arbitrarily. The customers define, which qualities are important to them/to their organisation. A basic set of qualities is also obligatory.

Fulfilments (characterizing service features)

- are related to local / regional employment plans studied in EmplocTool,
- result from a text analysis as well as from experts' interviews in 6 European countries,
- form – all together – a list of 315 fulfilment indicators.

Fulfilments may not be chosen arbitrary. Once the customers defined, which qualities are important to them/to their organisation, the fulfilments are obligatory, i.e. the QFD-system and not the user states by which indicators the fulfilment of a demand should be measured.

This link between demands and fulfilments is based on the QFD-matrix, which has been introduced above. The QFD matrix relates demands and fulfilments, and is a core element of many QFD applications. The cells of this matrix were established by an experts' questionnaire (the 17 labour market experts mentioned above). There are several issues to set up such a QFD-matrix properly.

Given 158 demands and 316 fulfilments, a QFD-matrix with a vast amount of cells was a logical consequence. Theoretically, all these cells request the evaluation of an expert, in order to assess separately the impact of each performance measure on each demand. However, in an attempt to avoid that the experts had to run through the matrix cell by cell, an alternative approach was applied.

Based upon the content analysis of the mentioned reports, the frequency of appearance of all demand-fulfilment combinations could be determined. To obtain these numbers, a combination that appeared on several occasions within the same plan or initiative was only counted once. The obtained figures allowed selecting the most important fulfilments per demand for further evaluation.

The number of fulfilments per demand was limited to ten. If more fulfilments showed to be equally important according to the content analysis, the scientific partners in EmplocTool made the final selection. This finally resulted in a list of approximately 800 combinations to be evaluated by the experts. Putting the system into praxis, again a reduction had to be applied, assigning a maximum of four indicators to a single demand.

The composition of the group of experts was fully designed to minimize subjectivity. A good spread across various functions and approaches was strived for, by selecting applied economists, pure economists, sociologists and specialists of other fields of research concerning labour markets. Additionally, cross-national variety was built in by incorporating experts of the six countries involved in the project. Altogether, seventeen experts were questioned.

In the expert questionnaires, we asked them to quote the demand-fulfilment combinations on a discrete scale from 0 to 100 according to the goodness of a fulfilment to measure the demand. After obtaining the results, they were analysed statistically. As was to be expected due to the cross-national and cross-functional composition of the group, the results of the different experts diverged considerably.

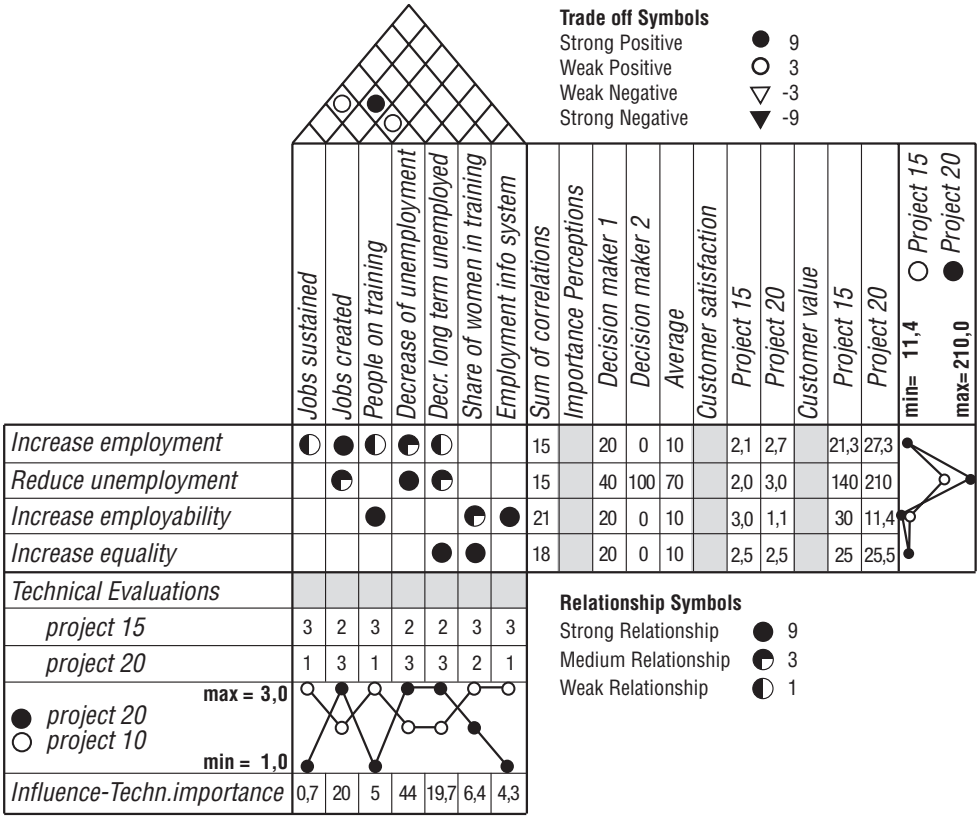
An Example to QFD

The EmplocTool QFD-scheme can hardly be visualized because of its size. Figure 3.1 therefore demonstrates a small example of application of QFD to employment issues, based on some of the EmplocTool variables identified. The numbers and values attached to this example are hypothetical. The following graphics (Figure 3.1) shows how the steps of the QFD procedure interact.

The example constitutes the so-called "house of quality" (HoQ) that screens the quality as the customer observes it (demands) against the quality as the service provider plans it (fulfilments). Customer demands (goals) show up in rows, measurable fulfilments (indicators) in columns. The relationship between both is the QFD-matrix marked with symbols, and both graphics provide a benchmarking of qualities with identification of improvement opportunities. The "roof of the house" identifies correlations between the fulfilment variables; these data are used for information on synergy or trade-off, they do not directly effect the QFD-calculation.

Four demands have been identified: Increase employment, Reduce unemployment, Increase employability, Increase equality. Seven fulfilments have been identified: Jobs sustained, Jobs created, People on training, Decrease of unemployment, Less long-term unemployed, Share of women in training, Employment information system. These fulfilment variables are "measurable", meaning that an employment project or initiative will be able to identify which effect it creates on each of the fulfilments.

Figure 3.1:
An example to QFD: a matrix relates demands, indicators and project solutions



The QFD-matrix is read row-wise: the first row therefore shows how intense the fulfilments influence the demands. To increase employment e.g., the number of jobs created will be a significant influence. Decreasing unemployment will further be considered as an important fulfilment indicator to that demand. In this hypothetical example, no relationship is considered between the demand "Increase employment" and the fulfilment "Share of women in training". In practice, each of the cell values must be argued: either through studies on cause-effect relationships, or – as it has been done in EmplocTool – by experts' ratings.

The table attached to the right of the House of Quality (HoQ) is related to the customer aspects. In this example, two decision maker set their priorities concerning the importance of the demands. They allocate 100 points; and the example shows that the decision makers differ with respect to their priority assignments. An average value is calculated that could be weighed also with respect to the importance of a specific customer segment.

The table attached to the bottom of the HoQ is related to the service provider aspects. They relate projects to the technical features of an evaluation or monitoring system. In this example, two projects are compared. The results of the evaluation have been transformed to values one to three, meaning that a 3-rated project is considered to be located in the upper third of the projects' total, a 1-rated project is considered to rate in the lower third. In the case of EmplocTool the survey of projects all over Europe has been used to establish a data base that allows to identify these benchmarks preliminary. The more data on projects are available the more stable these ratings will become.

Finally, technical evaluation, QFD-matrix and decision makers' priorities are combined to show the actual value of a project. This figure is again represented at the customer related attachment to the right of the HoQ. In sum, project 20 will get a higher benchmarking result compared to project 15, what can be read out of the graphics attached to the right. In spite of the fact that project 15 achieves more superior single qualities in the technical evaluation, marked with "3", at the end project 20 is to be preferred.

This is because the decision makers focus here on a specific demand "Reduce unemployment", and project 20 exactly focuses on those features, that mostly affect that demand due to the QFD-matrix. The row "Influence – Technical importance" on the bottom of the diagram provides a support how the concurring but inferior project could be improved in order to better perform with respect to the values the decision makers prefer.

Demands and Fulfilments in the Case of EmplocTool

As a result of the pact document analysis and practitioner visits, EmplocTool has created lists of demands and fulfilments. The EmplocTool list of *demands (goals)* comprises demands related to employment, unemployment, inactivity, education, institutions and others. These groups of demands are further split up into subgroups of demands. At the lowest level a single demand is e.g. "to increase participation of disabled" or "to create a local employment pact". In order to get an overview about the demand structure, they were categorised into six groups and thirty-three subgroups. These demands are related (via the QFD matrix) to concrete fulfilments.

A similar structure is applied to the *fulfilments (indicators)*: a typical fulfilment indicator could be "the number of graduates of a specific course (as an effect of the measure)" or "the number of jobs created (by the measure)". For a more detailed description see Chapter 5.3 Results of the Empirical Work.

Each fulfilment / indicator is measured with a three-layer system that is flexible to the data availability of the end user:

- Layer 1: Facts
- Layer 2: Survey
- Layer 3: Respondents opinion

Layer 1 (Facts) is the most hard and reliable measure. A common example is the number of jobs created, the number of persons trained, etc. This should not be an opinion or assessment of the end user, but an objective widely available figure.

Layer 2 (Survey) applies to some of the indicators, that are not measurable directly but can only be obtained by surveying the opinions, perceptions and desires of persons related to the projects executed. An example is the satisfaction with career perspectives of employees trained on a project, which can be measured using a Likert-scale.

Layer 3 (Respondents' opinion): This layer applies when data from the other layer is not available. Layer three measures the respondents' opinion on a point scale from 0 to 100. The question posed always relates the respondents' observation on the project to a virtual best-practice project, carried out with the same budget but yielding possibly a better effect. Of course, layer three is the most subjective influenced measurement, and therefore the use of this layer should be avoided as much as possible. The objectivity of the quality score will decrease substantially, the more indicators are measured with layer three questions.

On the other hand, quality indicators seem to gain importance. They may refer to an individual, subjective rating, but simultaneously, they may be relevant and exactly defined. The indicator "job satisfaction" e.g., has just recently been included into the set of indicators for the Joint Employment Report (EC – Employment Committee 2004).

To calculate a quality score a standardization of the indicators is necessary. Therefore in a first step budgetary aspects were brought into the analysis to keep into account the differences caused by budgetary size; i.e. it is logical that a project with a budget of ten times another project's budget should be capable to create more jobs in absolute terms. Therefore it is logical not to use these absolute values, but to execute a kind of normalization according to the budget. The efficiency approach, discussed in Clijsters et al. (2003) was proposed in this respect. An efficiency ratio of outputs and (financial) inputs has been introduced upon layer 1 variables.

In a next step, the obtained values were clustered per indicator in high, medium and low scores, that can finally be added weighted according to the QFD-matrix weights to obtain the final quality score of the studied projects. Calibration sets project evaluations in relation to the results of the empirical results of other projects. Thus the relationship to the project budget allows to categorize projects and to find out the best, worst and medium performing projects.

3.2 Function of IO within EmplocTool

In order to obtain an economic score for employment projects in EmplocTool, an 11-business sector input-output model for 206 regions, mostly in NUTS-2 regions of the European Union was applied. Since survey-based regional input-output tables for these regions are not available, non-survey regionalisation techniques were applied, in order to come up with regional input-output tables that are based on national input-output tables. According to the situation and to calculations based upon the Monte Carlo simulations described in Clijsters et al. (2004), the appropriate regionalization techniques were applied. The two most frequent of these techniques are the simple location quotients (SLQ) and cross-industry location quotients (CILQ). Once the regional input-output tables were constructed, it was possible to derive output and employment multipliers for the 11 business sectors in each region.

In EmplocTool, there are 3 indicators in the General Information sector and 35 indicators in the QFD Model sector that are suitable for the application of input-output analysis. Three hierarchical levels of data construction were defined, to which multipliers can be attached to indicators. The levels can be independently applied for obtaining output and employment effects. The economic score of an employment project in EmplocTool is the weighted average of the total output and employment effect of the project.

In addition to the quality score of employment projects, the economic score serves as a benchmark score for projects from the economic perspective. By establishing sector and region specific multipliers to economic outputs of the projects, it was possible to attach the multiplying value of the expenditures associated with these projects for the economy of the respective NUTS-2 region. Regional multipliers are obtained from regionalised input-output tables on the basis of national input-output tables for all European countries. regionalisation takes place on the basis of observed economic characteristics of the regions. For this purpose, a simple location quotient technique was applied

Input-Output Model and Regionalisation Technique

As a starting point for this discussion about the economic score, the standard regionalisation technique used for obtaining simple Type-I output and employment multipliers is presented. The economic transactions in an economy for a specific period, (for example a year), can be summarized in an input-output table (IO table) as in Table 3.1.

Table 3.1 – Input-output table (IO Table)

		Input				Final demand		
		Sector A	Sector B	Sector C	Exports	Private consumption	Public consumption	Private investment
Output	Sector A	A				B		
	Sector B							
	Sector C							
	Imports							
Value added	Wages	C				D		
	Capital revenues							
	Net taxes							

There is a distinction among four different sections of the input-output table. In section A, also referred to as the intermediary flow table, the transactions between producing business sectors are registered in nominal values. These transactions are characterized by the exchange of intermediary goods and services that are needed for the production process. In the representation of the IO table, imports and exports are included in this section, because most of the transactions associated with imports and exports are business-to-business exchanges of intermediary goods and services. Imports and exports, however, will not be important in the discussion further on, so it will not elaborated on.

In section B , the transactions between the producing sectors and the final users are registered. These transactions refer to the final demand for goods and services. There is a distinction between private consumption, public consumption and private investment as the main categories of final demand.

In section C, the transactions between producers and suppliers of production factors are registered. Together, these transactions refer to the primary costs of production and add up to the value added of a specific sector. Suppliers can be households, which supply labour and receive wages, providers of capital, which supply capital and receive capital revenues (interest, rents, profits), and the government, which supplies public goods and subsidies and receive tax revenues. Finally, in section D, transactions outside the production sector are registered, such as tax payments of households to the government or direct imports by households and government.

In the construction of the economic score, it is important to establish the effects of employment projects on the region's output and employment levels. These effects are direct and indirect effects.

Direct effects measure the impact of expenditures associated with employment projects on the output (gross production) of business sectors.

Indirect effects measure the increased output of the business sector who suppies goods and services to these sectors that are directly influenced by the employment project. For example, if an employment project creates employment in the manufacturing sector, the observed increase in jobs in that sector is referred to as a direct effect of the project. Since the workers in these newly created jobs need materials to work with, the increased output of the materials sector that delivers these materials is referred to as an indirect effect of the project. Also third round increases in output of those producers who deliver inputs to the materials sector in our example are referred to as indirect effects of the project.

Input-output analysis makes it possible to measure the second and higher round effects of an employment project by means of establishing the so-called multipliers. A multiplier of, for example 1.50, indicates that, in addition to every Euro spent in the economy due to an employment project, which leads to an increased output of one Euro, another 50 Eurocent of output value is created due to these second and higher round effects.

To recap, the indirect effect of a project's expenditure of one Euro amounts to 50 Eurocent.

From this discussion, it can be concluded that, section A and B of the IO table, excluding imports and exports, are the most important sections for the EmplocTool purposes. Section A presents the structure of linkages between business sectors that generate the second and higher round effects of employment projects. Section B registers the final demand: it is the section where an increased expenditure of the public sector, such as an employment project, will emerge in this accounting system of the economy. A mathematical description is provided in the appendix.

It must be said here that this analysis is subject to a number of restricting assumptions, but their discussion is beyond the scope of this publication. (The main underlying economic assumptions of the applied IO model are: (a) there's a fixed proportions production technique with constant returns to scale in all business sectors, (b) price effects are disregarded, (c) each sector produces one commodity, (d) there's perfect capital circulation and (e) there's Keynesian unemployment of production factors with resulting underutilization of the output capacity).

Now that the economic model for obtaining economic scores has been established, the focus is shifted towards the availability of input-output data. It may be clear so far, that the collection of the required output shares for all business sectors in all regions is a time consuming and costly business. Since survey-based IO tables are available at

the national level for all EU countries, a standard non-survey technique is applied for regionalizing the output shares.

From the Monte Carlo experiments previously mentioned, it is found that the errors due to regionalisation are within acceptable ranges when applied to a combination of a simple location quotients (SLQ) and cross-industry quotients (CILQ) to the matrix of national output shares A, also referred to as ASLQ. However, where necessary other quotients are applied. Location quotients serve as a correction of national output shares for the size and the characteristics of the regional sector structure.

With SLQ, the assumption made is that a region's output share is equal to the national output share if a sector shows an equal or bigger share in total regional production as compared to the sector share in national production. If this share is smaller, the regional output share is proportionally adjusted downwards.

With CILQ, the assumption made is that a region's output share is equal to the national output share if the selling sector's output as compared with the buying sector's output is equal or bigger at the regional level than at the national level. If this quotient is smaller, the national output share is proportionally adjusted downwards to obtain the regional output share. In sum, if a sector's production at the regional level is sufficiently high to supply other sectors in that region, the national output shares are applied to that sector in that region. If not, the output shares are adjusted downwards. The SLQ technique is used for the diagonal elements of the matrix of output shares, the CILQ technique is used for non-diagonal elements.

Before proceeding, a comment on one of the major drawbacks of applying this static input-output technique must mentioned, i.e. the overestimation of multipliers. Almost all underlying assumptions of this IO model contribute to an expected overestimation of the indirect effects obtained from IO analysis. We are aware of this drawback and should warn the users of EmplocTool of drawing too narrow conclusions from the results of our calculations.

Making explicit value comparisons on the basis of the construction of economic scores cannot be justified, they can only be used as indicators. Since we are not able to isolate all the sources of overestimation, and can therefore expect that overestimation is present in all calculated scores, we can only use the calculations as benchmarks if the assumption, that errors due to overestimation are distributed equally in all employment projects, is accepted. It may be clear from this discussion that this is not true, but we are not aware of an alternative technique that performs better for our purposes.

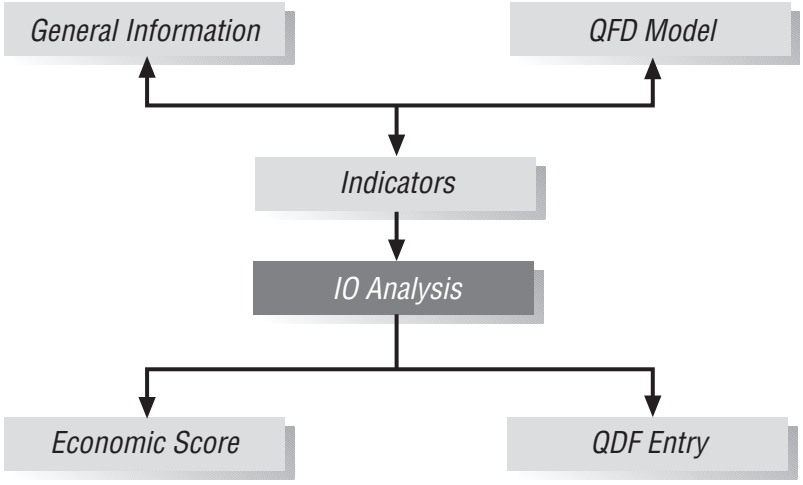
Regarding the implementation of the model in a statistical analysis, data obtained from Eurostat is used. First, harmonized national input-output tables for all European member states are available. Second, information about the value added in European regions and sectors for calculating location quotients is used. Third, there is national

employment data available, which has been regionalized by means of the value added data mentioned earlier.

Indicators in EmplocTool for IO Analysis

The basic structure of EmplocTool consists of two separately operating parts. The first part contains general information about the employment project, such as its name, its geographical location, objectives, financial issues, etc. The second part contains information that is required for the application of the Quality Function Deployment (QFD) analysis of the employment project. In EmplocTool, the IO analysis and QFD analysis were integrated, as presented in Figure 3.2.

Figure 3.2 – Integration of QFD analysis and IO analysis in EmplocTool



From the General Information part of EmplocTool, indicators are gathered, as well as from the QFD Model. An important issue to notice is that the entry of indicators that are suitable for IO analysis is not compulsory in the General Information part. Furthermore, it may well turn out that indicators that are suitable for IO analysis may not emerge in the QFD Model part. The latter depend exclusively on the choice of goals in the EmplocTool software. It may therefore be the case that the economic score cannot be established due to missing suitable indicators. This can be solved by indicating the information required for IO analysis in the General Information part and pointing the user to this need of data. In the bottom part of Figure 3.2 it is shown that the output of the IO analysis will be used for constructing the economic score, as well as for entering information in the QFD model. The latter case refers to the calculation of the "number of indirect jobs", which is a model indicator in the QFD analysis (indicator number 3).

Based on the latest version of the EmplocTool software, it can be determined which indicators in each of the two parts of EmplocTool can be used for IO analysis. In the list below, we name the indicators (as they appear on the user's screen), state their position in the software (only for General Information) and mention the value type of the specific indicator.

General Information

I – Project location (Description page of the EmplocTool software): The (NUTS-2) region is required here for the choice of the multiplier(s) used in the IO analysis.

II – How many jobs are directly created in the following business sectors by this project? (Question 4 in the Strategies page of the EmplocTool software): The sector specific number of jobs entered here can directly be used in the IO analysis for the calculation of the number of indirect jobs created by the project.

III – Expenditures (Left column in the Finance page of the EmplocTool software): The different types of expenditures (Euro) entered here can be attached in the IO analysis to different output multipliers for the calculation of output effects of the project.

IV – Incomes (Right column in the Finance page of the EmplocTool software): The different types of expenditures (Euro) entered here can be attached in the IO analysis to the region's overall output multiplier for the calculation of output effects of the project. Since the destination of the project's expenditures cannot be identified by the incomes of the project, we use the overall multiplier.

QFD Model

The following indicators can be used for IO analysis if, and only if, information about these indicators is available at the level of the first layer in the EmplocTool software. This is the layer in which the user can enter a value type of information for the indicators. The IO analysis cannot be applied to second (survey) and third (personal) layer information.

1 – Number of jobs (employment)
2 – Number of job openings (employment)
4 – Number of self-employed (employment)
5 – Number of working hours (employment)
6 – Number of low skilled jobs (employment)
7 – Number of high skilled jobs (employment)
8 – Number of subsidized jobs (employment)
9 – Number of apprenticeship/work-experience jobs (employment)
10 – Number of full-time jobs (employment)
11 – Number of part-time jobs (employment)
12 – Number of fixed contract jobs (employment)
13 – Number of temporary jobs (employment)
16 – Working hours per week (employment)
17 – Average overtime per week (employment)
32 – Number of commuters (employment)
43 – Level of unemployment (employment)
45 – Level of long term unemployment (employment)
64 – Number of "transit" jobs (employment)
98 – Employment subsidies for companies (output)
106 – Gross production (output)
107 – Value added (output)
114 – Investment (output)
116 – Foreign investment (output)
118 – R&D expenditures (output)
141 – Capital for investment (output)
146 – Public educational expenditures (output)
147 – Private educational expenditures (output)
232 – Number of private employment officers (employment)
268 – Financial support for child care (output)
273 – Budget for restoring old/historical buildings (output)
284 – Formal partners: money input per year (output)
285 – Informal partners: money input per year (output)
306 – Subsidies (output)
308 – Resources for administration (output)
315 – Total expenditures (output)

This concludes the discussion about suitable indicators for the IO analysis and their identification in the EmplocTool program. The following section focuses on the construction of the economic score.

The Construction of the Economic Score

In this section, the construction technique that obtains the economic score of employment projects in EmplocTool is explained in detail. Insight on the restrictions to the construction of the economic score as resulting from the availability of information, is complementarily provided. An important restriction to the technique refers to the weights that must be attached to the economic effects of different monetary and physical features of an employment project. Since we are dealing both with output and employment effects in the IO analysis and cannot be sure whether one type of effects (e.g. output), the other type (employment) or both types (output and employment) can be incorporated in the analysis, we must assume comparability to some extent in order to construct the economic score.

Two different types of multipliers are applied:

- Output multipliers measure the total (=direct and indirect) output effect of monetary features of the employment project, such as expenditures. Those multipliers can be applied to the following indicators: General Information III and IV; QFD Model 98, 106, 107, 114, 116, 118, 141, 146, 147, 268, 273, 284, 285, 306, 308, and 315.
- Employment multipliers measure the total (=direct and indirect) employment effect of physical features of the employment project, such as the number of jobs created by the project. Those multipliers can be applied to the following indicators: General Information II; QFD Model 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 32, 43, 45, 64, and 232.

Both output and employment multiplier effects can be expressed as a percentage of the corresponding direct effect. Suppose a total project's budget of € 5 million (M) creates a total output effect of €7M in the region, the total output effect is equal to 140 percent of the direct output effect (€ 5 M). Or, a project creating 20 full-time jobs generates a total employment effect of 25 full-time jobs, the total employment effect is equal to 125 percent of the direct employment effect (20 full-time jobs). This type of calculation is used for establishing the economic score of an employment project.

The calculation procedure for the economic score is as follows. First it is found out at which hierarchical level of data construction, information is available to construct the economic score. Table 3.2 describes the three different hierarchical levels of data construction.

Table 3.2 – Hierarchy levels of data construction

Level	Name	Description	Output		Employment	
			General Information	QFD Model	General Information	QFD Model
1	OPT	Sector specific information is available, covering the whole project	III	106, 107, 114, 116, 118, 146, 147, 268	II	
2	COM	Information is only available with respect to specific results of the project. A combination of indicators is made.		114+116, 146+147, 284+285		6+7, 10+11, 12+13
3	ONE	Information is only available with respect to the total result of the project. Only one indicator is used.	IV	106, 107, 114, 116, 118, 146, 147, 268 and: 98, 141, 273, 284, 285, 306, 308, 315		1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 32, 43, 45, 64, 232

Distinguishing between the following levels:

OPT: optimal level for data construction. At this level, we are able to attach multipliers to a full set of sector specific indicators. Such information is found only in the General Information part of EmplocTool. General Information III defines the project's expenditures by type of expenditure, so that it is possible to attach output multipliers to these different expenditures and obtain the total output effect of the project.

General Information II defines the project's employment result by sector, so that it is able to attach employment multipliers to these different sector results and obtain the total employment effect of the project. If there is data available for General Information III, it is possible to attach an output multiplier to one of the indicators in the QFD Model part mentioned in the Table in order to account for the economic consequences of the project. Their effects add to the total output effect of the project.

COM: combination level for data construction. At this level, multipliers are attached to combinations of indicators which are related to each other. For both output and employment effects, there are three different indicator combinations in the QFD Model part. For example, "investment" (114) and "foreign investment" (116) can be related outcomes of a project that aims at stimulating investments in a region. It is possible to attach differently constructed output multipliers to these two indicators and obtain the total output effect of the project. For employment, a similar example can be given for "number of low skilled jobs" (6) and "number of high skilled jobs" (7).

ONE: one indicator level of data construction. If no information is available at the previous two levels (OPT and COM), we can calculate the project's output or employment effect by attaching a multiplier to one single indicator that reflects the overall per-

formance of the project. For example, "gross production" (106) may reflect the increase in the region's gross production due to the project.

It is possible to attach an output multiplier to this indicator in order to obtain the total output effect of the project. As in the case of OPT, it should also be distinguished, if possible, between the project's expenditures and the economic consequences of the project. All indicators in the second list (following the "and" in row 3) in the table can replace General Information IV as indicators for the project's budget.

The hierarchy of the levels implies that first the availability of information at level 1 is checked, then at level 2 and finally at level 3. For obtaining output effects and employment effects, this is a separate and independent process. In other words, output effects at a different level than employment effects, dependent on the availability of data can be calculated. However, information at level 1 has a higher data quality level than information at level 2 or 3. Therefore, in calculating the final economic score, we attach weights to the results of the different levels: 3 points to level 1, 2 points to level 2 and 1 point to level 3.

We then calculate the weighted average of the total output effect and the total employment effect. For example, if a total output effect of 125 % at level 1, and a total employment effect of 145 % at level 2, the economic score is calculated as (3*125 %)+(2*145 %)/(3+2) = 133 %. This score is closer to the total output effect (125 %) than to the total employment effect (145 %) because it is assumed that, the quality of the calculated output effect is higher than the quality of the calculated employment effect due to the difference in the hierarchical level of data construction.

Summary and Conclusion

In obtaining an economic score for employment projects in EmplocTool, an 11-business sector input-output model for 206 regions was applied, mostly NUTS-2 regions of the European Union. Since survey-based regional input-output tables for these regions were unavailable, a non-survey regionalisation technique was used in order to produce regional input-output tables based on national input-output tables.

Once we constructed the regional input-output tables via the ASLQ-method, we derived output and employment multipliers for the 11 business sectors in each region. In EmplocTool, there are 3 indicators in the General Information part and 35 indicators in the QFD Model part that are suitable for the application of input-output analysis. We defined three hierarchical levels of data construction at which multipliers can be attached to indicators.

The levels can be independently applied for obtaining output and employment effects. The economic score of an employment project in EmplocTool is the weighted average of the total output effect and the total employment effect of the project.

3.3 The Interlinking of Scientific Methods

Both techniques: IO and QFD can be set up independently from each other. On the other hand, there is a relationship between them. In special the results of IO are incorporated into the more general QFD-model. The following table shows the basic features of the methods.

Table 3.3 – Comparing the characteristics of the two techniques applied

	QFD	IO
Concerning area	Legal, social, economic, technical, political, environmental	Economic
Main result	Q-Score	E-Score
Detailed results	Demand & fulfilment performance	Sectoral effect, indirect effects concerning labour, value added, investment
Components	Matrix of QFD scores	Matrix of IO scores
Advantages	Holistic approach, considering a broad range of factors	Preciseness of the results
Limitations	Economic effects may be underestimated; qualitative results may be overemphasized	May be over-focused solely on economic performance, if applied exclusively; limitations concerning assumptions, especially regionalisation

Each method has its specific advantage and a number of limitations. During the implementation of the project, all prominent factors in the QFD and IO were constantly kept in mind to exploit the benefits and minimize the impact of the limitations. Both techniques were selected on purpose to support and supplement each other: the advantages of one method compensate occasionally for the limitations of the other, and vice versa. Of course mathematical preciseness of these techniques will depend on the data availability. Also both techniques themselves have some inaccuracies in the calculation of the scores, but at the moment they are considered to be among the best for this type of applications. By the combination of both methods in EmplocTool, the advantages of each method contribute to a sound analysis. The applicant of EmplocTool is provided with outcomes of both methods, ensuring a differentiated analysis of the employment project.

Chapter 4 Technical Solution

4.1 Structure of the Software

The ideas of Quality Function Deployment and input-output analysis have been incorporated in the software of EmplocTool. The program integrates to some extent the two frameworks, as explained in the previous chapter. Additionally, and sometimes complementary to these techniques, background information about local employment projects is asked for in the software. There are several references between the two techniques and the elements in the structure of the software

Apart from the two techniques mentioned, there are invisible elements of the EmplocTool software (the QFD matrix and the IO multipliers) and visible ones: the software inputs (like background information, goals, priorities and indicators), and the software outputs (like the Q-score and the E-score). QFD relates to all visible elements of the EmplocTool software, except for the E-score. From the background information, budget levels are extracted for scaling the performance of the projects, i.e. their indicators. Goals, priorities and indicators are explicit elements of the technique of Quality Function Deployment as explained in the previous chapter.

Regarding the output of the software, the Q-score is the one and directly obtained result from applying the QFD technique. By calculating the Q-score, the invisible element "QFD matrix" is used. IO relates to only two, in some cases maybe three elements of the EmplocTool software. First, if available, the input-output analysis preferably works with employment effects of the project entered in the background information section. As argues in the previous section, this information is specific for business sectors and therefore more accurate and applicable than the information in the indicators section.

Furthermore, specified information about the budget of the project can yield more precise results for the E-score. These data however are not always available. It is inevitable that the input-output technique, if applied, makes use of indicator information.

Finally, the IO technique refers to the E-score since this is the one and main outcome of applying this technique. By doing so, the input-output framework builds on the availability of output and employment multipliers for 206 EU regions at NUTS-2 level. This is one of the invisible elements of the software.

Now that the relation between the applied techniques and the structure of the software is established, it is common knowledge that the software inhibits four input

"containers" and two single outputs. The input containers consist of software elements for the purpose of multiple entries, whereas the output only consists of two separate numbers (Q-score and E-score). It should be noted that not all entries in the input containers are needed to calculate the Q-score and the E-score. In table 4.1, an overview of the elements that are needed and/or preferred for the calculation of the software's outputs are presented.

Table 4.1 Required and preferred elements in the software for the calculation of outputs in the software.

Input container	Q-score	E-score
Background information	Budget information preferred	NUTS-2 region required Sector employment effects preferred Budget information preferred
Goals	At least one combination required	Not related
Priorities		Not related
Indicators		Specific indicators preferred (see previous chapter)

From this overview, it is obvious that not all information entered in the background information section is needed for the calculation of the outputs of the software. In fact, only budget levels and sector specific employment data are to some extent required or preferred for this purpose. The choice of a NUTS-2 region in the Description tab is required for identifying multipliers. Nevertheless, this boils down to the conclusion that most of the background information serves as an independent and additional source of information about the employment project.

The other entries in table 4.1 need some elaboration. First, with respect to the calculation of the Q-score, it is preferred to have at least a number for the total budget of the project. This number of used for the scaling of available (layer 1) indicators (for an explanation, see below). If no hard facts are available for the project, i.e. no layer 1 indicators, then the level of the project's budget is not needed for the calculation of the Q-score.

Secondly, one positive combination of a goal, its priority and a corresponding indicator, is needed at least. If there is no single combination of these three, the Q-score in the Project List window will be zero. Furthermore, if only one such case exists in which the indicator is a hard fact (layer 1 indicator) and the project's budget information is not available (in the background information section), then the Q-score remains zero. Therefore, to produce a Q-score for a project, follow the next sequence of reasoning:

Is there at least one combination of a goal, its nonzero priority and a nonzero indicator (related to the goal as indicated by the software)?
➢ **If no**, then the Q-score equals zero. ➢ **If yes**, is the indicator a hard fact (entered at the first level, see below for explanation)?

➢ **If no**, then the Q-score is nonzero. ➢ **If yes**, is the project's budget known from the background information section?

➢ **If no**, then the Q-score equals zero. ➢ **If yes**, then the Q-score is nonzero.

This is the structure of the software regarding the production of Q-scores. Looking at table 4.1 again, it is also possible to set up such a sequence of reasoning for obtaining the E-score. As discussed in the previous chapter, the economic score is split into a score for employment and a score for output. Producing either one of these scores immediately results in a nonzero E-score. The software is thus defined to provide the user with information as soon as any part of the information is available. Therefore, one can define the sequence of reasoning for producing an E-score as follows:

Is any of the following information available?
Sector specific employment in the background information section;
Budget information in the background information section;
Any of the indicators mentioned in the previous chapter in connection to the calculation of the e-score.

➢ **If no**, then the E-score equals zero. ➢ **If yes**, then the E-score is nonzero.

This is the structure of the software regarding the production of E-scores. It completes the discussion about the structure of the program. In the following section, we discuss the functioning of the software.

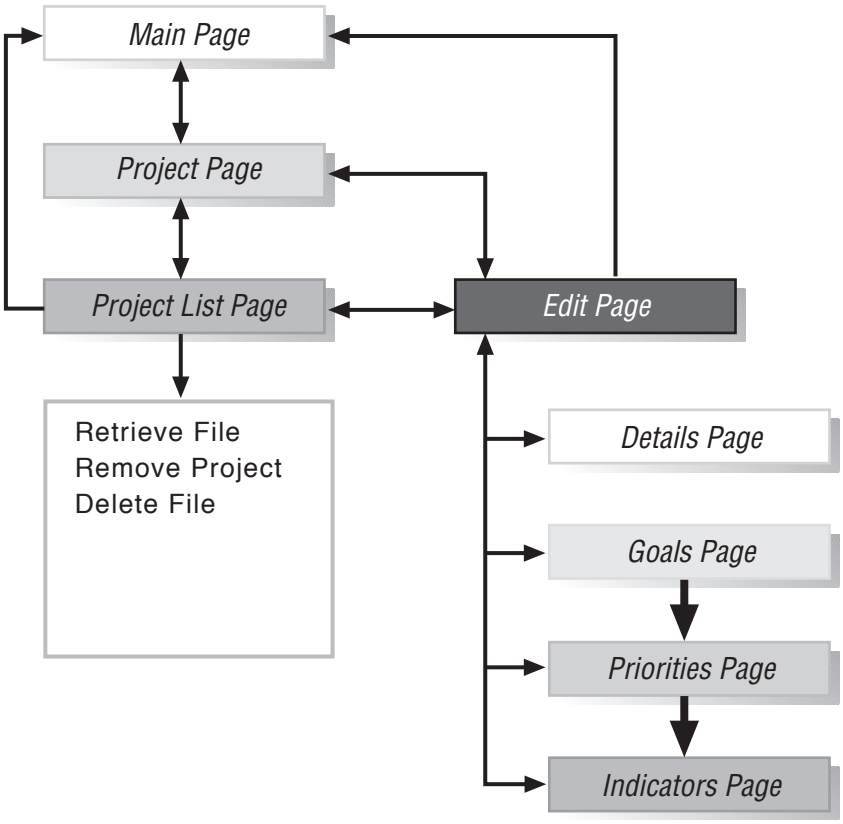
4.2 Functioning of the Software

The organisation of the software is directly related to the input structure of the software. In Figure 4.1, the organisational scheme of the EmplocTool software is presented. The boxes in the figure relate to (main) windows that can be accessed in the software. The Main Page and the Project Page offer functionality being a "gate" to other parts of the software.

Main Page

One accesses the software by means of the Main Page. The appearance of the Main Page is preceded by a flash screen presenting the logo of EmplocTool and the version number of the software. During the presentation of the flash screen, required textual headings for goals and indicators are loaded into memory. At the specific moment that the Main Page appears on the screen, EmplocTool is still loading QFD data (almost 50,000 entries) into computer's the memory. This is a background process.

Figure 4.1 Organisation of the EmplocTool software.



The Main Page serves as a welcome portal to EmplocTool. It exhibits no functionality other than guiding the way to the Project Page. The Main Page originally gave access to other important functions in a first draft of the software (2002). These functions (for example a search and benchmark function) represent a scope for future improvements of the software. The Main Page will then gain its importance and function again.

Project Page

The original idea to have different functions in the Main Page justifies an introductory page to the edit functions for employment projects. This is the portal to the entry facility of EmplocTool's database, the Project Page. From here, one can either go back to the Main Page (and automatically close all open windows, including the Project Page itself), or move on to either the Project List page or the Edit Page. In the first case, the user chooses to work with a list of projects (including the possibility to add a new project to the database), in the latter case the user chooses to enter a new project directly. Again, there's no own functionality in the Project Page.

Project List Page

The Project List Page is undoubtedly the most important window in the EmplocTool software. It provides the user with a list of selected projects. The selection of projects is made by the user himself by means of adding, retrieving, removing or deleting projects. The list not only indicates the name of the project, but also the number of goals, whether at least one priority has been set (yes or no), the number of available indicators, the number of indicators needed for a full evaluation, the Q-score and the E-score.

At this moment, this is the only window in which the user receives information about the Q-score and the E-score. With respect to the number of available indicators, one should keep in mind that the number in the list refers to the number of indicators for which an observation has been registered by the program. Furthermore, the number only relates to the indicators that are relevant for the current evaluation; any observed indicator that is not relevant for the current evaluation process is not counted here. Therefore, the number of available indicators relate to the number of needed indicators: the former cannot be higher than the latter.

In the Project List Page, the "current project" is not active. The software waits for a choice made by the user in order to fill the "current project" with information of an existing project, or to start from scratch (new project). This enables EmplocTool to list a very high number of projects without running into troubles with the memory of the computer. It must be mentioned here that the software works efficient with only one "current project". The user should avoid editing two or more projects simultaneously.

By clicking on a project in the list, the user can activate that project and edit, remove or delete it. Double clicking yields access to the edit function; double clicking the first line in the list yields access to the editing function for a new project. By clicking the retrieve file button in the toolbar (on top of the screen), the user can retrieve an existing project from the database.

All projects are stored in the standard folder "Projects", which is a subfolder of the "EmplocTool" folder. The software cannot work with project files from other folders, so that the user's information will always be stored in one folder on the computer. By clicking the remove project button in the toolbar, the user can remove the active project from the list. The file of the project will not be removed from the computer and the project's information will not be lost.

By clicking the delete file button in the toolbar, the user can also remove the active project from the list. However, the file of the project will then be deleted from the computer and the project's information will be lost. It may be clear from this description that file handling in EmplocTool takes place in this Project List Page, whereas data handling is organized by means of the Edit Project or Edit Page (see figure 4.1).

Edit Page

The Edit Page yields access to the windows needed for data handling in EmplocTool. Only via this window, the user can access the Details Page (background information page), the Goals Page, the Priorities Page and the Indicators Page. The Details Page and the Goals Page can always be accessed by the user, regardless of other information that has been entered for the project. The Indicators Page can only be accessed if the user has chosen at least one goal in the Goals Page; the Indicators Page can be accessed once at least one priority for a goal has been set. The logical sequence for data entry is therefore:

- Enter background information in the Details Page;
- Choose goals in the Goals Page;
- Set priorities in the Priority Page;
- Enter data in the Indicators Page.

The Edit Page presents a summary of information about the "current project": the name of the currently selected project, the number of goals set for this project, the number of priorities set for this project, and the number of relevant and available indicators. With respect to the latter (indicators): relevant indicators are presented in the List Project Page as indicators needed, and available indicators are presented in the List Project Page as available indicators. All numbers of indicators only refer to relevant indicators, i.e. those indicators that have been generated by the QFD matrix on the basis of goals and non-zero priorities.

All summarizing issues presented on the Edit Page can be clicked to move to the specific window.

Details Page

The Details Page forms the data entry of background information about the employment project. The window offers 6 so called thematic "tabs" for different types of information about the project:

Description. In this tab, the user can enter general information about the project, such as its name, its geographical location, project type, start and end dates of the project, and the number of formal and informal partners. Note that (a) a project name is needed for creating a data file for the project, and (b) the NUTS-2 region that can be clicked on is needed for identifying the multipliers that are used for the calculation of the E-score.

These two entries are therefore very important. With respect to the project name, it should be mentioned that the full name is used as the file name of the project's data file, extended with the usual extension ".xls". Any name that does not fit the requirements regarding file names will cause errors in a later stage!

Personal. This tab registers information about the person who enters the information, as well as about the person who is regarded as the contact person. None of the data entries in this tab is frustrating the working of the program in any way or in a later stage of using the software.

Strategies. The project may refer to the creation or adjustment of employment in specific business sectors. In this tab, the user can enter information about the sector specificity of the employment project, as well as about the number of jobs directly created by the project in different business sectors. The classification of business sectors refer to the common NACE R16 classification used by Eurostat. The data entries regarding direct job creation in different business sectors, bottom of the screen, are the most valuable source of information for calculating the employment part of the E-score (see previous chapter for more details). However, these entries are not required for obtaining the E-score.

Consensus. This tab consists of three different measures of commitment to and consensus about the employment project. First, it is asked if local politicians are involved in the project. Second, information is asked about the definition of goals and the agreement about them. Third, it is asked which organisations are likely to support the results of the project. None of the data entries in this tab is frustrating the working of the program in any way or in a later stage of using the software.

Finance. This tab yields a possibility to the user to enter information about the financing structure of the project. There's an interactive way of calculating expenditures and incomes in this tab. If a specific expenditure (income) category has been entered by the user, the total budget of the project is automatically adapted to the new information. If

the user enters some number of total expenditures (total incomes) that is larger than the sum of the specific categories above the total, the surplus is added to the category "other expenditures" ("other incomes").

Financial information is used in EmplocTool in two ways. First, the total budget of the project (expenditures) is used as a scalar for layer 1 indicators. Second, expenditure categories are used for calculating the output part of the E-score (see previous chapter). In neither one of these cases, the lack of financial information implies a zero Q-score or a zero E-score, as explained in the previous chapter and in the previous section. We stress however the point that financial information is an important entry in the software.

Satisfaction. In this tab, satisfaction levels about specific results of the employment project are measured. We distinguished between 7 specific issues and one general or overall valuation for the project. Satisfaction measures range from 1 (not satisfied at all) to 10 (very much satisfied). Normally, satisfaction measures refer to the satisfaction of the project manager or the pact responsible for the employment project. None of the data entries is crucial for any other function in the software.

The save/quit or quit button in the toolbar brings the user back to the Edit Page.

Goals Page

By clicking the edit goals button in the toolbar, the user reaches at the Goals Page. In this window, the user can choose from a list of 158 categorized goals in order to establish the goals for the current project. Currently selected goals are presented in a list on this page. By clicking the add goals button in the toolbar, the user can add goals to the list. The user cannot choose one and the same goal twice in the list. The choice of the goals can be made by means of the pop-up screen appearing after clicking the add goals button. A three layer list of goals is presented to the user, in which only the lowest layer can actually add goals to the list. The first two layers guide the user to the specific goal he is looking for.

By clicking on a goal in the list on the Goals Page and using the delete goals button in the toolbar, the user can delete the activated goal from the list.

By clicking in the list in the budget field behind a specific goal, the user can specify the financial budget reserved for the realization of the respective goal. This information is not required, but serves as a backup for establishing priority levels in the software.

Clicking the save/quit button in the toolbar brings the user back to the Edit Page.

Priorities Page

By clicking the edit priorities button in the toolbar in the Edit Page, the Priorities Page can be accessed. In this window, priorities are attached to the goals set in the project or

in the pact. One must be aware of this difference, because priorities may not necessarily be set at the project level by the pact manager. Sometimes, priorities are set at the pact level, defining also the structure of (different) projects within the pact. Once the user clicks the select priorities button in the toolbar, the software asks for this choice.

By clicking "yes", the goals selected for the current project are added to the list on the Priorities Page and the user can set the priorities. By clicking "no", the same three layer list of goals as in the Goals Page appears on the screen and the user can select his own goals that have to be prioritised.

Setting priorities is easy: just click in the list in the priority field of the specific goal and enter a whole number between 0 and 100. The sum of all priorities cannot exceed 100 points and the software will warn the user if he tries so. The higher the priority level, the more important is the goal in the project or in the pact.

By clicking the save/quit button in the toolbar, the user reaches at the Edit Page again.

Indicators Page

By clicking the edit indicators button in the toolbar in the Edit Page, the Indicators Page will be opened. In this window, the user can enter data regarding the performance of the employment project. If at least one goal has been selected in the Goals Page, with a corresponding nonzero priority level in the Priorities Page, the corresponding indicators that are needed for the evaluation of the project are presented in the list on the Indicators Page.

The first two buttons in the toolbar can be used to switch between the "project set" modus and the "entire set" modus. In the project set modus, only relevant indicators are listed. In the entire set modus, all 315 indicators of EmplocTool are listed. In both cases, all data entered are saved to the project's data file. This function may be of interest to those users who want to reuse indicator sets in other projects.

The reuse of indicator sets can be established by clicking the third button in the toolbar, i.e. copy set. The familiar (List Project Page) listing of project files then appears on the screen and the user can choose from which project file the indicator set has to be copied. All data entered in the selected project file is then copied to the indicator set of the current project. This can be made visible both for the project set and the entire data set by switching between them with the first two buttons in the toolbar (see previous paragraph).

The information entry is based on a three layer data system. Once the user clicks in the list on one of the indicators presented there, the first layer appears on the screen. In the first layer, the program asks, if possible, about the actual performance of that indicator. In all cases, this is a number that can be entered. Save/quit brings the user back to

the Indicators Page and the number entered appears in the list. This type of information is referred to as a layer 1 indicator. Clicking "This information is not available" brings the user to the second layer. Based on a small scale survey among the pact members or organisations involved in the project, the user can enter survey frequencies according to the answers given by those pact members of involved organisations. Save/quit brings the user back to the Indicators Page and the frequencies entered appear in the list.

If the user has no survey results available, he can decide to add the question posed in this second layer to a survey. Clicking this option brings the user also back to the Indicators Page, but now the word "survey" appears in the list. Information obtained from this layer is referred to as a level 2 indicator. Again, the user can click "This information is not available". This brings him to the third and last layer.

In this layer, the pact manager or any person involved in the project is asked to rate the success of the project himself by moving a horizontal toolbar between 0 and 100 percent. The question refers to a comparison between the current project and an imaginary best practice project and measures the satisfaction of the respective respondent with respect to the achievements of the current employment project and the respective indicator. This type of information is referred to as a layer 3 indicator.

All different levels of indicators add information to the Q-score. In the first layer (layer 1 indicator), the number entered is scaled with the budget of the project, if available. In the second and third layer, the information can directly be used for the calculation of the Q-score. It may be clear to the reader that level 1 indicators are more precise and more useful for the calculation of Q-scores.

At the end of this chapter, we refer to the user's manual for more detailed information about the functioning of the software. In addition to all information presented in this chapter, it should be mentioned that the EmplocTool software exchanges information with Microsoft Excel® data files. As a consequence, that software should be installed on the user's computer in order to be able to work with the EmplocTool software.

Chapter 5 On the Field Testing

The testing of EmplocTool in practical situations has been a major task of the project. It provided as well an impression about the usability of the concept as well as information on results and the impact of employment related projects. These results have also been used to calibrate the method and provide benchmarking information. This chapter answers the question where EmplocTool has been applied, and to which project or activity.

5.1 Characterisation of Test Regions

Austria – Characterisation of Test Regions

EmplocTool was tested in different regions, using both primary and secondary data. In particular, the following regions were covered:

Steyr-Kirchdorf (NUTS 3) The region has approximately 100,000 inhabitants, consists of two rural districts with some manufacturing industry and the EU Structural Fond (former objective 2) supported city of Steyr. This area had a high unemployment rate during the 1980s after the closure of some important manufacturing plants, but recovered well due to a number of measures and a diverse and well-structured local industry. Most of the primary research was carried out here.

Mühlviertel (NUTS 3) This area consists of 4 agriculturally dominated rural districts near the Czech border. Some local measures were tested in the area of the "Mühlviertler Alm", that consists of 9 communities with approximately 12,000 inhabitants altogether.

Province Vorarlberg (NUTS 2) This Province is located in the very west of Austria and is characterized by a strong manufacturing industry, a high wage level (due to the proximity to Switzerland), a low unemployment rate and a very high proportion of immigrants. For the case studies, secondary data of the provincial audit court was used.

City of Vienna (NUTS 2) With 1.6 million inhabitants Vienna constitutes the largest test region. The backbone of its economy is trade and services together with public administration and public services, but Vienna also hosts a significant number of manufacturing enterprises in the chemical and electronic sector. For the research, mostly secondary data of the Viennese labour market service was used.

Province Burgenland (NUTS 2) This province is the only Austrian objective 1 area and can be described as predominantly rural, with a considerable lack of infra-structure

and secondary and tertiary sector. Its main problems are increasing depopulation and commuting of a large share of its labour force, mostly to Vienna. Since the Austrian accession to the EU in1995 several high-tech enterprises were settled, but they are not yet fully integrated in the regional economy. The research carried out for EmplocTool was based mostly on existing evaluations.

Germany – Characterisation of Test Regions

The German test-regions are in diverse parts of the country: Bavaria, North-Rhine-Westphalia, Saxony, Lower-Saxony.

Looking on the big size of the country it was the intention to get data from different parts which have different preconditions on the labour market. The following description gives an impression of varying developments of the labour market situation in the selected parts of Germany.

District of Neumarkt, rural area in East-Bavaria, 128,000 inhabitants on 1,344 km² surface: Main branches are building industry (with worldwide acting companies like Bögl and Pfleiderer) and craft. In this rural region there still exists 2,900 farms exist of which about 70 % are run by part-time-farmers. The unemployment rate in the district is about 7.2 percent. Main opportunities in the district are the mixed structure of small and medium sized enterprises and a good transport connection by train and car. Main problems are the loss of jobs in the agricultural sector and the low percentage of people working in the service sector (only 29 % – the Bavarian average is 40 %).

District of Cham, rural area in East-Bavaria bordering to the Czech-Republic: 131,000 inhabitants live on 1,510 km² surface. Main branches are craft (construction, metal) and tourism. 60 % of the employed people are working in the production sector. The unemployment rate is at about 7 %. The upcoming extension of the EU is an important factor for the people in the area who see it both as an opportunity and as a risk for the district and regional economy, especially concerning job opportunities.

District of Höxter, a rural area in North-Rhine-Westphalia: 156,000 inhabitants live on 1,200 km² surface. Main branches are timber and furniture industries. The unemployment rate is about 9.4 % percent. The economic structure is a mixture of craft, agricultural and timber with small and medium enterprises. 37 % of the employees are working in the service sector, of which tourism is very important. 40 % are working in the production sector while 21 % are working in trade, communication and transport sector. Main opportunities are a quite young population (21 % are younger than 18 years) and a growing industrial turnover.

South-East-Lower-Saxony The south-east-part of Lower-Saxony is inhabited by 1.17 million people on 5,078 km² (size comparable with NUTS 2 level). Main sectors are automobile industry (Volkswagen, Robert-Bosch etc.) and micro-electronic industry.

About 30 % of the employees are working in the transport sector. The opportunities are a high level of qualification and a high potential of technology and international research. For the future the sector of small and medium enterprises should be strengthened and cooperation between companies, institutions and universities has to be improved in order to be competitive with the (world-) markets.

Vogtlandkreis / District of Vogtland: The population of the district Vogtlandkreis is 206,000 on 1,307 km². 44 % are working in production sector, 52.5 % in trade, transport and services and 4 % in agriculture. Main branches are engineering, metal-industry, construction and food industry. Situated in East-Germany the Vogtlandkreis is still confronted with the transition after the unification of Germany as the unemployment rate is 13.5 % .

Ireland – Characterisation of Test Regions

Traditionally Wexford has been economically successful and prosperous. This prosperity was built on the basis of an efficient and thriving farm sector and on a significant industrial base, particularly in Wexford Town. Overall Wexford's position as 'the Model County' stems from this prosperity and today Wexford has many strengths which make it an excellent location for business investment. Among these we can include:

- A strong tradition of enterprise
- An excellent working environment and quality of life
- Energy and capacity to grow in the local economy
- A strong track record in indigenous job creation
- Strong public sector support for business investment
- The largest population base in the south-east at 104,000 people.
- Good national road linkage to Dublin and other commercial centres
- Easy access to Europe via Rosslare Europort

The county can therefore look forward to a successful economic future. The recent decision by PFPC International Ltd., to establish here is evidence of Wexford's attractiveness as a business location. However in recent times Wexford's economy has not performed as strongly as it traditionally did. The twin pillars on which its prosperity was built have been significantly weakened. Wexford's high dependence on agriculture (17.7% of the workforce) is not an advantage at present given the substantial problems being experienced by that sector. The industrial base has been concentrated in traditional sectors, e.g., metals and engineering, and has experienced little productivity growth. It is therefore vulnerable to external competition. Plant closures, experienced in all of the main towns in recent years, are evidence of the vulnerability inherent on reliance on these sectors alone. The resultant job-losses have been deeply traumatic for the people concerned.

Belgium/Netherlands – Characterisation of Test Regions

In Belgium, four test sites have been analysed. Two different policy levels have been involved in the testing. One is the sub-regional level, with the *Province of Limburg* as the testing unit. The three remaining test units are situated on the level of local authorities: the *city of Genk,* the *city of Dendermonde* and the *community of Maasmechelen*. Both Genk and Maasmechelen are located in the Belgian Province of Limburg, meanwhile the city of Dendermonde is located in the province of Eastern Flanders.

Some important information on the Province of Limburg: At the beginning of last century, Limburg welcomed the first industrialization with the expansion of the Kempische Steenkoolmijnen (coal mines). Because of the recession in the thirties, the structural crisis in the coal industry starting in the sixties and the lack of development of other industries, Limburg as a region was vulnerable.

After a period of economic wealth, the oil crisis halfway through the seventies struck Limburg hard. The unemployment rate rose to a quarter of the active population in the eighties. The closing of the coal mines in Limburg, which followed on this bad evolution, went hand in hand with a coordinated action of different policy levels. As well the provincial, Flemish, Federal as the European Government engaged in a coordinated action to improve the unemployment situation in Limburg.

Today at the beginning of the twenty first century, Limburg reached a new phase in its development. Limburg has grown to a strong region, located centrally between important concentrations of populations in Western Europe. There is a strong presence of foreign industrial companies and a strong focus on exports. Although the future seems prosperous, a lot still needs to be done. Still there are people who suffer from the closing of the mines and who cannot find a job fitted to their competencies. In this context some of the projects we have studied need to be seen.

Some of the Dutch test areas are located near the Belgium boarder. The Dutch city of Maastricht (120,000 inhabitants) focuses on a reconversion of its city centre, which aims at the creation of more employment in the retail sector. In addition, industrial areas are adjusted to standards of sustained development. The city of Weert (50,000 inhabitants) is attractive to new business due to the lack of mobility problems. The municipality aims at the creation of an industrial area in order to create additional employment.

Italy – Characterisation of Test Regions

In Italy, the major focus of the empirical work has been based upon the *province of Frosinone*, located in the region of Lazio. A territorial pact (Territorial Pact for the Development of Frosinone) is established in that province. Another province studied in the region of Lazio is *the province of Latina*, with 2 territorial pacts (North / South). Within the region of Molise projects of the *province of Campobasso* (Territorial Pact of the area "del Matese") have been studied. All three provinces lie in the area of middle Italy, between the cities of Rome and Napoli.

Outline of the labour market in the Province of Frosinone

Between 1995 and 1999 there has been a decline in the agricultural occupation (–44.4 %) and in industrial occupation (–3.8 %), which is not totally compensated by a contemporary increase in the new forms of economy (decrease by –1 %). This has brought to a slow down of the occupational dynamics (–1.9 % between 1997 and 1998; – 2.0 % between 1998 and 1999).

Table 5.1 – Occupational trends between 1995 and 1999

		Absolute values				Difference to previous year (in percentage)			
	year	Agri-culture	Industry	other activities	total	Agri-culture	Industry	other activities	total
Frosinone	1995	8	56	88	152	–	–	–	–
	1996	9	52	94	156	12.5 %	–7.1 %	6.8 %	2.6 %
	1997	10	53	93	156	11.1 %	1.9 %	–1.1 %	0.0 %
	1998	9	51	93	154	–10.0 %	–3.8 %	0.0 %	–1.9 %
	1999	5	53	92	150	–44.4 %	3.9 %	–1.1 %	–2.0 %
Lazio	1995	81	376	1,344	1,800	–	–	–	–
	1996	81	363	1,371	1,815	0.0 %	–3.5 %	2.0 %	0.8 %
	1997	80	362	1,375	1,817	–1.2 %	–0.3 %	0.3 %	0.1 %
	1998	77	353	1,401	1,831	–3.8 %	–2.5 %	1.9 %	0.8 %
	1999	58	374	1,451	1,884	–24.7 %	5.9 %	3.6 %	2.9 %

Unemployment represents the other complementary aspect of occupation in the labour market. In comparison to past years, the unemployment rate has decreased. It is not the worst compared to other Lazio's provinces such as Viterbo. The updated situation is aligned to the regional averages. In 1998 unemployment was 12.3 %; this rate was only one percentage point higher than the regional average. In the previous year 1997 unemployment was lower than the regional average.

Table 5.2 – Unemployment and employment in the province of Frosinone and other provinces of Lazio in 1997 and 1998

	Rate of unemployment			Rate of employment		
	1997	1998	difference	1997	1998	difference
Viterbo	16.0	14.3	–1.7	39.2	38.2	–1.0
Rieti	9.3	10.1	0.8	39.0	41.5	2.5
Roma	12.3	12.2	–0.1	42.0	42.2	0.2
Latina	13.6	12.1	–1.5	41.1	41.7	0.6
Frosinone	11.3	13.5	2	39.2	37.1	–2.1
Lazio	*12.5*	*12.3*	*–0.2*	*41.4*	*41.5*	*0.1*

Female unemployment

In all the Region Lazio there are strong differences in unemployment rates between men and women. With respect to other provinces, the female unemployment rate in Frosinone in 1998 was higher than average (Frosinone 20.9 %, overcome only by the Province of Viterbo +22.8 %). Men are in general more favoured in hiring than women. This can be seen in the table 5.3, where male rates of employment were 54.7 % in 1997 and 51.4 % in 1998. These were higher than the female rates (24.6 % in 1997 and 23.6 % in 1998). This is a sign that in the province of Frosinone, like other rural areas, the opportunities for women are not equal to the opportunities for men.

Long term unemployment

According to Eurostat unemployment is computed among those who are out of a job since one month. If long term unemployment is included, the total unemployment rate aggravates. This has been done by the regional monitoring of occupation in table 5.3.

The Province of Frosinone reaches an average rate of long term unemployment of 22.2 % for total manpower; the contribution of long term unemployment is +9.8 %, that is higher than the regional average. Unemployment reaches 34.6 % among the female manpower. This data justifies a greater commitment in the field of professional training, that is not only short term. Professional training to fight long term unemployment regards functions of conversion and utilization of labour force which has remained out of jobs for considerable time.

Under employment and part time

In Lazio 1997, part time employment reached a total rate of 7.6 %, in absolute values 103,000 workers, lower than national averages (8.9 %). This is not a sign of progress, but a sign of traditional positions within the labour market, as most “real” part time labour is not made regular; thus, it does not appear in statistics.

Table 5.3 – Rates of activity, employment and unemployment according to age and gender in the Province of Frosinone

All population	Activity		Employment		Unemployment Total		Unemployment Long term	
Territorial units	1997	1998	1997	1998	1997	1998	1997	1998
Males + Females								
Province of Frosinone	44.1	42.9	39.2	37.1	11.3	13.5	8.6	9.8
Region Lazio	47.3	47.3	41.4	41.5	12.5	12.3	9.2	8.9
Males								
Province of Frosinone	58.9	56.7	54.7	51.4	7.1	9.4	5.1	6.1
Region Lazio	61.7	61.5	55.7	55.5	9.7	9.9	7.0	6.9
Females								
Province of Frosinone	30.3	29.9	24.6	23.6	18.8	20.9	15.1	16.5
Region Lazio	34.0	34.2	28.2	28.6	17.2	16.4	12.9	12.2

Youth (15–24 years old)	Activity		Employment		Unemployment Total	
Territorial units	1997	1998	1997	1998	1997	1998
Males + Females						
Province of Frosinone	24.3	26.1	14.4	14.8	40.6	43.4
Region Lazio	26.9	28.5	14.8	16.0	44.9	43.7
Males						
Province of Frosinone	25.3	29.3	17.2	18.0	31.9	38.4
Region Lazio	28.4	32.1	17.5	19.4	38.5	39.5
Females						
Province of Frosinone	23.2	22.5	11.4	11.2	50.7	50.4
Region Lazio	25.3	24.8	12.0	12.5	52.3	49.4

5.2 Documentation on Objects Tested

Within the regions documented above, only selected projects, initiatives and measures have been studied. The origin of these projects has been Austria (18), Belgium (10), Germany (4), Ireland (8), Italy (24) and the Netherlands (42). In total, 106 such projects/pacts have been evaluated.

In total, 106 objects (projects) have been tested so far.

All projects relate to recent experience, they have been conducted between 1997 and 2004. These objects are most often linked to specific territorial employment pacts. The following lists document these relationships.

Austria – Documentation on Objects Tested

Within Austria, the following objects have been tested:

- 1 territorial pact (2 evaluation periods), the TEP Oberösterreich 2002+2003
- 1 measure (family of actions), the project "Mädchen und Technik"(Girls and technical professions) in 7 provinces
- 11 individual projects, several of which for different evaluation periods, see the following list

Tests were carried out by personal interviews, secondary data analysis and complementary telephone interviews.

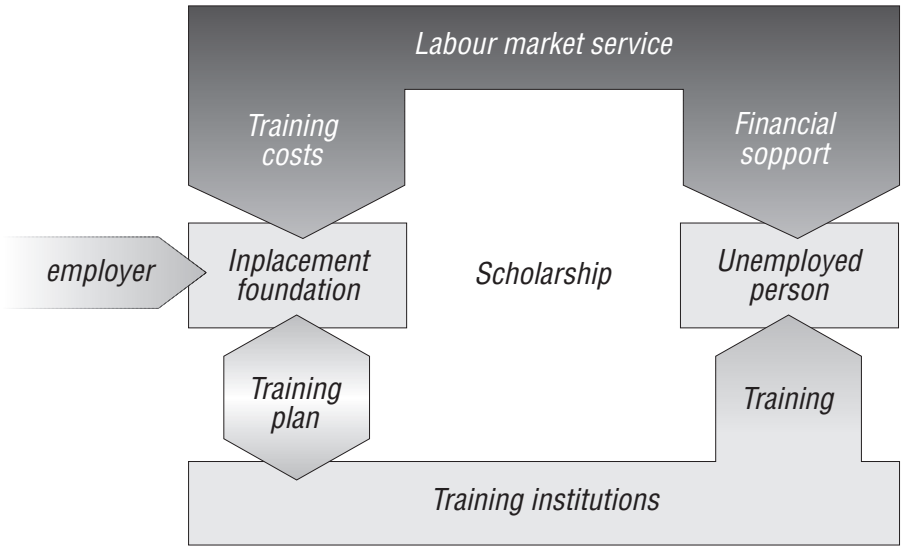
Additionally the software was presented and tested regarding its applicability and functionality by project managers and regional managers for labour in the region of Steyr/Kirchdorf and the region Mühlviertel.

Table 5.4 – List of projects (Austria)

Project name	location	Main focus	Evaluation period
Arbeiten und Lernen (Working and learning)	Vienna	Re-integration of long-term unemployed	1999
Arbeitsinitiative Region Bodensee	Province Vorarlberg	Long-term unemployment, persons with social and physical handicaps	Separated evaluations for 1999, 2000, 2001, 2002
Caritas Feldkirch	District of Feldkirch	Long-term unemployment, social exclusion	Separated evaluations for 1999, 2000, 2001
Chancengleichheit in der Region CHIRON (Equal chances in the region)	Region Mühlviertler Alm	Gender equality, qualification of women	2002-2004 (project proposal)
DOWAS	City of Bregenz	Long-term unemployment, persons with social and physical handicaps (drug addicts, excons, …)	Separated evaluations for 1999, 2000, 2001
Implacement foundation for handicapped	Province Upper Austria	Tailored training for handicapped	2002-2003
Karenz plus	Vienna	Reintegration of women after maternity leave	1999
Organisations≠assistentInnen	Vienna	Long-term unemployment	1999
Siemens Facharbeiterausbildung Kommunikation	Vienna	Match specific demands in high technology sector	1999-2001
Telecom competence	Province Burgenland (objective 1 area)	Fight brain drain, match specific demands in high technology sector	1997-2001

One of the innovative approaches in Austria is the model of *implacement foundations*. These organisations are private bodies that act as intermediaries between unemployed and employers on the one hand side and the public labour market service and educational institutions on the other side.

Figure 5.1 – Model of implacement foundations (Austria)



This model was developed to match qualification demands with labour supply. Unemployed persons who cannot find jobs in their profession receive training to match the demanded skills for available jobs.

The unemployment foundation develops training plans according to the specifications of the future employers and brings labour demand and supply together. During the training period, which consists of theoretical education plus training on the job, the trainee continues to receive unemployment benefit plus a scholarship from the foundation. During the training the employer does not have to pay any salary costs, only an initial matching fee to the foundation and a monthly administration fee.

The costs for the training are covered by the labour market service up to a certain amount, the exceeding costs have to be covered by the future employer. The intention is to have a tailored education for the future job and to avoid dropouts during the education.

Another well-known employment related model is *Der Steinbacher Weg* (The way of Steinbach). Steinbach an der Steyr, a small community with about 2,000 inhabitants in Upper Austria, has created an intense process of community development in the framework of Agenda 21 (Rio declaration on environment and development). A deep social and structural crisis was the reason to start, including a massive reduction in employment and jobs.

With a broad participative process inhabitants and enterprises developed a vision for the community and started different action programs as practical steps, targeted to liv-

ing conditions, culture of cooperation in economic and political councils, and towards job creation.

Today, Steinbach is a place of prosperity and wealth, where citizens are continuously participating in the sustainable development of their community. The number of jobs increased as well as the number of enterprises in the village.

Steinbach is the most well-known example for "best practise" of sustainable development in Austria and with the creation of 150 new jobs in SME also a best practise of local commitment to employment. Their success in employment strategies was the reason to focus our "EmplocTool-view" to learn about the main factors of success.

Germany – Documentation on Objects Tested

In Germany the following projects have been analysed:

CAH (Christliche Arbeiter Hilfe / Christian Support for Workers) – District of Neumarkt: The Initiative which brings long-term unemployed people into work. The people offer services like removal service, installation service etc.

Die Brücke (The Bridge) – District of Neumarkt: The project gives disabled people the opportunity to join the labour market and get qualification. The employees manage a restaurant with all services behind, e.g. waiter or kitchen work.

Beschäftigungs- und Qualifizierungsnetz (Employment and Qualification Network) – District of Neumarkt: The project will start at the end of 2003. Objective is to bring people from different groups with problems to join the labour market, into work. The aim is to support 100 people until 2006. A project-coordinator will make contacts for the unemployed to possible employers.

Mechatronic-Network – District of Cham: The objective of the project is to build up a network between all relevant institutions and companies concerning mechatronic. A main focus is also on the qualification of (young) people in this field.

Project „MARKT" (Monitoring – Arbeitskräfteentwicklung – Transfer, Monitoring – personell development – transfer) – District of Höxter: The objective of the project is to analyse the employment and qualification situation in the district of Höxter in order to support SME and their recruitment of qualified personnel. MARKT surveys information for the enterprises, continues observation of the regional labour market and supports the dialogue between regional actors. Therefore it is another aim to establish regional labour market forums.

SIMBA Soziale Integration von Migrantinnen und Migranten in Beruf und Arbeit (Social integration of migrants into profession and work) – South-East Lower Saxony: Objective of the project is the improvement of the preparation of migrants concerning the qualifications on the labour market. Therefore the target group gets information translated in the mother tongue of the main migrant-groups. The people are supported in

finding out useful ways to qualify and to find jobs. Another aim is to use the contacts to SME to help the migrant people in getting a job and to qualify migrants according to the needs of the SME.

Regional Personnel Management – Vogtlandkreis: The project "Regional Personnel Management" concentrates on increasing the employment opportunities for the people in the region. Basis is a study in which the employment needs are analysed with the aim to find qualified personnel for the companies. In a further step individual qualification models will be developed. In order to achieve these goals, modern information technology is used e.g. e-learning.

Ireland – Documentation on Objects Tested

The test areas comprise of community and business projects and NUTS III pacts. These tests were all conducted within the south east of Ireland. The following testing took place in Ireland. The projects of the test areas are recorded below:

Courtown Harbour Water Leisure Centre – North Wexford: The objectives of the development are to optimise tourist numbers and spend in the resort by attracting additional overseas tourists by broadening the range of tourist facilities in the area; extending the tourist season by providing weather independent facilities; generating increased tourist spending locally; increasing the length of stay of tourists by providing weather independent facilities.

Duncannon Community & Family Resource Centre – South West Wexford: Duncannon Community and Family Resource Child Care Initiative recognises that the area has been deemed a disadvantaged area. The aim is to provide quality and affordable childcare in the community, thus improving the quality of life for children and their parents. There is no all-day child care facility in this area.

Duncannon Fort Trust Co. Ltd. – South West Wexford: Duncannon Fort was identified by the tourism industry as a centre that would benefit from improving and renewing the centre. The development of Duncannon Fort is to be advanced on the basis of market potential and available resources. The current situation is that the public can be allowed safe access to most of the fort. The long term goal is to position the fort as a unique visitor attraction with a commitment towards excellence in customer care, with an emphasis on entertainment.

On Farm Computer Training Programme – County Wexford: The project involves delivering IT skills to farmers on a one-to-one basis in the farmers home. A core group of 10 tutors received training in farm software package and these 10 tutors went on to provide training to farmers around the county in general IT skills and in the use of the farming packages. The tutors, who were employed through the project on a part-time basis, were family members of active farming families and also received upskilling

themselves. The project which was grant aided by LEADER+ funds involved the tutors travelling to farmers homes to provide IT training. 128 farmers received the training and received certificates.

Raheen Family Resource Centre – South West Wexford: Raheen Family Resource Centre is a place for all to belong, to grow and develop together in order to improve the quality of life for all of the community. Aims are to provide accessible and affordable services to individuals and groups within the community; to respond to training and re-training needs identified within the community by providing (a) opportunities, information, encouragement; (b) specific skills training; (c) links to further education / employment opportunities. Also aim to provide support services to facilitate access and participation in the community; and to the development by the people for the people, regardless of age, gender, social, economic, cultural, ethnic, or religious background.

St. Louis Day Care Centre Ramsgrange – South West Wexford. The purpose of Ramsgrange Daycare Centre – Senior Citizen's Concern Ltd., is to provide care and essential services to disadvantaged old people and people with special needs within the geographical area.

The complete list of projects tests documented is, including test number, organisation name and the name of the respondent:

01: St. Louis Day Care Centre, Ramsgrange: Sarah McDonald
02: Duncannon Community & Family Resource Centre: Sarah McDonald
03: Courtown Harbour Water Leisure Centre: Angela Travers
04: Duncannon Fort Trust: Sheila Wilmot
05: Wexford Jobs Club: Catherine Darcy
06: Raheen Family Resource Centre: Marie-Louis Byrne
07: Kennedy Homestead, New Ross: Patrick Grennan
08: County Wexford Children's Choir Project: Rosaleen Molloy
09: John F. Kennedy Dunbrody Famine Ship: Sean Reidy
10: Carroll's Boatyard, Ballyhack: Josephine Carroll
11: County Wexford Tourism: Amy Whelan
12: Duncannon Cockle Festival Ltd.: Peter Murphy
13: W.O.R.D. LEADER II Programme: Yvonne Byrne
14: On Farm Computer Training Project, W.O.R.D. Project: Eileen Dake
15: Blue Chip Computer Training: Anna Kehoe
16: Wexford County Enterprise Board: Sean Mythen
17: Craanford Community Association : Anne Kavanagh
18: Bree Community Development Group: Josephine Byrne
19: Glasgorman Computer Services: John Timmons
20: St. Michael's Theatre, New Ross: Tomas Kavanagh

Belgium/Netherlands – Documentation on Objects Tested

The following projects have been surveyed in the Province of Limburg:

Opleiding Torenkraanmachinist (education for learning to drive cranes) – Goal of the project is: One specific firm re-oriented from renting out cranes without drivers to renting out cranes with a driver. The sector involved is Construction. The project results are: 45 participants to the courses. Project costs have been € 41,000.

Sociaal Bedrijvencentrum (social company center) – Goal Enlarging opportunities for employment minority groups, people with restraints, improving quality of life in backward neighbourhoods. The sector involved is Health and social work. The project results are 181 participants. Project costs have been € 1.086,945.

Uitbreiding buitenschoolse kinderopvang (enlarging possibilities for child care after school) – Goal of the project is reducing the need for extra child care facilities. The sector involved is health and social work. The project results are 5 full-time jobs. Project costs have been € 126,743.

Dienst voor Scheepvaart (service for navigation) – Goal of the project is the opening of grounds for manufacturing industry. The sector involved is manufacturing. The project results are 8 jobs (opening up the grounds, new industry not included). Project costs have been € 705,480.

Other projects are located in the City of Genk:

STEBO – Goal of the project is: Leading people from backward neighbourhoods to employment/shopfor employment. The sectors involved are Other community, social, personal services. The project results are 130 participants (guiding the people to jobs). Project costs have been € 50,000.

Alternatief – Goal of the project is: Personnel for hotels and restaurants are difficult to find, long term unemployed people are interested in this kind of jobs. The sector involved is Hotels and restaurants. The project results are 18 part-time jobs (9 full-time equivalents). Project costs have been € 111,000.

TOP – Goal of the project is letting people get acquainted with certain jobs/tasks in the metal industry. The sector involved is manufacturing. The project results are 15 full-time jobs. Project costs have been € 508,000.

Trajectbegeleider VDAB (guiding trajectories for VDAB) – Goal of the project is guiding groups with higher risks to employment. No specific sector is mentioned. Created jobs have been 3 persons who guides the people. Project costs have been € 40,500.

Within the Community of Maasmechelen and the City of Dendermonde the following projects have been observed:

Maasmechelen Village/Euroscoop – Goal of the project is reconversion after closing the mines in 1987. The sector involved are wholesale, trade and repair, hotels and restau-

rants, other community, social and personal services. About 300 jobs have been created. Project costs have been € 80.000,000.

Nabijheidsdienst voor Toerisme (taks related to tourism) – Goal of the project in the City of Dendermonde is seizing the opportunities that a strengthening of tourism offers. Sectors attached are also other community, social and personal services. 5 jobs have been created. Project costs have been € 210,000.

For the Netherlands 42 projects have been analysed. All of them are part of the local and regional labour market project database of the Dutch Ministry of Economic Affairs and Employment (source: www.ez.nl). Most of the projects have been carried out in the provinces of Noord-Brabant and Limburg and focus on the supply of intermediate technical skills. Success factors have been personal mediation and guidance for technical students, as well as a focus on the awareness of the practical use of technical skills.

Italy – Documentation on Objects Tested

Projects in the regions Lazio and Molise have been tested, especially in the provinces Frosinone and Latina of Lazio, and Campobasso in Molise. The following infra-structural and employment related projects in the Province of Frosinone have been tested:

P 49 78 Frosinone: Scope is to create road links in and among industrial zones in the limits of Frosinone

P 49 76 Anagni Fermentino: Asse viario di collegamento area industriale: Scope is to establish road links for industrial areas

P 49 77 Strada di collegamento tra S.S. 637 e S.S.156 primo lotto: Scope is to build an artery road to reduce traffic problems in the centre of Frosinone

P 49 79 Rete di Metanizzazione nell'area industriale: Scope is to create an operative building that distributes methane gas, extracted from a conduct at high pressure

P 49 83 Impianto di depurazione e rete fognaria dell'agglomerato industriale di Sora e Isola del Liri: Scope is to improve the infra-structure concerning the enterprises' zone

P 49 85 Rete viaria zona Schito – Agglomerato industriale di Sora: Scope is to build new roads, the enlargement of a road to make it up to standards and the building of a bridge

The above 6 infra-structural projects created 25 direct full-time jobs all together, and have reached their objectives. The main objective, common to all of them was, to improve the physical infra-structure. The sum of investment for the infra-structural projects amounted to 18.995,000 Euro.

Table 5.5 – Test projects in the province of Frosinone

Local project	Scope
P 49 06 Bruno office Activity – producing office furniture	to enlarge the business, by increasing productivity, by partly acquiring another land, purchasing new machinery
P 49 11 Cassino espurghi di Coletta – producing eco-products, like recycling,	to purchase/acquire land in the commune of Piedimonte S.G., the construction of a building, restructuring the office building, and purchase machines and equipment necessary for ecological services
P 49 23 Fantini Meccanica – mechanical productions	Increase productivity; to acquire industrial land in the commune of Anagni of 15,000 m²; The construction of an industrial office with a group of offices; and the purchase of machinery and equipment for the mechanical productions
P 49 44 Nuova CML – production of machines and equipment	to enlarge the business; the purchase of land; construction of 9 warehouses; and the purchase of tool machines and the related equipment
P 49 28 Grafiche Ponticelli – the company is concerned with editorial works, published news and the related services	to purchase and the restoration of an establishment; and the purchase of machinery and equipment required for editorial activity and typography
P 49 37 Le Marble di Sfavillante – producing marble works and fireplaces	to purchase land; to purchase machinery and equipment for both marble works and fireplaces
P 49 39 Manifatture Colici – producing semi-finished accessories for vehicles and their machines	the construction of an industrial establishment of 3,600 m², another building of 504 m², which includes offices, and services; the purchase of machinery and equipment for the production of the semi-finished goods for vehicles and their machines
P 49 40 Marangoni Tyre Spa – operating in the industrial sector of rubber, for the production of vehicle tyres	enlarge the business by purchasing a building and the purchase of machines
P 49 42 MICROME S – producing precise micromechanical components	to purchase machines in order to higher and diversify productivity
P 49 45 Open Data SRL– producing industrial machines for pricing and labelling products	to build up a labelling machine that produces prices in the dual value i.e. Italian Lira and Euro
P 49 56 SICART SRL – producing rolled paper for the industrial production of cartons	the restoration of one building and the purchase of machines and equipment for the production of rolled paper
P 49 70 Terme Pompeo – involved in the industry for health and wellness, specifically thermal baths	the realization of recreational-sports centre, the restructuring of the existing thermal pool, the construction of squash camps, and to improve the natural park in which the company operates
P 49 66 Sanitary & Sports Technology – operates in the sector of techno-sanitary and sports equipment	to enlarge the business space to accommodate the increasing productivity; and purchase other machines to match its supply with demand
P 49 38 Alberghiera Frosinone – built-up and the management of local restaurants, hotels, motels, touristic villages, bars and pizzerias	the construction of nine offices, and the acquisition of hotel furniture and for the other infra-structures
P 49 72 Venafro Marmi e Graniti Spa – involved in marble and stones works	becoming a Total-Solutions company i.e. offer complete service to clients
P49 73 Vitra Srl – production of glass	the enlargement of an industrial building and the purchase of machines and equipment
P 49 24 FELMAT Srl – textile industry	restructuring the industrial building of the company
P 49 12 COGET S.N.C. – construction and maintenance of roads and electricity	purchase new warehouse with offices, and new/additional machines

The most common objectives for the Frosinone projects were: to support small enterprises; support new entrepreneurs; support innovation; support high growth sectors; sufficient business areas; support local/regional products; a more effective use of labour potential; to stimulate ecological production; to stimulate the use of ecological product labels.

3 projects are located in the Province of Campobasso:

Table 5.6 – Test projects in the province of Campobasso

Local project	Scope
Terme di Sepino – thermal baths	to re-open a thermal bath and to install a new production line to bottle the thermal water
Esse Due – handcrafts industry, specialising in "stitching"	the restoration of the operative building that hosts this company
Fiumi Puliti	Giving work to drug addicts in rehabilitation: the work involves cleaning the rivers and lakes

Most common objectives for the Campobasso projects were: to improve the quality of life; increase local / regional competitiveness; improve local/regional attraction; support local/regional products; stimulate co-operation with education sector; stimulate training/education to be a labour condition; stimulate ecological production; develop one strategy/vision with labour market actors; create employment; support small enterprises

Furthermore, four pacts for the regions of Frosinone, Latina and Campobasso have been studied:

Regional Pact – Ita3 Patto territoriale dello svilluppo di Frosinone: Scope of the pact is to increase the economic development of the region, with a special focus on infrastructure and support to SMEs; creating employment indirectly. The pact also serves as mediation between 3 unions and the employers institutions.

- Jobs directly created – 600
- Number of total projects – 39
- Investment – 107.500,000 Euro

Regional Pact – Ita1 Latina Territorial Pact Area North: Scope of the pact is to improve the infra-structure: indirectly creating jobs; local development consistent with eco-sustainable development

Regional Pact – Ita1 Latina Territorial Pact Area sud: Scope of the pact is to improve the physical infra-structure; hence creating employment; local development compatible with eco-sustainable development. For North & South Latina together:

- Jobs directly created – 98
- Number of total projects – 23
- Investment – 38.600,000

Regional Pact – Ita4 Patto territorale per le occupazione mattese: Scope of the pact is to adopts a holistic approach towards local and regional development; not solely concerned with the development of 'depressed' areas and/or deficient economic sectors. Main objectives: improving the quality of life, on a general level : Promote an image of quality for the territory, especially concerning products, hospitality and standard of living. To create infra-structural interventions while developing the region. To increase the entrepreneurial rate of the area, to create employment.

- Jobs directly created – 600
- Number of total projects – 240
- Investment – 76.610,000

5.3 Results of the Empirical Work

The documentation of the empirical observations on employment initiatives above shows a variety of goals, sectors affected, results achieved and financial and organisational pre-conditions. Nonetheless, some basic empirical results have been derived. These are established on the analysis of pact documents, the survey of 17 labour market experts, and on the analysis of a general questionnaire common to all of the projects.

Demand structure and frequencies

The empirical analysis shows the weights that are given to specific issues of local employment promotion. This analysis has been based on the study of 75 pacts and on 106 projects within EmplocTool. All percentages relate to 1,105 nominations in pacts and 612 nominations in projects. It reveals that creation of employment and promotion of education are the two objectives with highest priority, they together account for more than 50 % in both surveys. The reduction of unemployment and inactivity account for 25 %, and improvements in the institutional framework of a region for about 10 %.

Table 5.7 – Priorities given to demands (level 1 demands)

Level 1 demand	Nominations in pacts (relative frequency, n=1,105)	Nominations in projects (relative frequency, n=612)	Priorities in projects (mean value, n=106)
Employment	34%	35%	28%
Unemployment	10%	17%	18%
Inactivity	17%	9%	8%
Institutions	11%	10%	9%
Education	20%	18%	26%
Other	7%	11%	10%

With regard to differences in this analysis, the unemployment objective is less frequently mentioned in the pact documents than it is in the concrete projects.

As explained in a previous chapter, the user of EmplocTool is lead through a 3 level hierarchical system of demands. This eases the selection procedure. In order to clarify the details behind these demands, a listing of these levels is are displayed. The following table displays the level 2 demands as well as their frequencies.

Table 5.8 – Priorities given to demands (level 2 demands)

Level 1 demand	Level 2 demand	Nominations in pacts (relative frequency, n=1,105)	Nominations in projects (relative frequency, n=612)
1. Employment	Create jobs (general)	11%	13%
	Create jobs (others)	4%	3%
	Support entrepreneurship	4%	2%
	Improve job quality	4%	2%
	Improve regional economic structure	7%	12%
	Employment (others)	3%	2%
2. Unemployment	Decrease unemployment (general)	7%	4%
	Decrease unemployment (specific group)	4%	12%
3. Inactivity	Higher participation (general)	7%	4%
	Higher participation (specific group)	10%	4%
	Stimulating measures to increase participation	0%	1%
4. Institutions	Employment pacts	8%	2%
	Education pacts	0%	1%
	Public services and political pacts	1%	1%
	Business pacts	1%	2%
	Institutional framework (characteristics) (others)	0%	1%
	Increase matching quality	0%	1%
	Develop monitor systems	0%	1%
	Support better management in firms	0%	1%
	Less bureaucracy, simple rules	0%	1%
	Institutions (others)	0%	1%
5. Education	Education system (adjust, improve, etc)	4%	5%
	Accommodate skill requirements/labour market demands	4%	5%
	Co-operation forms with respect to the education sector	0%	0%
	Training of people	12%	9%
6. Others	Equality	2%	1%
	Flexibility	1%	1%
	Mobility	0%	1%
	Financial issues (wages, social benefits)	1%	2%
	Infra-structure	2%	4%

The dominant project demands on level 2 are to create jobs (13 %), to improve the regional economic structure (12 %) and to decrease unemployment of a specific group (12 %). With respect to the pact study, also the higher participation of a specific group (10 %), the training of people (12 %) and the institutional framework of the pact itself (8 %) gains attention.

In order to clarify also the level 2 demands, a listing of the basic demands on level 3 and their frequencies is provided. The following table displays the important ones as described above. For other demands on level 3 we refer to the software tool.

Table 5.9 – Priorities given to demands on level 3, related to selected level 2 demands

Level 2 / level 3 demand	Nominations in pacts (relative frequency, n=1,105)	Nominations in projects (relative frequency, n=612)
Create jobs (general)		
Create employment	8.3%	6.9%
Preserve employment	0.9%	1.8%
Create sustainable employment	0.4%	2.1%
More work-experience projects	0.6%	0.2%
Higher proportion of working people	0.1%	0.7%
Accommodate labour demand	0.5%	0.5%
Identify new employment opportunities	0.6%	1.3%
Improve regional economic structure		
Attract new companies	0.4%	0.5%
Increase local/regional competitiveness	0.6%	2.9%
Improve economic sectoral structure	1.8%	1.8%
Invest in knowledge systems	0.1%	0.2%
Create good conditions for companies	0.2%	0.5%
Support high growth sectors	1.5%	1.5%
Sufficient business areas	0.1%	1.0%
Sufficient office space	0.1%	0.5%
Improve the supply of public services	0.7%	0.8%
Improve local/regional attraction	1.2%	0.7%
Support local/regional products	0.5%	1.6%
Decrease unemployment (specific group)		
Decrease long-term unemployment	1.0%	3.6%
Improve service to long-term unemployed people	0.3%	2.5%
Decrease unemployment of school leavers	0.0%	0.3%
Decrease unemployment of low-skilled people	1.4%	2.1%
Decrease unemployment of disabled people	0.2%	1.1%
Decrease unemployment of foreign people (immigrants)	0.1%	0.5%
Decrease unemployment of young people	0.5%	0.5%
Decrease unemployment of old people	0.3%	0.5%
Decrease unemployment of women	0.2%	1.0%
Higher participation (specific group)		
Increase participation of women	1.9%	1.1%
Increase participation of older people	2.3%	0.5%
Increase participation of foreign people (immigrants)	0.9%	0.3%
Improve school-employment transition	2.7%	0.3%
Increase age of retirement	0.0%	0.2%
Increase participation of disabled	0.7%	0.5%
Increase participation of low skilled people	0.7%	0.7%
Increase participation of young people	0.7%	0.8%

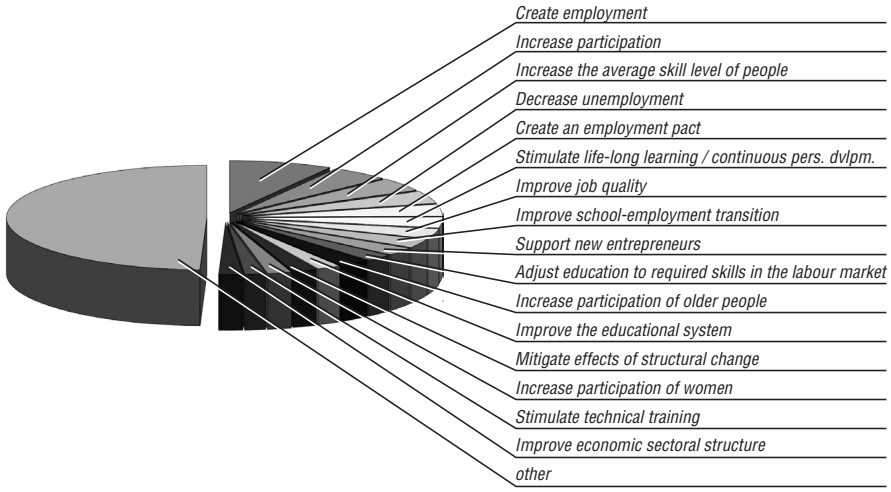
Employment pacts		
Create an employment pact	3.6%	0.3%
Create a clear employment pact structure	0.6%	0.3%
Implement (inter-)national employment policy in the region	0.7%	0.3%
Develop one strategy/vision with labour market actors	0.7%	0.3%
Support key processes in the region	1.1%	0.2%
Improve communication between the actors	1.4%	0.3%
Create bottom-up initiatives	0.0%	0.2%
Training of people		
Increase the average skill level of people	4.2%	1.1%
Stimulate life-long learning/continuous personal development	3.3%	0.2%
Increase the participation in education programs	1.3%	0.7%
Stimulate training of foreign people (immigrants)	0.2%	0.3%
Stimulate training of disabled people	0.5%	0.5%
Stimulate training of low skilled people	0.0%	1.6%
Stimulate training of older people	0.2%	0.2%
Stimulate training of women	0.1%	1.0%
Stimulate technical training	1.9%	2.1%
Avoid education drop-outs (school leave without diploma)	0.1%	1.0%

Analysis of pact documents

16 demands (out of 158) already account for 50 % of the frequency.

Goals and demands that have been essential to regional employment issues have been identified by analysis of 78 pact documents all over Europe. 158 demands and 315 fulfilments (=possibilities to quantify the realisation of a demand) have been derived by text analysis out of these documents. A frequency analysis shows that some of the demands are mentioned more often than others. In fact, 16 demands already account for over 50 % of the nominations, 46 demands account for 80 %.

Figure 5.2 (pie chart) – The most frequent demands, ranked with respect to the frequency they are mentioned in employment pact documents



The most important (frequent mentioned) demands are to create employment, to increase participation, and to increase the average skill level of people. In fact, employment projects today strongly focus on "*soft factors*" related to skills, qualification, education, training and knowledge. It is necessary to orient these factors to two divergent goals: towards the external requirements of the labour market as well as to the internal requirements of "life long learning". Increases in employment and decreases in unemployment may be regarded as an effect also of such immaterial inputs. Also "soft effects" as an improved job quality may be an outcome.

In some (more lagging behind) regions though, infra-structural projects like building streets have been encountered quite often. It has been argued that these *material* investments are necessary to promote basic economic development opportunities and therefore could keep the young generation in those regions.

> ***"Soft factors" are important demands in regional employment pacts as inputs (skills, education) as well as output (job satisfaction, continuous personal development).***
> ***"Organisational restructuring" is important to adapt to the new demands, e.g. employment pacts, harmonization of schooling – labour market***

On the other hand, also *organisational factors* become a crucial requirement. The creation of employment pacts, improvements of school-employment transitions and

the support of new entrepreneurs will certainly need a harmonized and effective institutional framework. New alliances and forms of co-operation shall be established in order to achieve these goals.

Expert surveys

Demands and fulfilments gained by pact document analysis have been the dimensions of the so-called QFD-matrix. This matrix reflects, to what degree a fulfilment contributes to a certain demand. For example, the demand "sustainable employment creation" may be measured by the number of fixed contract jobs created or by the number of jobs in emerging industries.

The EmplocTool partners established a list of up to ten fulfilment indicators per demand. 17 external experts (mostly university professors) all over Europe were asked to assign values to the inter-linkage of demands and fulfilments. Later on, the wording of some of the indicators had to be rephrased, and therefore the assignment had been reconsidered, again using results of the EmplocTool team and the external experts, but restricting the number of fulfilments to four instead of ten.

Field work in regions

Data has been gathered from 106 projects. A survey system has been developed, in order to gather information about the projects to be observed. The system consists of two parts:

- a general part with questions on the general project performance
- a specific part with questions concerning the specific goals of the projects, its priorities and performance concerning the indicators.

This field work has been supported by a software tool, allowing the data to be typed in directly. On average, about an hour has to be given to process the information found essential at this stage. It may very well be noticed, that some of the demands would make a more thorough analysis necessary (e.g. conducting a survey for measuring the improvement of "career perspectives"). Such in-depth analysis have not been encountered here, but the system of EmplocTool provides all necessary tools therefore, even the questionnaires and a description of possible target groups.

Project type

Concrete actions prevail.

89 projects are "local and concrete actions/projects", and only 3 objects relate to a "Measure (family of actions)" and 12 to a "Regional pact". The regional performance will be influenced by a mixture of all these 3 categories.

Project partners

Employment projects are normally based on a partnership approach, typically including about four formally assured partners.

Typically an employment project includes a formal partnership and not a single promoter. The median value of the number of partners is 4, but in some cases up to 107 formal partners were mentioned (this especially includes the case when municipalities are mentioned.)

Informal pact partners are seldom and mentioned only in 25 cases. In 18 cases the number of partners increased.

Satisfaction

Generally, the satisfaction with project performance is high.

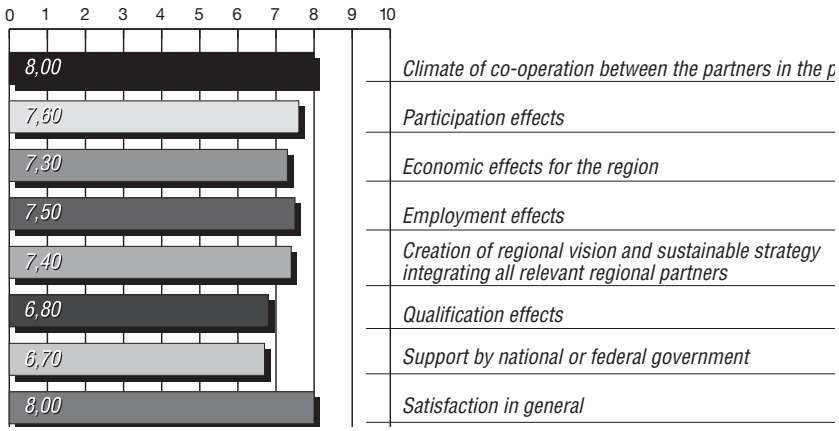
For all the indicators a satisfaction of more than 6 on a scale of 10 points has been reached. This means, that the respondents are most often satisfied with the projects.

In detail, the *climate of co-operation* between the partners in the project is best appreciated. The second best value goes to participation effects. Employment effects and the creation of a regional vision and a sustainable strategy integrating all relevant regional partners are also quite well captured. Some backlashes may be seen for

- economic effects
- qualification effects
- support by national or federal government.

They attain the least values concerning satisfaction. It may be argued that these areas should get some more focus in future development of employment policies and programming.

Figure 5.3 (bar chart) – Satisfaction of projects from the point of view of respondents



Acceptance

Educational institutions often are likely to accept all goals of a project – politicians are expected to be more critical.

Beside high internal acceptance, the external view towards the project could be improved. This is shown in the answers towards the question: "Which members of the employment pact are more likely to accept all the goals set by the project?".

Table 5.10 – Members of the employment pact more likely to accept all the goals set by the project (answers in percentage)

	no	yes	No answer
Educational institutions	22	63	15
Local government	28	57	15
Employers' organisations	31	54	15
Labour offices	39	46	15
Labour unions	52	33	15
Politicians belonging to the political majority	55	30	15
Politicians belonging to the political minority	67	18	15
others	71	14	15

Organisations taking part in the regional pact are expected to accept the goals of the project, whereas the political acceptance sometimes is not very sure (only 14–18 % preferences assigned). It may be concluded, that the political integration of employment issues is a very important future topic, in that more effort should be placed on this.

Incomes

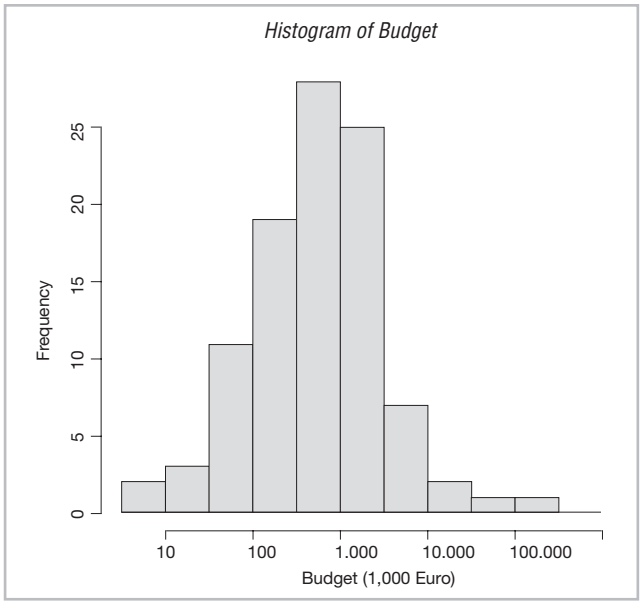
The projects diverge very much with respect to the sources of their incomes.

Projects use a broad variety of sources. Large amounts stem from national and regional governments, and most often job seeker, pact members and the project itself generate some incomes. The European Union directly covers only 5 to 15 % of the incomes.

Project budgets

Observed project budgets lie in the range of 6,800 Euro up to 80 million Euro. A typical project would have the median budget of 604,000 Euro. Half of the projects' budgets is higher than 125,300 Euro (quartile value) and lower than 1.756 million Euro. Seven projects did not document any budget. The distribution of budgets is log-normal, meaning that costly projects are rare.

Figure 5.4 (histogram) – Frequency distribution of the budgets



The histogram gives the frequency distribution of the budgets. The logarithmic scale indicates the budgets of the projects, the number 100.000 on the horizontal axis e.g. means a project with a budget of 10.000,000 Euro up to 100.000,000 Euro budget. There was only one "project" falling into this category.

The EmplocTool software allows for differentiation of expenses concerning administration, R&D, creation of labour market structures, qualification, and financial support for job seeker, employees, trainees and employers. Most often, project costs have not been classified within the empirical survey. On average, administration rates about 20 % of total costs.

5.4 Evaluation of Relevance of Tool – QFD Ranking

This chapter documents the empirical results of the QFD analysis conducted for 106 projects/pacts in six European countries. There have been basic observations on each project, e.g. the budget, the demands (goals) linked to that project, and the indicator values, describing the fitting of projects to different fulfilments. The budgets, goal

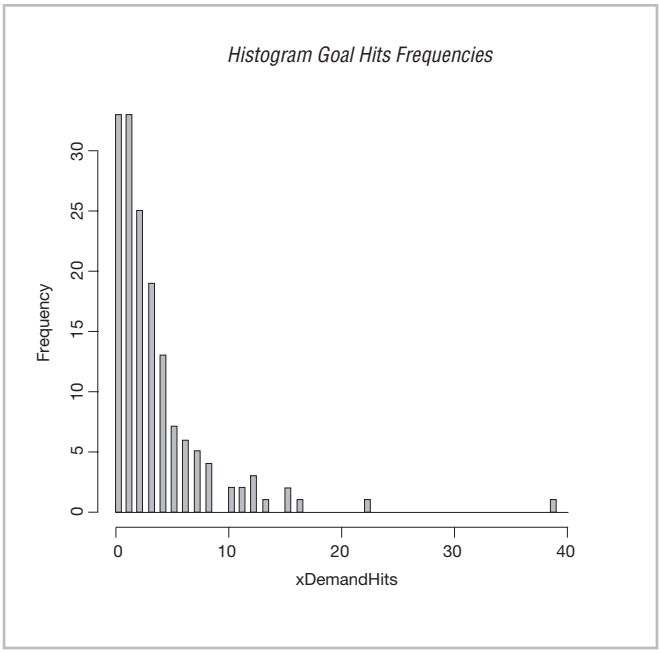
priorities and fulfilment values build the input to the QFD-analysis. The outcome is a ranking of projects, a profile of technical features for each project and the amount it meets the demands. Especially the latter values are relevant to understand why a project ranks better than another and what could best be improved to reach the most enhancing effect on the projects' success.

Demand Frequencies of Projects

The analysis shows, that in total, the projects should meet a broad variety of demands due to the answers of the respondents. EmplocTool supplies 158 demands (goals), and only 33 of them have not been chosen by any respondent. This fact again confirms the complexity of employment issues and the variety of regional issues and project goals. It is therefore relevant to keep the variety of goals that EmplocTool provides.

One single goal ("creating jobs") has been chosen 39 times, "Decrease long-term unemployment" has been chosen 22 times, and others like "Preserve employment", "Create sustainable employment", "Increase local / regional competitiveness", "Improve economic sectoral structure" have been mentioned ten times and more.

Figure 5.5 (histogram) – Frequency distribution of goals



Fulfilment Indicators

Each demand has been monitored by at least one and maximum four indicators (fulfilments). The QFD-matrix relates the fulfilments to the demands. EmplocTool provided 315 possible fulfilments, but the respondents have used only 212. 102 out of them have been used only for one, two or three projects. 38 indicators may be regarded as very important, as they apply to 10 or even more (up to 40) projects. From that it can be reasoned, that the number of indicators could be reduced by at least one third.

The table shows the most often applied indicators. It further documents their frequencies as well as their absolute and relative accumulated frequencies. 96 indicators account for 80 % of nominations, the above listed 38 indicators already for 51 % of nominations. By this it may be concluded that the number of indicators may further be reduced to a more manageable amount, without loosing too much of acceptance with regard to the employment projects' needs.

Table 5.11 – Frequency of indicators in projects' evaluation

Indicator	Frequency absolute	Frequency absolute accumulated	Frequency relative accumulated
Number of jobs	40	40	3.1 %
Gross participation rate	37	77	6.0 %
Number of job openings	36	113	8.8 %
Percentage of vacancies	36	149	11.6 %
Number of high skilled jobs	23	172	13.4 %
Long term unemployment rate	21	193	15.0 %
Business centres (also for starters) (y/n)	21	214	16.7 %
Level of long term unemployment	20	234	18.2 %
Number of jobs (by sector, NACE)	19	253	19.7 %
Quality of business areas	19	272	21.2 %
Number of firms co-operating with education sector (%)	19	291	22.7 %
Available business areas (ha)	18	309	24.1 %
Personal coach for reintegration (y/n)	17	326	25.4 %
Participation of low skilled people in education (%)	17	343	26.7 %
Educational attainment of long term unemployed people	16	359	28.0 %
Possibility to train unemployed (y/n)	16	375	29.2 %
Sufficient transport facilities (y/n)	16	391	30.5 %
Participation in training in new technologies (%)	16	407	31.7 %
Co-operative projects for training and work experience (y/n)	16	423	33.0 %
Promotion of local/regional projects (y/n)	16	439	34.2 %
Positive perception of infra-structural opening up (y/n)	16	455	35.5 %
Average duration of unemployment	14	469	36.6 %
Economic structure (by sector, NACE)	14	483	37.6 %
Investment bank for regional development (y/n)	14	497	38.7 %
Co-operation between business and education (y/n)	14	511	39.8 %
Unemployment rate for low skilled people	13	524	40.8 %
Number of „transit" jobs (%)	13	537	41.9 %
Sector approach to solve bottlenecks (y/n)	13	550	42.9 %
Unemployment rate	12	562	43.8 %
Participation in life-long learning (%)	12	574	44.7 %
Number of participating companies in employment pact	12	586	45.7 %
Good career perspectives (y/n)	11	597	46.5 %
Participation in education (%)	11	608	47.4 %
Share of co-operative companies with labour office (%)	11	619	48.2 %
Number of fixed contract jobs	10	629	49.0 %
Sufficient capital for investments (y/n)	10	639	49.8 %
Participation in apprenticeship courses / dual education	10	649	50.6 %
Bottom-up approach (y/n)	10	659	51.4 %

Layers of Indicators

The indicators have been surveyed on a 3-layer system. Layer 1, *the fact layer*, has been accessed 321 times (out of 1.278 entries), layer 2 (*the questionnaire*) has been addressed 878 times, and layer 3, *the subjective rating* by the recipient on a scale between 1 and 100, has been applied 79 times.

In order to get the indicators comparable to each other as well as to the layers, a scaling procedure must be applied. The basic rationale is: Projects are compared to each other and categorized into three groups with best, medium and worst performance. This is done for each indicator and for each layer. The result will be a "rating matrix", assigning fulfilment values of 1, 2 or 3 (for the best) to projects. For each indicator, there will be a similar number of projects falling into the categories of 1, 2 and 3. This notion has to be considered as being based totally on the empirical data.

In praxis, there are some difficulties to overcome. First, if there are not more than three projects with different values, it will not be possible to set up the three categories and to classify the projects. The more projects are evaluated, the better the categories may be chosen. If only a few categories are missing, projects could be searched, that especially address the correspondent demands.

With the empirical analysis of the surveyed projects EmplocTool thus managed to establish a classification of 31 indicators on layer 1 and 9 indicators on layer 3.

Scaling of Indicators

Furthermore, a standardisation has to be chosen. A project creating twenty jobs might look better than a project creating ten, but if the amount of budget spent has been four times higher in the former case, the latter project could be preferred. The idea of efficiency considers not only the outcome of a project, but also the inputs in terms of costs. The standardisation procedure applies different methods to different layers.

Layer 1: There has been a discussion, if the straightforward ratio of effect and cost creates a feasible indicator. Other procedures like the so-called borderline-efficiency have been encountered (see Clijsters, presentation to the QFDI conference, Orlando, USA, 2003). These procedures incorporate, that small projects may have a larger overhead due to administration cost, and – on the other hand – that large projects often not reach a reasonable surplus effect in comparison with medium or even small ones. One of the reasons may be dis-economies of scale and bureaucracy, another may be saturation: to find a job for the last long-term unemployed will cost more than to start-up a project in a region, where nothing has been done so far.

On the other hand, such a preference to large projects would impose other assumptions, and the argumentation becomes less transparent. It would be difficult to explain, why an expensive project creating 101 jobs should be praised with the same efficiency

as a cheap project producing 100 jobs, when these projects are best within their budget class.

Therefore, the straightforward method of a ratio between outcome and input has been applied here upon layer 1 indicators, not anticipating that an advanced measurement procedure could be developed and incorporated within a next stage.

A test has been performed to compare two efficiency concept: (a) the efficiency gained by dividing effects by total budgets, and (b) the efficiencies gained by dividing effects by partial budgets. These partial budgets have been considered by dividing the total budgets with respect to the priorities assigned to the goals. Partial budgets assignments to the fulfilments yield higher and more realistic efficiency value for projects that attach a variety of goals. The calculation of efficiencies with partial budgets should therefore be preferred.

The following table of contingencies relates these efficiencies to each other. The table shows, that only a few assignments (43) yielded differences, whereas 231 assignments (the diagonal in the table) remain in the same category.

Table 5.12 – Contingency table of efficiencies – number of projects within efficiency category 1, 2 and 3. Categories are established in relation to total budgets and partial budgets

	Partial budget efficiency 1	Partial budget efficiency 2	Partial budget efficiency 3	sum
Total budget efficiency 1	137	5	1	143
Total budget efficiency 2	12	37	9	58
Total budget efficiency 3	5	11	57	73
sum	154	53	67	274

For layer 2, the classification will depend on a sufficient quantity of survey responses. At the state of the art, such surveys have only been applied in a few cases, and layer 2 has been used most often to impose a single answer of the respondent.

In 332 cases a number 3 (answer "Yes, definitely") has been given, in 286 cases a number 2 (answer "Yes, in part") has been given, in only 45 cases a number 1 (answer "No, not at all") has been given. 190 times no answer was assigned. There have been three cases of "in-between" answers, two of them rating between 2 and 3 and one rating between 1 and 2 – they were the only ones where a survey has been applied.

The layer 3 question formulation directly links to the performance of a "best practise project". Therefore, no further standardisation has to be applied, and the procedure to find three groups with best, medium and worst performance is feasible here also.

Nine indicators have been classified on layer 3, as there has been a sufficient number of observations to do so.

For the other layer 3 indicators these results have been further processed to get here at least a first estimate to a useful calculation. Out of all data for layer 3 the classification thresholds are calculated as: 26 for the 33.3 % quantile, and 75 for the 66.7 %-quantile. That means, that projects rating less than 26 will have worst performance (with respect to all other projects), and projects rating between 26 and less than 75 will have medium performance. Projects with performance 75 and higher belong to the premium class.

Combining the results of all 3 layers we find 417 ratings in category 3 (best category), 357 in category 2 (medium rating) and 245 ratings in category 1 (worst rating). It may be critical that best category assignments were created by layer-2 questions. On the other hand, layer 2 has been chosen most often, so that a high impact of answers on this layer is probable.

Table 5.13 – Layers versus Ratings

	Rating 1	Rating 2	Rating 3	Total
Layer-1	154	53	67	274
Layer-2	46	288	332	666
Layer-3	45	16	18	79
Total	245	357	417	1,019

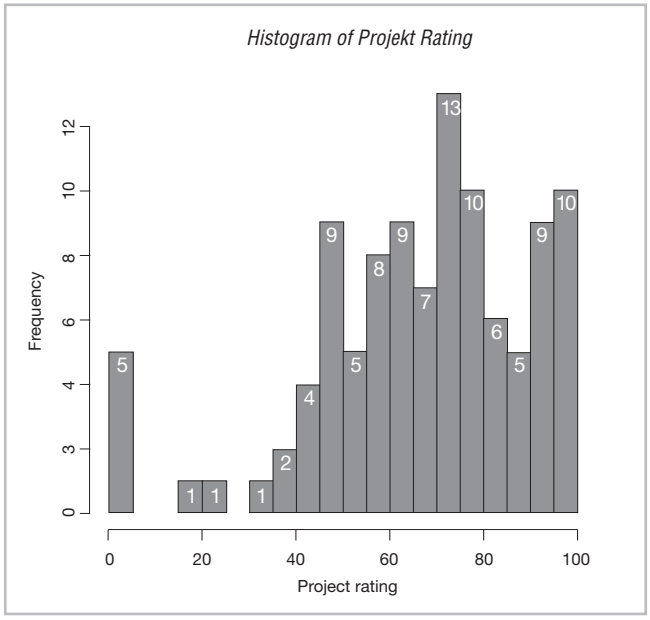
Final rating of the EmplocTool projects

EmplocTool achieved ratings of the projects, due to the empirical analysis and the QFD system. This may be considered as one of the final results, whereas the ability to improve the projects by comparison (which is supported by the software) will be another, for practical reasons maybe even more important result. Within this publication we confine ourselves to the "final rating", the Q-score that has been calculated by EmplocTool for the projects surveyed. It should also be considered that such a rating is a first step: the benchmarking benefits increase with the number of projects observed, and the same applies to the accuracy of the data.

The ratings project by fulfilment already gives an insight into the technical performance of the projects due to "indicators". Another relevant perspective comes from the demand side. Therefore the ratings will be combined and weighted by the QFD coefficients. These calculations have been performed and are documented below.

Low ratings (below values of 30) occur because of lack of comparable data, due to the testing phase of EmplocTool. About ten projects are affected in their performance values by these data availability problems. They are left out of the further discussion.

Figure 5.6 (histogram) – EmplocTool Project ratings



The following table shows some of the ranked projects, especially those best ranked projects of the testing phase of EmplocTool. All countries yielded good and even very good projects with values of 60 and higher. A more thorough look upon the deviations of a single project from the best practice performance gives insight into chances to improve projects.

For some of the observed objects it can be argued that results and experiences match: the best ranking project for Austria (Project number 66) is a well-known project with a lot of favourable features. Other EmplocTool values need a further explanation, e.g. some of the Netherlands projects yield very high values, whereas German projects rate lower. This will be a topic of further and in-detail reasoning, which exceeds the limits of this publication.

Table 5.14 – Selected best-ranked employment initiatives (all type "local and concrete action / project")

No.	ranking	name	location	state
15	100.00	NL002 EZ063 Techniek in de lift	Overijssel	NL
37	98.96	NL024 EZ203 Schoevers Allochtonen Administratie Project	Maastricht	NL
32	91.87	NL019 EZ190 Leren en presteren is mensenwerk	Noord-Brabant	NL
7	93.54	P49 76 Asse viario di collegamento area industriale	Provincia di Frosinone, Comune di Ferentino	IT
9	93.54	P49 83 Impianto di depurazione e rete fognaria	Provincia di Frosinone, Comune Sora-Isola del Liri	IT
8	93.18	P49 79 Rete di Metanizzazione	Provincia di Frosinone, Comune di Ferentino	IT
77	80.38	JFK Dunbrody Famine Ship	South West Wexford	IE
76	78.08	Duncannon Fort Trust Co. Ltd.	South West Wexford	IE
82	61.03	St. Louis Day Care Centre Ramsgrange	South West Wexford	IE
93	72.48	TOP	Zonhoven	BE
100	57.93	Alternatief	Genk	BE
98	55.83	Maasmechelen Village-Euroscoop	Maasmechelen	BE
66	92.83	Implacement Behinderte	Upper Austria (Oberösterreich)	AT
57	85.12	Arbeitsinitiative Regio Bodensee ARB 2000	District of Feldkirch, Austria	AT
59	76.59	Arbeitsinitiative Regio Bodensee ARB 2002	District of Feldkirch, Austria	AT
70	72.55	Arbeiten und Lernen	Vienna	AT

Chapter 6 Benefits for Users

The development of an evaluation tool for managers to evaluate projects and employment pacts has enormous benefits in terms of measuring the impact of strategic plans.

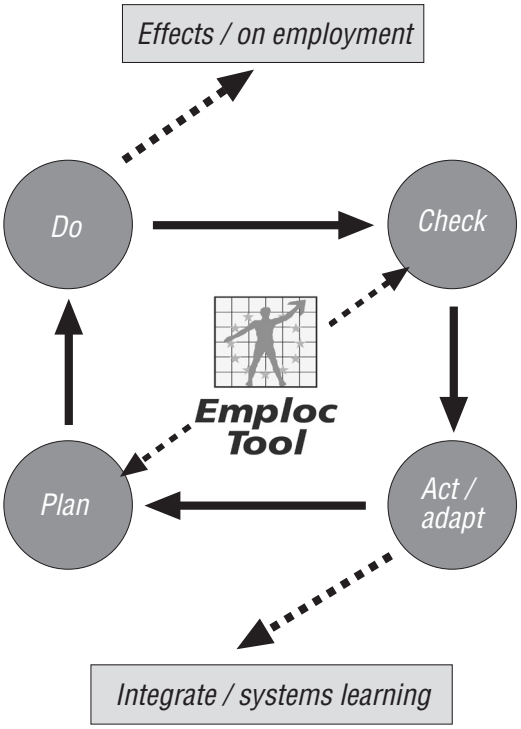
The evaluation tool comprises of the following:-

- Software tool available via the internet or CD.
- Manual with user instructions
- Website
- Data base of projects which have evaluated their projects on the software
- Quality and economic scores for projects / employment pacts so that the impact of a project can be measured and bench marked.

To date, within Europe traditionally little attention has been paid to monitoring and evaluation. The EmplocTool project aims to address this issue by providing a tool for users to monitor and evaluate their plans.

Users may thus want to apply EmplocTool to different phases of their work. Work processes generally will have to follow the four steps: Planning – Doing – Check – Adapt (PDCA-cycle, Deming Cycle). The PDCA cycle is already applied in management of local development (KDZ 2003). The planning phase will define the work contents, the schedule, the capacities and budgets with respect to the objectives to be reached. The Do phase focuses on execution of the project. It will deliver results and impacts, and – for controlling purposes – information and reports on work progress and outputs. The Check phase will analyse results and impacts, and will detect deviations in contents, in milestones as well as in resources. As a consequence, the work plan will be revised (Act / adapt – phase) and corrective actions will be taken. These actions not only will effect the project itself but also yield information on a more general level, i.e. a revision of goals and measures.

Diagram 6.1 – EmplocTool within the work plan of a user



With respect to employment projects, EmplocTool fits into two of these four phases: the Planning and the Checking. EmplocTool would provide promoters of an initiative with information on the expected outcome of that project and thus help him to consider improvements in a very early stage of the project. EmplocTool would provide promoters also with a set of objectives and broaden the range of considerations on the outcome. These benefits also apply to the sponsors and decision makers at administrative levels. With EmplocTool they could decide ex ante, whether a project fits into their objectives, and what alternatives there are.

EmplocTool can also be used in the Analysis phase ("Check"). In this phase EmplocTool will be used ex post. Materials, documents and reports are available that allow results, outcomes and impacts of a project to be assessed. They would feed the EmplocTool system and yield indices and benchmarks for that project. Either they might be used in order to take corrective actions for a single project with respect to its goals, or to improve the project by learning from good practice from other projects. In a comprehensive way, the outcomes of EmplocTool evaluations could also be used to reconsider the development direction of a commune or a region in a more holistic

manner. It could e.g. be detected that within a region some objectives are not fulfilled by any project, or – on the other hand – that other projects work redundantly on similar objectives, without making use of synergies. These results could promote a "systems learning" and a better integration of the projects into the local institutional structures and resources.

The benefits of EmplocTool can be split up into a number of headings as detailed below:

6.1 Database

It was felt if the aims/goals of a group are available and easily accessible on a database, that this will prove very useful for groups who are considering doing a similar project to one of those on the database. It will allow them to learn from other projects and best practice models and give them the opportunity to compare goals in similar projects.

This provides a powerful motivation for encouraging managers to complete the software programme as their results can be compared to other projects within Europe. This information can also be used by Managers to argue the benefits of their project / employment plan to funding agencies and partners which they hope to involve in their initiative.

The data base also incorporates contact details for each of the projects and this fosters co-operation between EU Member States and supports the development of joint initiatives.

6.2 Development of an EU Standard Evaluation Tool

During the testing phases some of the respondents were concerned with having to do more paperwork on top of their existing monitoring and evaluation documents linked to grants and government contracts. However, if EmplocTool was introduced as an EU "standard", that replaced all existing evaluation documents, this would be enormously useful for groups.

It would also be very useful for government agencies as they would have a standard template which they could use for evaluation purposes and which they could use to compare projects / employment pacts.

In order for this software to become the standardised tool, considerable efforts will need to be made in marketing the tool. This may include liaisons with Government Departments to get them to incorporate the tool as part of an evaluation procedure, linked to the implementation of programmes and grants. We believe the key to the tool becoming useful, is that it becomes the "standardised" document across the EU for comparisons of employment plans and provides value for money.

This would also benefit the new candidate countries because they could access a 'standardised' software tool which would enable them to compare and benchmark their projects with the global economy to obtain a holistic view.

If it is to become a "standardised" evaluation document, Government bodies could insert other questions that they require information on. Care needs to be taken not to increase the length of the survey too significantly.

6.3 Website

Early in 2003, the EmplocTool website was launched (www.EmplocTool.com) and project partners also informed public media about the project. Throughout the course of the EmplocTool programme all partners were requested to submit recordings of promotional material produced on the programme, photographs and any other information available.

The website serves as a useful tool to the user of the EmplocTool software as it enables them to obtain background information on the project.

6.4 Quality Score

The software tool provides a quality score to the user. This enables the user to evaluate their project against other projects as well as to detect factors to improve their project.

6.5 Economic Score

The software tool provides an economic score for the user, which is based on an input / output model. This allows the user to analyse the overall impact of their project on a region in terms of economic output and / or employment effects.

6.6 Tested in Six EU Countries – Reference Tool for Users

The software programme was tested in six European countries. This work comprised of expert interviews; comparison and analysis of employment projects and pacts; examination of demands and fulfilments; user friendliness of the software and value of the software to the user. The results from all of this work were then drawn together into the final EmplocTool software.

This should provide a relevant and reliable evaluation tool for all users because of the number of member states experience that was drawn on.

6.7 Tool for Government Agencies

The EmplocTool software can be used as a useful tool for Government Agencies in evaluating value for money. It also provides a standardised tool which allows for quick comparisons between projects.

6.8 Aids Transnational Links

With the transnational links which can be established through the database it supports co-operation and communication between member states.

It also supports the sharing of best practice and the opportunity to learn from other employment plans and their aims / goals.

Chapter 7 Potential Further Development of the Tool

Sustainability is defined as, effects lasting into the long term and after the end of a programme. For EmplocTool such a long term strategy is supported by the individuals that have set up the operation. Their view towards a potential further development of the tool is a source of information essential for strategic planning.

7.1 Point of View of Programmers

Now that we have reached the development of a first version of EmplocTool, there is scope for further development of EmplocTool from a programmer's view. Almost all recommendations for further development relate to one single characteristic of the current version of the software: EmplocTool is a *stand-alone program* without reference to any network.

Automated Updating System

Crucial in this respect is the lack of an automated updating system to feed EmplocTool with results coming from new projects. A central database structure, preferably based on an internet application, should be a focus in the further development of EmplocTool. To some extent, provisions have been made for an internet based application, such as activating a website for EmplocTool (www.EmplocTool.com), but the software itself is not suited for use on the internet. Besides, such an internet based system would not be feasible right now due to a limited data flow capacity on the server on which the EmplocTool software has been installed.

In the upcoming period, a better alternative would be to establish a continuous updating mechanism providing users with the most recent version of a database. The user may then be able to download the updated database from the website, which requires a smaller amount of data transfers. Such a system would also require a fair communication system with the users of EmplocTool. We refer here to the system applied by the Dutch Ministry of Employment and Social Affairs, as discussed earlier in chapter 2.

Search Engine

Most of the recommendations for further development relate to this issue of non-communication. For example, extending the software with a search function implies

the availability of a database. Effective searching the database requires the inclusion of as much employment projects as possible, see the arguments presented earlier. The lack of a search engine in EmplocTool cannot be compensated by the current facility in EmplocTool to list projects and make selection: this facility is not interactive at this moment. Projects act as single islands in the ocean of European employment projects, whereas the next logical step to be made refers to the combination of information from these projects.

A same type of argument would hold for a benchmark function: the need for communication is quite high in this respect. But in this case, another technical detail need to be elaborated, i.e. the development of an automated updating system for indicators ranges. At this moment, we incorporate indicator ranges obtained from projects that have been analysed in the first test stage of EmplocTool. Indicator ranges determine whether the results of an employment project with respect to a specific indicator qualify as "good", "medium" or "bad". These ranges are extremely important in the course of evaluation of projects in EmplocTool: they make up an important part of the quality scores presented in the software.

The inclusion of many employment projects in the database reveal new best practices, as they alter efficiency curves of indicators in our framework (for an explanation, see Clijster et al., 2003). Procedures for how to deal with these incremental improvements to the EmplocTool technical framework have not been developed yet. There's an intrinsic danger in the current use of EmplocTool to stand still and not develop these issues in the future. Suppose another 100 employment projects were to be evaluated in the course of 2004 by EmplocTool, then they should add information on top of the ranges we have obtained from the first 106 projects evaluated in order to provide sound quality results.

Dynamics of Employment Developments and Policies

This brings us to the dynamic aspects of EmplocTool. The QFD framework has been designed on the basis of goals and indicators obtained from more than 70 employment reports in 6 different countries (Italy, Austria, Germany, Netherlands, Belgium and Ireland). The nature of problems in the labour market changes over time, simultaneously making (some) existing problems obsolete and creating new types of problems. This has an effect on the proper use of the QFD framework in EmplocTool, since the QFD matrix relates goals and indicators that are defined on beforehand.

Therefore, not all the goals in the QFD framework will remain relevant for the analysis of contemporary labour market problems at the regional or local level, whereas some new problems will emerge that are not part of the framework yet. The same reasoning holds for indicators, especially as some institutional indicators change in nature due to

new organisational structures in the labour market. Who can tell whether the concept of employment pacts remain relevant in the next 10 years? Even more complicated becomes the story when we look at the contents of the QFD matrix. Measurement and evaluation possibilities may change over time as well, which may change the coefficients in the QFD matrix themselves.

From the programmer's perspective, an updating mechanism accounting for these dynamics will be necessary in the near future to ensure the validity of the qualitative and economical evaluations in EmplocTool. Such an updating mechanism should build on published employment reports from all over the European Union, not only from the six countries mentioned. Furthermore, one of the questions raised from this perspective concerns the type of updating mechanism: automated by means of additional, freely accessible software for the users themselves, or isolated from the users and within the programming environment of the EmplocTool software?

Translation Issues

The lack of communication possibilities in the current stand-alone version of the software avoids one major problem that still has to be tackled: the translation issue. During the testing, it turned out that the availability of the software in the own language is an important determinant of the success of EmplocTool in different countries. In the course of events in the testing stage, two major translation exercises have been done in order to provide local pact managers and other potential users of EmplocTool with (provisional) software in their own language.

Apart from an English version, we constructed a German/Austrian version and a Dutch/Flemish version of EmplocTool. In Germany and Austria, we knew on beforehand that local people wanted to work with a version in their own language, in Belgium and the Netherlands we noticed that an own language version encouraged the use of the software. Furthermore, as could be concluded from comparing the Dutch with the Flemish case, it turned out that there's no one-to-one translation of labour market terminology due to the nationally created "own language" of people involved in employment projects. Once users recognize this very own terminology, they are encouraged to use the software.

A first conclusion should therefore be that EmplocTool should be distributed on national markets, translated in the national language using the very own national terminology. But there's more. Once we allow users to work with a version of the software which has been translated in their own language, we also allow them to answer in their own language. So far, we have been comparing different project results from different countries in a pure quantitative manner. We can do so, because we have organized goals, preferences and indicators in a systematic and uniform way.

However, we did not evaluate the projects in a qualitative manner, meaning that we look at the individual answers in the different files. Normally, a user is not capable of evaluating different projects from different countries himself, unless he has knowledge of the different languages in which the results or descriptions of these projects are put. From the perspective of the programmer, it is hardly possible to provide full translations of the texts entered in the software unless we incorporate advanced translation software into EmplocTool.

Make the Software Accessible to More Users

Some minor advances can be made to make the software accessible to more users in the EU. First, the software has now been developed for a screen resolution of 1024x768, the usual resolution on computers that have Windows XP installed. Adapting the software to other resolutions is possible, but calls for additional techniques to adjust the different screens designed for EmplocTool.

Second, the EmplocTool software will be distributed by means of one major CAB file and its corresponding setup program. The size of the CAB file already amounts to approximately 3MB, indicating the problem for users that have no access to broadband internet communications. We have faced this problem already within the EmplocTool partnership.

Third, from an ergonomic perspective, the interface can use some uplifting. The choice of windows to be opened and closed in specific situations while using the software is logical, but sometimes confusing or unhandy. Especially the situation in which specific windows (such as goals or indicators) are opened for different projects, updating of other windows (such as the list of projects) may fail and errors may emerge. The latter point is the last comment made here. This software tool has been developed within one year by one programmer. One of the most appealing developments for upgrading EmplocTool would be to discover where run time errors emerge and to solve for them. This may be a time consuming, but worthwhile activity.

7.2 Point of View of Scientists

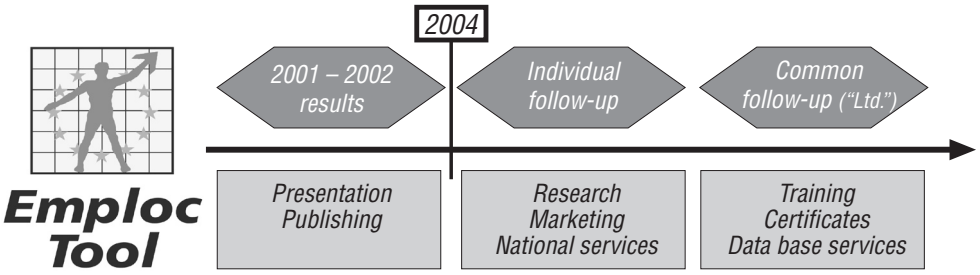
Once established, the EmplocTool evaluation and benchmarking tool is applicable to different regions all over Europe. The vision could be to develop EmplocTool as a standard evaluation tool for European employment projects.

The core process of EmploctTool has been elaborated. Its basic elements consist of demands concerning regional employment issues. The indicators attached to them, a

database capable of comparing, and a software tool supporting data collection and evaluation. A unique feature is especially the European project database and the chance to relate national projects to other countries with different political structures and objectives.

Applying EmplocTool solely on a national base would remove one of it's most striking advantages. On the other hand, the national level could efficiently support dissemination and a broader and much more intense application. A more solid database would be only one of the results. These initiatives would make the most sense, if a *central contact point* would guarantee continuity of developments and a steady increase in best practice knowledge.

Figure 7.1 – Future of EmplocTool



A continued cooperation of the consortium as a whole or parts of it therefore could create further market opportunities, either in R&D or in product/service development or marketing. Multidisciplinary approach and team experience should help the partners develop a long-term common presentation and market position and also strengthen their common competitiveness in assessing employment strategies.

Potential for further development has been identified as follows. Different types of actors, governments and administration, social partners, public employment services, NGOs and others, will implement the developed methods on regional, national and European level.

Presentation and Publishing

The benefits of EmplocTool should be presented and brought into discussion for practitioners, politicians and scientists. Different medias, books, papers, web-sites, mailings, conference speeches, seminars can be used to reach the target audience. This activity fits well into the European strategy to disseminate results to a wider public. On the other

hand project partners (and potential future partners) may be invited to contribute to this strategy, also on a national level.

Training Schedule

Training is required for those involved in employment organisations and projects. An idea would be to develop a training school to disseminate EmplocTool: to teach how EmplocTool functions, its application, and its benefits; using the tool to solve practical issues; interpretation of results; an aid for decision-making at management and executive levels; training of different geographical areas i.e. taking into consideration the context of the project/pact when analysing it.

For follow-up, it is intended to develop a training schedule for local, regional and national actors by assessing, evaluating and comparing already existing Best Practice Models. First contacts for such a project have been built in the area of Frosinone, Italy, in the course of EmplocTool.

This training schedule will enable the various actors to learn from successful models, take initiative within their area of responsibility and adjust the framework conditions to secure and to create jobs

New Candidate Countries

EmplocTool has shown some significant differences between developed and less developed regions: infra-structural investment being a prerequisite also to sound employment policies, gained attention in regions lagging behind. Similar effects are to be expected even more often in New Candidate Countries. A strategy to prove this would help apply EmplocTool within the new candidate countries; to support transnational projects; comparing and benchmarking with the global economy to obtain a holistic view.

Cost-efficiency Model and Other Scientific Improvements

As it has been shown in the results of the test phase, the empirical basis of EmplocTool provides, is sufficient for a start-up. But for some of the more detailed indicators, especially concerning financial issues, a more extended data would enhance the precision of the results as well as improve the validity and reliability of the quality score. The practical definition of "cost efficiency" would require an extension of the database, which implies that a link should be established between the projects and their geographical sectors. Similarly, it is relevant to quote projects in relation to their specific industrial sectors. Cost-consciousness will be an important issue in the future.

Adaptations to the Software

EmplocTool software already provides tools for individual project evaluation, data entry, benchmarking and applying the database. Help functions and a manual are supplied as well. A customer-oriented approach would make further smaller improvements necessary. An internet version would be useful as it will allow to entry of individual project data and access an evaluation result. Data entries via the web should automatically flow into the EmplocTool database, but they must be tested for reliability in order to protect the data pool from junk entries.

Marketing EmplocTool

One of the most urgent issues for exhausting EmplocTool's further development potential is the setting up and realisation of a marketing strategy. A well-defined marketing strategy includes communication, distribution, product and price policies.

Three target markets have been identified:

- EU-market on an institutional level, including Ministries of Member States
- Regional market, including regional authorities
- Local partners

Potential customers will have to be identified: national/federal governments, regional governments, local councils, ministries, employment organisations, employment agencies, labour unions, etc. There is also a need to establish types of business relationship: business-to-business, business-to-government, business-to-individual customers.

Such agreements should also apply to the EmplocTool project developers itself, including the definition of roles, contributions and an action plan. In order to communicate the product correctly, competitors should be identified and a SWOT analysis carried out. At the beginning, EmplocTool will be categorised as a service and not as a product. The EmplocTool customer-care service will offer different packages to different customers that suit the customers' unique needs.

Networking

A further long-term goal is the creation of synergies and win-win situations with other sectors that are relevant for employment (like economy, culture, environment, etc.). Being a partner in some network could help to promote most of the targets mentioned above. Links could be established to regions and municipal networks, to labour unions, to NGOs promoting education and training, sustainability and environmental protection. Other partnerships could be established to science (economics, statistics) and software enterprises. EmplocTool could be distributed by a franchising system established with strategic partners.

EmplocTool Employment Partners

Employment projects could become partners of EmplocTool. They will benefit by using the software for their own purpose. A benefit for EmplocTool would consist of a data back force, possibly fees for licences and potential further consulting.

EmplocTool Certificate

Employment projects could acquire an EmplocTool certificate. This would strengthen their position in documenting success and public promotion. Such a certificate would include a control on input data and a basic interpretation of results.

EmplocTool Total Service

National and regional governments, pacts and project partners could receive a total service, including not only certificates to their projects, but also in-depth and integrated studies.

Towards an Enhanced Technical Application

Although the methodology that was used to construct the EmplocTool QFD-scores has a sound scientific basis with major improvements in the application of QFD and IO, a number of significant suggestions for enhancing the applied techniques can be made.

Firstly, the question can be posed whether the plans studied in the content analysis are representative for all employment initiatives in Europe, as EmplocTool was restricted to the six participating countries (Austria, Belgium, Germany, Ireland, Italy, the Netherlands). Extending the study to the *other European countries* could definitely be worthwhile as a consistency test of the applied methodology and would support even more the obtained results, given the forthcoming increase in degrees of freedom.

Secondly, the expert interviews that were used for assessing the applicability of an indicator to measure the fulfilment of a specific demand, delivered quite different results (as was to be expected, given the variety in both scientific background and country of the experts). Augmenting the *number of experts* definitely would be a worthwhile investment, as it would provide a significantly higher reliability for the established QFD-correlations. Given the high cost of such an operation, this was not feasible within the EmplocTool project so far.

Also numerous scientific possibilities reside in improving the calculation of the QFD-score. Beyond any doubt, taking a closer look into problems as "*double counting*" (multicollinearity) or indispensable demands would significantly enhance the credibility of QFD as a benchmarking and evaluation tool.

Finally, the *cost efficiency* approach that the project group has been dealing with throughout the whole period, seems probably the most promising way for further research. Cost efficiency is irrefutably relevant for employment projects, given the ever more decreasing availability of public financial means. Once again, upgrading the amount of data is highly necessary in this respect: the more data that can be used to establish the efficiency curve, the more effective it will become in assessing the reality.

Improvements can still be made by trying to solve the so-called "congestion problems", referring to the fact that the creation of jobs is easier in a region with many unemployed people, than in a region with nearly no unemployment. This logical fact has not been incorporated in the actual EmplocTool methodology yet.

7.3 Point of View of Practitioners

For the further development of EmplocTool three different fields can be identified, EmplocTool Improvement, EmplocTool Training, and EmplocTool Marketing.

EmplocTool Improvement

One of the most important possibilities for the improvement of EmplocTool would be the extension of a project and program database on EU-level. In all countries of the EU the projects should be collected systematically. Another task of the tool could be a benchmark of projects in order to find the best practices.

Together with scientific organisations the database should be professionalised in order to incorporate as much data as possible and to fine tune the benchmarking tool.

A further opportunity would be to create a monitoring tool for employment projects. In that case the tool should get more functions enabling it to implement a continuous monitoring of the projects, e.g. there is the need of an improved finance monitoring module for EmplocTool. Therefore the development of a module for the financial controlling of a project would be useful. This module would come quite close to an "all-in-one" solution for the tool.

With EmplocTool different user groups should be able to apply the tool: An analysis of the labour markets on each NUTS level should be possible. That means that different practitioners on different levels could use the tool. For example could the EmplocTool be used on the government ministry level as well as on the level of practitioners in the counties or towns?.

Furthermore, the tool should be improved continuously from a technical point of view.

EmplocTool Training

According to the demand of different user groups a choice of training courses should be offered. Selected modules could be prepared for politicians, practitioners (like regional managers), for people in the governmental labour institutions and so on. The contents of those training units focus on specific problems of the users (examples):

Table 7.1 – Examples/Ideas for EmplocTool training

Selected problems and focuses	Target group
Which decisions have to be made on a strategic level?	Politician, government administration, interest groups (employers, employees,…)
How can the objectives be reached on a regional level?	Regional Managers, regional labour offices and services, regional development organisations
How can institutions be motivated to join the pact?	Practitioners, e.g. project promoters, project managers, local politicians, local entrepreneurs, education and training institutes,…

The EmplocTool is not only understandable as a technical software solution for the evaluation of labour market projects. The training content will also include units like "network management", "moderation of processes" and "regional management".

EmplocTool Marketing

For the distribution of the software a demo version could be a good way to find new clients. They could get the software for free and then decide to buy it or, if the real program distributed free, to register on a website. The customers could get an actual newsletter with the latest news on labour market, with emphasis on regional aspects.

The main product of EmplocTool is the training-programme. The training should be offered in modules and customers should be able to choose the module they need for training purposes.

Example: A regional manager wants to be trained in moderation techniques, budgeting of projects and public relations (for his labour market project). EmplocTool could offer him package 1 with three modules:

- module a: budgeting of projects in practice
- module b: process moderation for networks
- module c: PR for non-profit organisations.

Mathematical Appendix

QFD-model

The conservative median concept was applied to aggregate the different questionnaires.

$$Q_{med} = Q_1 + (\partial * (100 - \partial)) / 100$$
$$\partial = median - Q_1$$

By this formula, all results are situated in the interval between the first quartile and the median. The higher ∂, the more the value equals the first quartile. The lower ∂, the more the value comes close to the median. Consequently, the impact of outliers has decreased, thereby reducing the impact of extreme differences in opinion between the different experts. In other words: If the experts disagree, ∂ increases, possibly up to the limit of 100: then, only a small influence of fulfilments upon demands is accepted (the first quartile is approached). On the other hand, if experts agree, this would yield a low ∂, and the influence is accepted to be higher (the median is approached).

IO-model

If A is a matrix of output shares, X is a vector of gross output and Y is a vector of final demand, then sections A and B can be described by the following equation:

$$AX + Y = X$$

In this equation, AX describes the intermediary transactions of business sectors in section A (excluding imports and exports), Y describes the final demand for each sector's output and X describes total output of the business sectors. This equation can then easily be transformed to the basic equation of input-output analyses:

$$X = (I - A)^{-1} Y$$

In this equation, it is referred to the identity matrix (all diagonal elements are equal to one, all other elements are equal to zero), and superscript "–1" refers to the inverse of the matrix between brackets. More important than the mathematics of this equation is its economic interpretation. A direct relation between gross output X and final demand Y has been established that makes it possible to evaluate the effect of a change in expenditures (final demand) on gross output. Simple differentiation of the equation yields:

$$\Delta X / \Delta Y = (I - A)^{-1}$$

In words, the change in gross output due to a change in final demand can be specified in terms of output shares. The right hand side of this equation is known as the Leontief inverse and can be used to obtain output and employment multipliers.

Glossary

Activity rate: Share of employed and unemployed in total population of working age 15-64 (by gender)

AMS – Arbeitsmarktservice: Austrian labour market service, public governed

Benchmarking: rating of projects based on best performance according to multiple criteria

Bottom-up approach: People actively involved on the ground in the participation and development of projects and programs

CILQ – cross-industry location quotients: Method to regionalise the IO analysis, which usually yields outcomes only on a national basis

Commitment to employment: Agreement of participants or partners in a region in order to develop an employment strategy with the aim to create employment in a defined region.

Education type (ISCO-Reference): Abbreviation of "International Standard Classification of Occupations". It classifies persons through their actual and potential relation with jobs. Jobs are classified with respect to the type of work performed or to be performed. The basic criteria used to define the system of major, sub-major, minor and unit groups are the "skill" level and "skill specialisation"

Educational attainment (ISCED): Abbreviation for "International Standard Classification of Education"

EES – European Employment Strategy: process by which the European Union defines common objectives in relation to employment policy and detailed guidelines for the development of the employment policies of Member States

Effectiveness: Assessment of the effects in relation to the objectives. An action will be effective when the objectives have been attained.

Efficiency: Assessment of the achieved effects in relation to the inputs mobilised

EMPLOCTOOL: Software used for the evaluation of labour market programs and projects. The main target is to find out the effectiveness of a regional labour market program. It will also help the regional actors to design the labour market project as efficiently and successfully as possible. EmplocTool is based on the scientific methods Quality Function Deployment (QFD) and input-output-analysis (IO).

Employment pact (local / regional): Agreement at territorial level to support the regional labour market. Different institutions may be partners in such a pact: government

departments, local authorities, labour agencies / labour office, educational institutions, chambers of commerce, development agencies, politicians, and individuals.

Employment project: Project within an employment program aiming at enhancing the employment situation in a region (not only creation but also preservation of existing employment)

Employment rate: Employed persons aged 15-64 as a share of the total population aged 15-64 (by gender)

E-score: Result of the IO-analysis, describing economic effects of a project or action with respect to value added and employment created (direct and indirect effects)

Evaluation: Assessment and rating of programs or projects in comparison with best practices. The outcome of the evaluation should help to optimise a program or project. Evaluation can be ex ante (before the action is being undertaken), on going (during the action), ex post (after the action is terminated).

FAS: Irish labour market service, public governed

Formal partner: Partners in a project or plan, having signed an agreement or contract, usually with financial responsibility.

Fulfilment: Feature of a goal (within QFD identical to "indicator")

Goal: Intention of a measure or project (within QFD identical to "demand"). A goal has to be defined exactly.

HoQ – House of Quality: part of the QFD analysis, relating the quality as the customer demands it (goal) to the quality as the service producer can provide it (indicator)

Impact: Effects of the programme or action in the medium or long term

Indicator: Information in a form suitable for assessing or "indicating" the effects of the assistance. They represent more than the raw data on which they are based. Within the QFD-framework "indicator" is identical to "fulfilment".

Informal partner: Partners, who are involved in an action but not in a responsible (especially financing) function

Input: Resources mobilised to implement the programme or action

IO: Input-output analysis, a well-known econometric method for calculating indirect effects, such as e.g. the impact of an expansion of a company on the employment of its customers or suppliers

Layers: A measurement system for the fulfilment side of the QFD system, providing three levels related to the availability of data

Likert scale: named after its developer, Rensis Likert, this scale is a widely applied rating scale that asks the respondents to indicate a degree of agreement or disagreement with each of a series of statements about the stimulus objects. Typically,

each item is scaled by means of five possible response categories, ranging from strongly agree, to strongly disagree, (Malhotra and Birks, 1999).

Long term unemployment rate: Total long-term unemployed population (12 months or more) as a proportion of total active population (by gender)

NACE: Classification of economic activities in the European Union (Nomenclature générale des Activités économiques dans la Communauté Européenne).

NAP: National Action Plan (for Employment)

NGO: Non governmental organisation

NUTS: Abbreviation for Nomenclature des unités territoriales statistiques. EU classification for standardising the territorial units on the different levels in the EU

Output: What the programme or action finances. Within IO: value added, incomes, employment with regard to sectors

Participation: persons employed or in education and training (by gender)

Participation in education and training: Participation in education and training (25-64), overall, by age group, by working status and educational attainment (by gender)

Priority: Weight given to a specific goal (within QFD). Dependent on the individual choice or a goal reference system. In EmplocTool priorities are considered as an essential part of the quality perception of a project.

QFD – Quality Function Deployment: is a method of designing products and services that satisfy customer demands. QFD is a way to convert customer demands into product characteristics. Within EmplocTool "customers" are regarded as the stakeholders of the regional employment systems: (potential) employees, employers, trainers, employment market mergers, regional administration and social workers etc.

QFD-matrix: QFD investigates goals of customers (stakeholders), and compares them with the means (fulfilments) to meet those demands. The QFD-matrix relates goals to fulfilments.

Q-score: Result of the QFD-analysis evaluating a project or action on a scale from 1 to 100, depending on the performance of other projects or actions

Region: The regions in EmplocTool are related to the size of the "labour market place". A constraint to this size is e.g. the limited radius for commuting. Regions in EmplocTool mostly refer to the NUTS 3 level (sub provincial) or NUTS 5 (municipalities, communes, cities).

Regional manager: Person who does work in and for a specified region, often for regional development agencies. His or her tasks are e.g. to develop business and coordinate projects, to raise funding and build networks of actors of the region.

Result: The most immediate impact

SLQ – simple location quotients: Method to regionalise the IO analysis, which usually yields outcomes only on a national basis

Subsidiarity: principle claiming that decisions should be made at the lowest level, if possible

Sustainability: Effects are sustainable when they last in the long term, and after the end of the programme.

Unemployment rate: Total unemployed persons as a share of total active population (by gender), breakdown for older worker (aged 55-64) as a proportion in the same age group.

VDAB – the Flemish service for employment mediation

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Links

www.europa.eu.int/comm/employment_social
www.pakte.at
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About STUDIA

STUDIA – Study Centre of International Analysis – is an independent research and service centre, it provides a basis for decision making to actors in politics and the economy. STUDIA supports its clients and partners by developing new and sustainable solutions to their problems, enlarging the range of success factors, and assuring its advices by scientific methods.

Benchmarks of STUDIA's experience are some 80 applied scientific studies, focusing on the learning society, well-being and economic development. STUDIA specialized in mathematical models for societal development that include economic-technical as well as so-called "soft" variables, derived by polls, experts interviews, and own indicators. In many studies we applied our knowledge specifically to regional and rural development, sponsored by federal and provincial government as well as local co-operations. STUDIA is partner in various EU projects.

STUDIA operates on modern business lines as the best means of ensuring both our independence and our ethical principles: *L*ife quality before production – *I*mmaterial values before the material – *L*ong term and holistic approach – *A* gentle approach (the so-called LILA principles). STUDIA was founded in 1969 by the university professor Johann Millendorfer, 1991 STUDIA-Schlierbach was established by the Government and Economic Chamber of Upper Austria and the Austrian Industrialists Confederation. Scientists as well as counsellors and local actors now build the board of STUDIA.

Wolfgang E. Baaske, head of the board: born 1957, Diplom-Mathematician, studied mathematics and physics at the University of Cologne. Working at STUDIA since 1982. Member of the regional development organisations, e.g. the LEADER+ steering committee. Various publications, book author. Black Belt® Certificate in Quality Function Deployment by QFD Institute/USA, 2003.

Bettina Lancaster, project manager: Magistra, studied genetics at the University of Vienna, since 1996 working at STUDIA, since 1998 involved in local development projects, 2003 elected community politician.

FAX RESPONSE

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