



**EVALUATION OF THE MAIN ACHIEVEMENTS OF COHESION POLICY  
PROGRAMMES AND PROJECTS OVER THE LONGER TERM IN 15  
SELECTED REGIONS**

**(FROM 1989-1993 PROGRAMMING PERIOD TO THE PRESENT)**

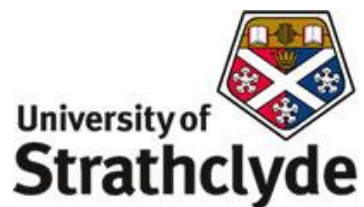
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**Case Study Nordrhein-Westfalen**

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## PREFACE

This report presents the Case Study for Nordrhein-Westfalen as part of the study ‘Evaluation of the Main Achievements of Cohesion Policy Programmes over the Longer Term in 15 Selected Regions (from 1989-1993 Programming Period to the Present)’ which is being managed by the European Policies Research Centre and London School of Economics.

The research was conducted over the period April to November 2012. The case study has been drafted by Dr Oliver Schwab and Kristin Schwarze, Institute for Structural Research (Ifs), Berlin. The authors are grateful to a considerable number of individuals in Nordrhein-Westfalen and at the Federal level who participated in the study and provided valuable insights, as well as assistance in tracking down other interviewees and data. The complete list of interviewees is listed in Annex IV at the end of the report.



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## EXECUTIVE SUMMARY

When ERDF intervention was initiated in Nordrhein-Westfalen, the funds were focused on the Ruhrgebiet area. This sub-region had been heavily impacted by the decline in the coal and steel sectors that had dominated the economic structure for decades. The ERDF remained focused on this sub-region until the current period.

The decline of the coal and steel industry began in the 1950s, but it gained momentum in the 1970s and 1980s. Several hundred thousand jobs were lost, and large industrial sites, which were often situated in the centre of cities, were left partly contaminated. The basic needs were clear: to support structural change and to solve the problems caused by the legacy of the old industries. In practice, these have been the basic needs for the entire period from 1989 to 2012. However, the relative importance is shifting, and the rehabilitation of industrial wasteland is - generally speaking - not as important as it was earlier. Simultaneously, the economic structure adapted to a certain extent and has become competitive. Meanwhile, productivity in the Ruhrgebiet is above the *Land* average, unlike in previous years. The most pressing problem now is a general shortage of jobs. Unemployment rates in some parts of the Ruhrgebiet are among the highest in Germany. What makes the situation more complex is that the problems of unemployment and exclusion are concentrated in specific areas of cities.

Shortly before the first ERDF programme was drafted in the late 1980s, Nordrhein-Westfalen began implementing Regionalised Structural Policy.<sup>1</sup> In a *Land* with some 17 million inhabitants, regional development could not be managed by the *Land* government alone, and accordingly the concept of Regionalised Structural Policy introduced specific bodies for strategic development at a sub-regional level between the *Land* and the local authorities. Groups of local authorities were organised to draft regional development concepts. Originally, ERDF OPs were meant to provide a strategic framework for the actors involved in Regionalised Structural Policy, but the OPs defined a rather broad and not very detailed strategy. The regional development concepts were intended to fill this gap.

Having started enthusiastically in the late 1980s, Regionalised Structural Policy lost importance during the 1990s, and today - even though the bodies originally established are partly still operational - it is hardly relevant to the policy objectives of the ERDF programmes. Although they were gradually losing their strategic basis, the OPs sustained the same structure for some time. The main components of the strategy are support for investment, development of R&D, reusing wasteland and environmental aspects, and SME-related infrastructure. Some changes appeared in the 2000-2006 programme: a specific approach to integrated urban development was introduced, and more emphasis was placed on start-ups. But only the current funding period presents a completely different approach. For the first time, there is now no predefined eligible area, and cluster policy is the guiding strategic orientation.

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<sup>1</sup> Developing the concept of Regionalised Structural Policy was based on the perception that a one-size-fits-all solution for regional development problems is not feasible in a region as big as NRW. On the other hand, the local authorities are too small to manage development problems. So, under Regionalised Structural Policy sub-regions have been defined. Each of them developed its own development concept. To do so, specific bodies (regional conferences) have been established. They have also been involved in project selection. Representatives from local authorities, other relevant public actors (e.g. labour administration) and to a limited degree civil society participated in regional conferences.

The main objectives of ERDF NRW were always twofold: on the one hand, to support structural change and improve competitiveness, and on the other to create jobs. A few core elements characterise the strategies of all the programmes: (i) support for investment in enterprises, (ii) innovation and technology, (iii) infrastructure, and (iv) human capital (mainly supported by ESF). The specific instruments and the relative weight of these components have varied over time. In general, infrastructure has lost importance in favour of innovation and technology, whereas investment in enterprises has been a more-or-less stable element in programmes. While human capital development is essential part of the overall strategy, the extent to which measures related to human capital appear in ERDF-programmes depends on how the programmes need to be drafted technically: While human capital support appears as a separate priority axis in the programmes from 1992 to 1999, the respective interventions have been integrated in the remaining priorities in the 2000 to 2006 period. In the current period ESF has its own separate programme.

The first programmes formulated clear strategies, but without quantifying objectives. Several fields of activity (create jobs, strengthen enterprises, innovation, qualification, wasteland, infrastructure, and environment) were introduced and maintained over most programmes, but objectives were often described in a way that did not allow for clear measurement and assessment. An explicit quantification of objectives first appeared in the 2000-2006 programme, when 20 quantified objectives were defined at a very detailed level. The targets defined relate both to result (e.g. jobs created) and output. Most indicators refer to outputs. However, this was accompanied by a loss of strategic quality in the sense that the focus of the intervention becomes a bit unclear because strategy formulation is overloaded with more than 20 detailed quantified objectives, and in a way it was easier to understand the overall strategic orientation of the earlier programmes than in this very detailed and complex one.

ERDF strategies have not been very concentrated. To a certain degree, this is intentional, as the programmes are meant to be implemented by the bodies and procedures of Regionalised Structural Policy. This becomes problematic when those structures lose relevance over time - and in this instance the strategic gap was not filled until the concept of the cluster policy was introduced in the current period.

The average annual spending of ERDF programmes per programming period (total eligible cost) has varied over the whole period since 1989 between €267 million and €337 million<sup>2</sup>. There were only minor changes to the programmes during their implementation. ERDF interventions have been of minor weight in comparison with other instruments applied over the whole period from 1989, although there have been significant amounts of ERDF spending. For example, sectoral subsidies to support the coal sector amounted to €176.4 per capita each year in the 1996-2006 period; ERDF expenditure in the same period was estimated at €24.6 per capita each year (at current prices).

Due to the stable strategic orientation, the most important effects of ERDF have been in the fields of infrastructure and investment in enterprises. Different sources (official reports and evaluations) are largely consistent in what they are reporting as results. Thus the following figures are quite reliable:<sup>3</sup> In the 1989-1999 period, more than 3,000 hectares of industrial wasteland were

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<sup>2</sup> If not indicated otherwise, €-figures are deflated and calculated in €/2000 values.

<sup>3</sup> What is a bit problematic is that there is only very limited information on results, as information mostly refers to output data.

redeveloped, as well as more than 24,000 m<sup>2</sup> of former factory buildings. By 1999, 43 technology and innovation centres had been funded. Between 1989 and 2011, more than 232 training and qualification centres were modernised and capacities for more than 70,000 training places were created. Over the whole period, more than 4,700 investment projects in enterprises were supported, leading to reported achievements of 23,000 new jobs (gross) and 'safeguarding' 27,500 existing ones. More than 108,000 consultations for start-ups and enterprises were provided. From 2000 onwards, this led to more than 23,000 actual start-ups. Between 1989 and 1999, 246 technology transfer projects were implemented. Evaluations conclude that the ERDF contributed significantly to investment in enterprises. Whereas the first phase mainly financed technology centres, from 2000 the funding focused on competence fields or clusters. In the current period, the main outputs include 43 supported networks and clusters, 266 projects for energy and resource efficiency and the development of environmentally friendly energy, 183 projects in the field of innovative services, and 21 intra- or inter-regional pilot projects.

Due to the vague definition of objectives, it is impossible to quantify actual achievement for most of the period. What can be said is that the reported achievements are in line with the targets set out in the programmes. The assessment of the evaluation for the 2000-2006 period - when quantified objectives were first defined - is mixed. Generally, the evaluation states that ERDF had limited effects on changes in economic structure, rate of start-ups, jobs or investment.

There is hardly any evidence on net effects of the intervention, and even less so in relation to the strategic objectives of structural change and employment. For some methods, such as macro-economic models, the impact of ERDF in the Ruhrgebiet is simply too small. Theory-based evaluations struggle with problems of identifying and summarising effects for single instruments at the level of the overall strategy. Not a single study discusses the reciprocal effect of different instruments on overall regional performance. Open questions include whether the substantial amounts spent on supporting the coal sector actually counteracted the efforts of other instruments to support structural adaptation.

What can be concluded is that ERDF contributed to several concrete and relevant developments in the region. First, the funds helped to ease the problem of the legacy of old industries. Extensive areas of former industrial usage were redeveloped, managing the environmental risk of contaminated areas and allowing for new economic and urban development. Substantial amounts of private investment were induced. There is no doubt that the ERDF contributed to increased productivity. Mainly continuous support for investment in enterprises certainly has an effect on this. On the other hand, the funds were not the only instrument to do so. In addition, the development of the regional innovation system was supported by ERDF both by infrastructural measures and financing of R&D projects. A large number of start-ups were ERDF-supported, and integrated urban development projects were carried out.

With regard to complementarities with other EU programmes, ERDF has been closely linked to the RECHAR and RESIDER Community Initiatives. They had overlapping objectives, and interviewees emphasised that in some cases it was hardly possible for them to distinguish the different sources of finance as the projects were very similar. There has been no coordination or synergy with ESF. ERDF and ESF are seen as completely separate instruments, each with its own logic, and technically it seems almost impossible to bring the two together in one concrete activity. In the domestic realm, a close - but not stress-free - relationship exists with domestic regional policy, notably the

Joint Task for Improving the Regional Economic Structure. ERDF and the Joint Task are mutually co-financed. Several other programmes are of relevance for certain parts of the ERDF programme, particularly federal programmes for urban development and R&D programmes.

The main contributions of ERDF to regional development in NRW are: (i) significant contributions to solving problems associated with industrial wasteland; (ii) support for substantial amounts of private investment; (iii) improvement of the regional innovation systems; and (iv) support to local actors implementing their integrated urban development strategies. In none of the four fields was ERDF the only instrument. For instance, a very important development for the regional innovation system was the establishment of universities in the Ruhrgebiet in the 1980s, where ERDF was used to improve the links between the universities and local and regional networks and clusters, thus helping to improve transfer and cluster development. In a similar way, the effects of ERDF interventions go hand-in-hand with the contributions of other instruments.

The overall strategic framework designed in the early programme acted as an example of good practice - as long as the Regionalised Structural Policy system worked efficiently. During the second half of the 1990s, a strategic gap became visible after the slow decline of this system. Elements of good practice included the early use of revolving instruments (already in the first programmes) and an integrated approach to the rehabilitation of industrial wasteland. Perhaps learning could have been a bit faster at the levels of individual instruments and strategic objectives.

In terms of conclusions from the case study, a first point is that regional development policies need to be defined carefully, taking into account the time span and relevant factors for the intended development. Structural change can take decades, and therefore policy needs to be carefully designed to address the most important elements. Nordrhein-Westfalen could perhaps have put an earlier focus on the education system and on the cultural conditions for dynamic development. Result-based management depends on prompt information on target achievement. It is difficult to draft programmes while taking very long processes into account and simultaneously seeking to identify indicators for short-term programme management. Nonetheless, the clarity of a strategy does not depend on quantification of objectives: in the case of Nordrhein-Westfalen, earlier programmes articulated clearer strategies without the quantification of objectives, while the 2000-2006 programme had a very complex strategy with a number of cross-cutting issues.

A second main conclusion is that ERDF programmes should be much more explicit in describing their context. For instance, how does the ERDF programme relate to other available instruments, and what is the (expected) additional contribution? Evaluations should also examine these factors, not only to account for ERDF effects, but also to understand how ERDF actually contributes to complex development processes.

For the situation in the Ruhrgebiet, this research mirrors the conclusion of a recent book (Bogumil et. al. 2012): 'a lot achieved - little gained'. Solving a good part of the wasteland problem and creating a competitive economy was a success. However, the continuing problems include high unemployment rates and persistent development problems increasingly concentrated in specific areas of the cities, as well as poor co-ordination between municipalities.

## 1. INTRODUCTION

Nordrhein-Westfalen (NRW) is located in the western part of Germany, bordering Holland and Belgium. It is a highly urbanised area, with an extremely high population density and a number of important urban centres. With a surface area of 34,092 km<sup>2</sup> and 17,841 million inhabitants (end of 2011), NRW is Germany's largest state. If it were a separate country, Nordrhein-Westfalen would be the eighth largest country in Europe: only Germany, France, the UK, Italy, Spain, Poland and Romania have more inhabitants. Given this size, NRW has always been characterised by internal economic disparities and a large variety of specialisations in different sub-regions ever since the pre-industrial era. Mountainous parts on the one hand, and the harbour and trade cities in the Rhine valley on the other, along with agricultural regions and valleys with a strong metal-working economy, all illustrate these variations (Ambrosius, 2004: 58 *et seq.*).

The sub-regions within what is today NRW had different conditions when industrialisation began in the 19th century. At that time, the heavily industrialised region of the Ruhrgebiet did not exist, and that part of NRW was still predominantly agricultural, with other sectors dominated by small enterprises. In the second half of the 19th century, large industrial companies were established, and they dominated parts of the region. The Ruhrgebiet, which is more or less the part of NRW where coal can be found, became dominated by coal and steel industries (Ambrosius, 2004: 73): this sector with a 'hitherto unknown vertical and horizontal concentration', which contrasted with the comparatively weak industry, poorly developed small enterprises and services in other sectors, characterised this part of the state for more or less a century. The political reaction in the first years of the crisis after World War II mainly comprised activities to stabilise the coal and steel sector. On the one hand, a policy of sectoral subsidies had already been launched in the 1950s, and the industrial actors at that time, such as the car manufacturer Ford, actively tried to hinder investment in other industries. This policy of 'blocking the ground' (*Bodensperre*) was in part actively supported by the government of NRW (Nonn, 2004: 95). In the 1970s, it became clear that the Ruhrgebiet had been decoupled from national development trends: the crisis deepened and the process of de-industrialisation began (Petzina, 2004: 107 *et seq.*). A first, comprehensive 'development programme Ruhr' was launched in 1967. A number of universities were established over the 1960s (Bochum 1965, Dortmund 1968, Düsseldorf and Bielefeld 1969), the impacts of which are illustrated in the case study.

The late 1960s brought a completely new approach to regional policy problems in Germany: the federal government and the states pooled their efforts in the so-called 'Joint Task Improvement of Regional Economic Structure', launched in 1969. In the 1980s, several specific programmes were implemented under the framework of the Joint Task targeted at different parts of NRW and tackling different kinds of structural problems. From 1987 onwards, the government of NRW launched activities under the concept of a 'Regionalised Structural Policy'. ERDF funding entered the scene in 1989, when NRW used the European support by combining the opportunities offered by the Funds with the recently developed Regionalised Structural Policy. Up until the 2007-2013 funding period, ERDF funds were strongly concentrated on the Ruhrgebiet.

The analysis presented in this case study is based on a number of different sources of information:

- programme documents and official reports (annual reports and final reports) have been analysed in so far as they are available;

- evaluation studies for all periods have been exploited;
- financial data on implementation has been analysed;
- 28 people with different roles in managing and implementing OPs have been interviewed (see Annex IV); and
- a workshop held on 5 September 2012 in Düsseldorf discussed the first findings with some of the interview partners.

Furthermore, an online survey was undertaken to complement the fieldwork and desk research, and enhance triangulation. This questionnaire was directed at 247 email addresses, comprising the interviewees, plus representatives from local authorities, firms, regional and local socio-economic partners and interest groups. The questionnaire returned an overall response rate of 21.9 percent and a completion rate of 12.6 percent. The questions and a summary of responses are presented in Annex VII.

Not all sources of information are available for every single programme. The AIRs for the earlier periods were missing. The table in Annex V gives an overview of the sources used.

The report begins with a short summary of the main features and development of regional development and disparities (Chapter 2). Although some aspects progressed well in the Ruhrgebiet, such as the productivity of the economy, some - mainly labour market factors - remain problematic. Chapter 3 describes how the ERDF programmes reacted to the situation. It also shows that instruments other than ERDF were important for the Ruhrgebiet - partly with differing objectives. In Chapter 4, the financial indicators for ERDF interventions since 1989 are presented and discussed. On this basis, a presentation of the main achievements follows in Chapter 5. On this basis, the achievements are discussed in relation to the objectives and needs in Chapter 6. The report ends with conclusions on relevance, effectiveness and utility, as well as identifying key elements of success and failure and lessons learnt.

## 2. REGIONAL CONTEXT AND ANALYSIS OF NEEDS

### 2.1 Policy Context

With regard to the policy context, there are two important interfaces are instrumental for understanding the development of ERDF interventions. The first is between state level and federal level, and the second is between state and local authorities.

When analysing the development of ERDF strategy, it is important to keep some basic features of the federal system of Germany in mind. The federal system is built on the principle of a clear division of tasks between the levels. Regional policy is fully the responsibility of the states (*Länder*), and the federal level has no immediate competence in this field.

At the same time, the constitutional law of the Federal Republic of Germany defines the creation of ‘equal conditions of living’ as a national objective. Under this objective, the federal level dealt with different aspects of regional disparities from the 1950s onwards.<sup>4</sup> However, in the 1960s, the disparities worsened, and the increased efforts of the federal level to resolve them made the instruments more and more complex and fragmented.

In 1969, the whole system was put onto a new basis. The so-called ‘Joint Task for Improving the Regional Economic Structure’ was established (*Gemeinschaftsaufgabe Verbesserung der Regionalen Wirtschaftsstruktur*, GRW). The GRW is far more than a grant scheme. It contains regulatory elements by defining the eligible area under the state aid rules as well as the maximum rate of support - not only for the GRW but for all subsidies. It also defines the concrete rules for spending the funds under the GRW. In practice, the federal level and the states pool their financial resources and co-finance the spending under the GRW in equal parts.

The introduction of the programme approach under the ERDF in 1989 can be seen as opening up regional policy and introducing (for the first time) a second strategic framework alongside the GRW. As ERDF was implemented as a responsibility of the states, due to their fundamental competencies in regional policy, an explicit tension developed between ERDF and the GRW. The *Länder* could use the scope they gained through both the additional European financial resources and the responsibility for developing intervention strategies under the OPs to establish their own approaches to regional development policy.

NRW was the most prominent pioneer in this respect. Already in the first funding period from 1989, a very distinct approach to regional development was conceived - the concept of Regionalised Structural Policy.<sup>5</sup> Subsequently, a continuous interrelationship and tension between the GRW and ERDF developed. Both have been used to co-finance each other, so the different logic behind both ‘worlds’ of regional policy immediately clashed. In the 1990s, there was a broad academic discussion on the effects of these processes, questioning how far the GRW had changed due to ‘pressure from above and below’, reflecting the title of an article from this time.

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<sup>4</sup> For instance by launching specific support for those regions immediately at the border between East and West Germany, or by supporting certain development efforts in rural regions.

<sup>5</sup> This is discussed in more detail in Section 3.2.

With regard to the second relevant interface - between state and local authorities - the underlying concept of the first ERDF programmes developed in the late 1980s was that of 'Regionalised Structural Policy'. Its basic assumption was that local actors were best equipped to identify needs and choose suitable projects to meet them. This means that, from the beginning, ERDF strategies were designed to allow local authorities scope to fill the framework defined in the OP according to their own preferences. Accordingly, ERDF strategies were intentionally defined as a type of framework for local actors to fill.

ERDF strategies and programmes were financially linked and strategically delineated from GRW activities. A permanent latent tension between the two runs like a thread through the whole history of ERDF in NRW. Simultaneously, the explicit strategies at state level were never intended to detail every aspect of ERDF intervention, as they were designed to leave scope for local authorities to choose their own approaches. Both aspects are discussed in more detail in this report.

## 2.2 Socio-Economic Context

After the first signs of crisis in the coal and steel sectors in the 1950s, there was a profound deconstruction of existing economic patterns and traditions and a long struggle for reconversion. From its peak in 1957, when the coal industry employed 530,983 people, a steady decline led to only 16,073 employees in 2011. A comparable decline hit the steel sector. From the early beginning in the 1950s, and more specifically from the serious breakdown of the old structures in the 1970s and 1980s, a process of reorientation and restructuring began. This process has been in operation for decades and is not yet complete. The coal and steel industries were both concentrated in the Ruhrgebiet, but this forms only one part of Nordrhein-Westfalen; accordingly, general development at the level of Nordrhein-Westfalen is considered first, followed by a closer look at the specific situation in the Ruhrgebiet.

Since the late 1990s, Nordrhein-Westfalen has seen a decline in its degree of relative specialisation (as measured by the Herfindahl index<sup>6</sup>), as it has experienced a shift towards the service sector, with increasing growth in commerce, finance and business services (Görner, 2011). This shift happened faster than elsewhere in Germany, so that by the late 2000s the level of services and industry in the region corresponded almost exactly to the national (unweighted) average. This development reflects the adaptation to new economic structures after the breakdown of the coal and steel industries. Agriculture, although extensive in terms of arable land, is of limited importance for the economy and well below the national average in terms of its employment share. Within industry, the *Land* has specialisation in many sectors, including metal manufacturing (steel, machinery, automobiles), mechanical engineering, chemicals, textiles, food processing and furniture. The *Land* records above-average export performance because of its industrial structure and high labour productivity (although the productivity advantage over the national average has become much narrower in the 2000s). Investments were allocated disproportionately to service-sector activities (banking, tourism, commerce, research) in the 2000s, as the *Land* increasingly diversified into modern economic activities and cutting-edge technology (e.g. in the energy sector), helped by the large number of multinationals that are located there (with a high concentration of headquarters) and the high rates of FDI coming into the region. For the purpose of an overall

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<sup>6</sup> The index measures the degree of concentration in a market.



evaluation, the current needs at *Land* level can be summarised into four main categories corresponding to different aspects of economic advantage/disadvantage: endowments, accessibility, structure and disequilibria.

**Endowments:** Nordrhein-Westfalen is a highly urbanised region, with a number of major cities and conurbations. As such, it benefits from a very high population density and the associated agglomeration economies. Despite this concentration, the environmental quality of the region is not bad (and is improving). Urban amenities and environmental standards are also good, as is the physical landscape - especially in the more rural areas in the north and east. The region has plentiful natural resources and important locational advantages, being at the centre of a large industrial complex and well connected to other industrial, financial and transport centres in Germany and internationally. Although its educational endowment is below the national average, the region has a strong presence in the university and science & technology sectors.

**Accessibility:** The Nordrhein-Westfalen region has one of the highest densities in terms of transport infrastructure and benefits from very good transport links, by land, air and sea (waterways), to other production centres in Germany and abroad. As a consequence, connectivity and accessibility for the region are very high, allowing the further concentration of population, economic activity and productive capital (including foreign direct investment), as the region acts as an important agglomeration not only for Germany but also for Europe in the broader sense. This has allowed the region to maintain, or regain, its traditionally very good export performance, which is high even by national standards. Internal connectivity is also good, thus facilitating strong functional links across its territory and strengthening the forces of agglomeration in the region, but without creating high environmental pressures or concentration diseconomies.

**Structure:** Although traditionally an industrial and highly specialised region, over the last 10-15 years Nordrhein-Westfalen has seen a significant diversification of its economy, with a shift towards business services (accompanied by above-average rates of SME growth) and technology-intensive activities. Its R&D performance is above average and largely improving, which supports the modernisation of its production base and the overall competitiveness of the region - and which is manifested in both the above-average rates of investment (domestic and foreign) and the above-average levels of labour productivity. Economic modernisation has seen both the recovery of traditional industries (steel, machinery, car manufacturing) and the emergence of new specialisations (chemicals, banking, tourism), while the region has been successful in maintaining and extending its role as an important location for the headquarters of large national and international companies. These characteristics make the Nordrhein-Westfalen region a highly dynamic and export-oriented economy.

**Disequilibria:** Despite its productivity advantages and successful economic restructuring and modernisation over the last two decades, the region has notable problems in its labour market. These are most evident in the above-average and persistently high unemployment rates (in spite of the recent decline), the relatively low rates of employment participation, and especially the rather high percentage of long-term unemployment. The latter is largely attributable to the restructuring and diversification of the economy and its comparatively low educational levels, which in combination produce sizeable problems of skill shortages and mismatch. Although these problems do not appear to create social (e.g., deprivation) or spatial imbalances (e.g. unemployment rates are rather homogeneous across the region), observable differences nevertheless exist between the

north/east and west/south in sectoral specialisations and income levels - despite the very good spatial (transport) and functional (e.g. commuting) links observed within the region.

The following table highlights the basic pattern of the structural adjustment in the Ruhrgebiet compared to Nordrhein-Westfalen and Germany. The figures show a breakdown of the industrial structures. While industry employed nearly a quarter of the employees in the mid-1990s, the share went down to only 16.6 percent in 2009. The Ruhrgebiet has actually been partly deindustrialised in the last two decades: the share of industry in overall employment has been significantly below both national and Nordrhein-Westfalen averages. However, this does not mean that there is now no competitive industry in the Ruhrgebiet - on the contrary, as the remaining industry consists mainly of highly competitive enterprises.

**Table 1: Employees by sector -percentage share**

	Germany		Nordrhein-Westfalen		Ruhrgebiet	
	1996	2009	1996	2009	1996	2009
Agriculture	2.6%	2.1%	1.5%	1.5%	0.9%	0.9%
Industry (without construction)	23.3%	19.4%	26.2%	19.0%	24.4%	16.6%
Construction	8.4%	5.5%	6.2%	4.7%	6.6%	5.1%
Domestic Trade, accommodation and food services activities, tourism	24.8%	25.0%	25.8%	26.2%	26.5%	26.6%
Financial, real estate, renting and business activities	12.3%	17.3%	12.0%	17.9%	11.9%	18.1%
Other service activities	28.6%	30.8%	28.3%	30.7%	29.7%	32.7%

Source: Volkswirtschaftliche Gesamtrechnung der Länder, due to revisions in domestic statistics, data is not available in the same structure for earlier years than 1996.

The structural change is profound. Industry in the Ruhrgebiet lost nearly 150,000 employees in only 13 years between 1996 and 2009. Financial, real estate, renting and business activities contributed most to compensate for this loss of employees. The fact that changes have already become clearly visible at sector level highlights the extent of change that the regional economy has been undergoing.

While productivity in the Ruhrgebiet has been significantly below the *Land* average, it has recently improved. In examining the 2009 figures, it should be borne in mind that this was the only year in which Germany was impacted by effects of the crisis. Nordrhein-Westfalen is specifically export-oriented and thus was amongst the Länder with the greatest decline in GDP. Although the Ruhrgebiet seems to be catching up, it remains to be seen whether this is permanent.

**Table 2: Productivity - GDP per employee in Euros**

	1992	2000	2009
Nordrhein-Westfalen	47,915	53,620	60,244
Ruhrgebiet	46,754	51,601	60,718

Source: [www.statistik.metropol Ruhr.de](http://www.statistik.metropol Ruhr.de).

In the case study, structural change and unemployment have been identified as the most important problems of the region. In the programme documents, the emphasis shifts slightly from the former

to the latter over time (see Chapter 3). The interviewees highlighted structural adjustment in the Ruhrgebiet as the main problem - thereby partly reflecting the decision to focus ERDF funds strongly on this part of NRW. Accordingly, the general perception of the main problem is very much in line with the actual development. Depending on their position and perception, interviewees highlighted different aspects in their description of the situation. The more concrete problem definitions related to urban development, availability of industrial real estate or others are embedded in the general story of profound structural change in the *Land*. One aspect that was mentioned several times is that recent problematic developments in educational attainment and training qualifications have become more and more visible.

A recent inventory of the situation of the Ruhrgebiet is entitled 'A lot achieved - little gained' (Bogumil *et al.*, 2011). This general impression was shared by many of the interviewees. On the one hand, new employment capacities have been developed that could at least partly replace the lost jobs in heavy industries, a substantial amount has been invested and competitiveness has improved, as has the environmental situation. However, at the same time, structural development has stalled, unemployment rates in some cities rank among the highest in Germany, and a concentration of problems persist in specific areas of the cities. Regional disparities within NRW have remained more or less unchanged since 1995 (Schirbaum *et al.*, 2012).

The story of this change in the Ruhrgebiet is also one of a continuous search for alternative sources of growth. However, the conditions at the outset were not very favourable, as the heavy industries actually prevented the development of alternative strong industrial structures in other areas that could have served as a starting point for new development (automobile, electrical engineering, etc.). Although the Ruhrgebiet deserves specific attention due to its size and severe problems, it should be noted that other parts of NRW and other industries also faced challenging structural developments, for example the textile industries, which are to be found mainly in the region around Münster and in the northern part of the Rhine valley.

### **3. PROGRAMME EVOLUTION AND RELEVANCE**

This chapter presents a review of the development of the explicit strategies as they are stated in the OP documents, and it compares this material with the findings on implicit strategies both from the interviews and evaluation studies (3.1). Latterly, an assessment is made of the relevance of the strategy chosen in the light of regional needs (3.2).

#### **3.1 Explicit and implicit strategies and their evolution**

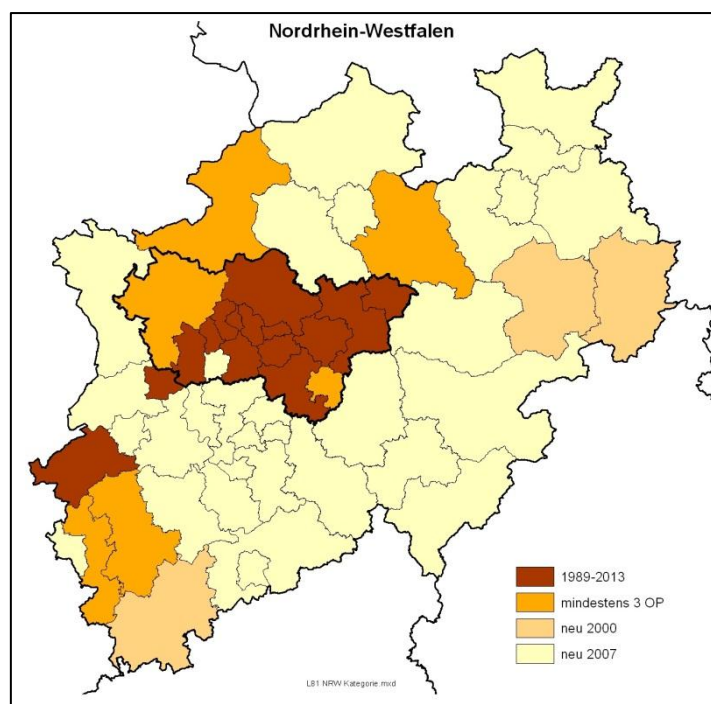
Nordrhein-Westfalen has participated in ERDF funding from 1989 onwards. ERDF was implemented under six Operational Programmes. The funding periods 1989 to 1993 and 1994 to 1999 were each split into two consecutive programmes.<sup>7</sup> In addition to the mainstream ERDF programmes, this chapter includes as far as possible some selected Community Initiative programmes: RESIDER I and II (1989-1991 and 1994-1999), RECHAR I and II (1991-1993 and 1994-1999) and SMEs (1994-1999). The reason to include those programmes is that they were focused on the same region, the Ruhrgebiet, and follow the same objectives. The interview partners repeatedly mentioned that for certain project types the Community Initiatives funding could actually be replaced by mainstream ERDF and vice versa. In addition, the financial allocation under the Community Initiatives was substantial (see Chapter 4).

The strategic approach of ERDF intervention in NRW shows some properties that remain more-or-less stable over most of the period from 1989 to 2012. A first point is that the funding has been strongly focused on the Ruhrgebiet. Grouped around the large cities of Dortmund, Bochum, Essen, Duisburg and Gelsenkirchen, the Ruhrgebiet is marked with the dark colour in Figure 1. It has 5.1 million inhabitants, which represents 29 percent of the overall population of NRW. Outside the Ruhrgebiet, only the former mining region close to the city of Aachen (Heinsberg) has been part of the eligible area for the whole time. The whole of NRW has been covered by ERDF funding since 2007, when the territorial focus on a pre-defined eligible area was abandoned.

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<sup>7</sup> The OPs are 1989 to 1991, 1992 to 1993 and, for the 1994-1999 period, the programmes for 1994 to 1996 and 1997 to 1999. The 2000 to 2006 programme was a Single Programming Document. When referring to them collectively, the term 'OP' is used.

**Figure 1: Nordrhein-Westfalen - Eligible Area**



The territorial focus and the main strategic orientation have been comparatively stable over time. ERDF has focused on supporting structural adjustment in the Ruhrgebiet, following the decline of the coal and steel industries. For the most time, eligible area has been pre-defined on European level. Actually the selection of the eligible area was often subject of negotiations between the Commission and the Member state. Only since 2007 the Land was completely free in defining the eligible territory on its own.

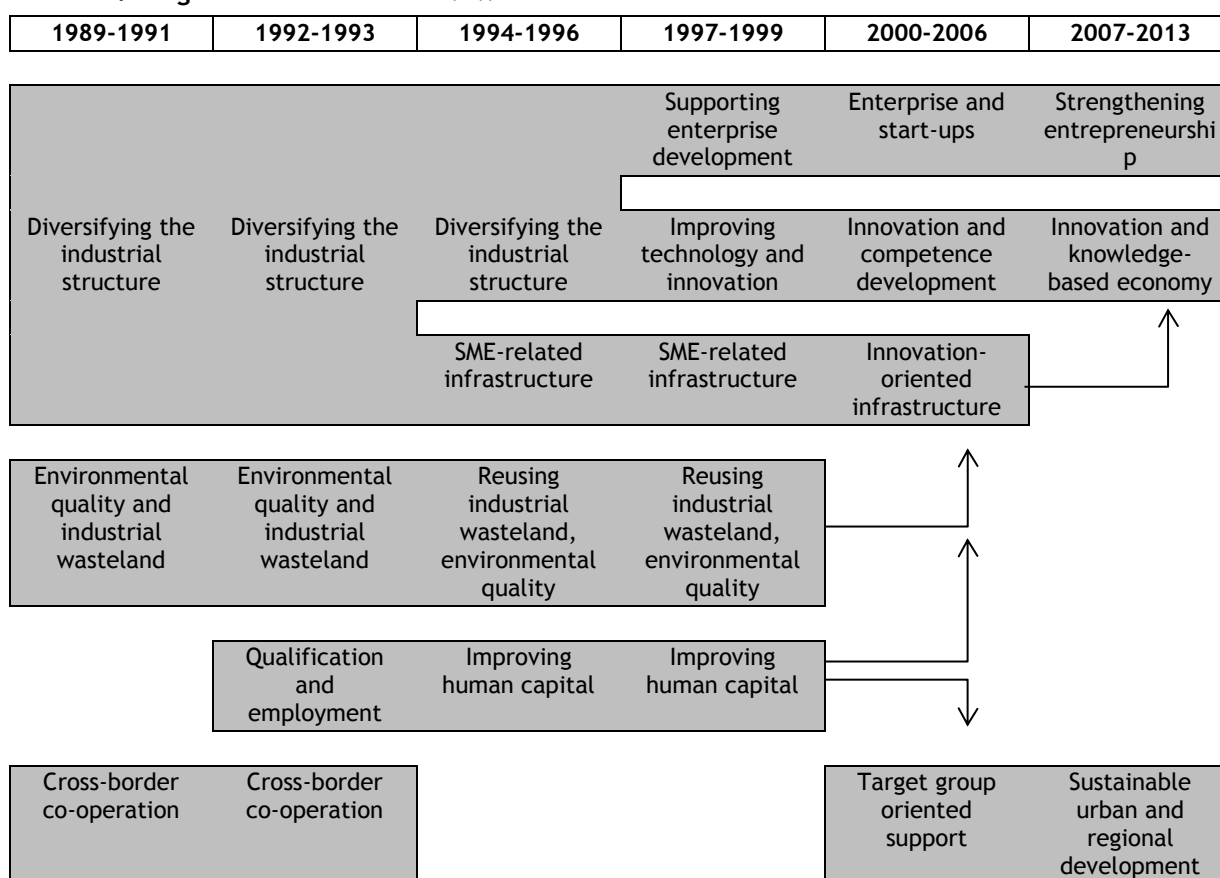
The OP strategies mention the objective of supporting structural adjustment explicitly in some periods. Linked to the structural adjustment, the main strategic orientation of the funding is on the creation of jobs and reducing unemployment on the one hand, and on competitiveness on the other. The employment objective dominated the earlier programmes. The emphasis varied between creating new jobs and protecting or maintaining existing ones. Although modernisation has been mentioned as an objective in earlier periods, competitiveness only became part of the OP strategy from 1997.

**Table 3: Main Objectives of ERDF-Programmes**

OP	Main Objectives
1989-1991	Creating new jobs in sectors other than those affected by decline (OP, p. 5). Diversification of Industrial Structure in the target region (OP, p. 5).
1992-1993	Creating new jobs or protecting existing ones in sectors other than coal, steel and textiles (OP, p. 13).
1994-1996	Creating and protecting future-proof jobs especially for women and simultaneously supporting economic development by modernisation and restructuring, taking into account women-related issues (OP, p. 34).
1997-1999	Fighting unemployment by improving the competitiveness of enterprises and creating future-proof jobs (OP, p. 42).
2000-2006	Creating new and maintaining existing jobs by improving the region's competitiveness (OP, p. 217).
2007-2013	Improving the competitiveness and adaptability of the NRW economy and creating employment (OP, p. 64).

A third element that is relatively stable is the basic structure of the instrument mix. The main elements of the strategy are: (i) supporting investment in enterprises (mainly SMEs), (ii) technology and innovation (or ‘software’ activities, as the earlier programmes call it), (iii) infrastructure, and (iv) human capital (mainly ESF). Within these broad categories, the mix of instruments changes over time as does their relative weight, but the overall structure remains more-or-less stable until the end of the 2000-2006-period. Table 4 presents an overview. From the broadly defined priority axis ‘diversifying the industrial structure’ in the earlier programmes, three separate priorities were developed in the later ones, but the actual content is mostly the same. The early programmes already combined support for enterprises, innovation and infrastructure in the priority on ‘diversifying the industrial structure’. The infrastructural component - both the SME-related infrastructure and the re-use of wasteland - has not completely vanished in the current period. It is no longer a separate priority, but the other priorities contain infrastructural elements. Innovation-oriented activities were included as part of the priority on ‘diversifying the industrial structure’ from 1989 onwards, only becoming a separate priority in the 1997-99 programme. This development is reflected by the growing financial scale of the innovation-related instruments (Chapter 4). Human capital support is visible only until 2000-06: in this period, the ESF-financed instruments were integrated into the remaining three priorities. In the current period, the ESF is programmed in a separate document, so this element no longer appears in the ERDF programme. The cross-border cooperation component was shifted to the INTERREG programmes in 1994 and, from 2000 onwards, the strategy was complemented with a strand strongly inspired by URBAN-type approaches to integrated development.

**Table 4: Programme Priorities in NRW over time - overview**



Highlighting the stability of basic features of ERDF intervention does not mean that no change and development occurred. Nevertheless, it was only in the current funding period (2007-13) that the strategy was fundamentally changed. From 2007, the territorial focus on the Ruhrgebiet was discontinued; a broader focus on competitiveness and adaptability was chosen as the main objective, a cluster policy became the guiding principle of the strategy, and competitive tendering procedures were introduced on a broad basis. The following sub-sections review the development of the explicit strategies over time. However, the shifts in the financial weight of the different components are not discussed here; this issue is dealt with in Chapter 4.

This explicit strategy as defined in the OPs is very much in line with what the interviewees report as implicit strategies. There is a broad consensus concerning most instruments and their mix. To some extent, this is certainly a result of the comparatively broad definition adopted by the strategy, comprising nearly all relevant fields of activity dealing with structural adjustment. It should be emphasised that from the outset the strategy provided for elements such as R&D support, which was not self-evident at that time.

### **3.1.1 1989-93 Preparing the ground**

This period comprises two OPs, one from 1989 to 1991, and the second from 1992 to 1993. The first OP (1989-1991) set out the strategic framework that remained more-or-less stable until 2006. As has been noted, the main aim of NRW's structural policy was to support the process of restructuring in the old industrialised regions, mainly the Ruhrgebiet. The strategy identified seven starting points:

- create new, sustainable jobs in sectors not affected by structural problems;
- strengthen small and medium-sized enterprises, which are under-represented;
- create new products and processes and apply them in enterprises;
- improve the qualification of the labour force;
- provide sufficient industrial real estate, and solve environmental problems in contaminated sites;
- modernise infrastructure and adapt it to meet the new needs; and
- strengthen private and public investment to protect the environment.

These activities were intended to contribute towards developing a diversified and competitive economic structure. The strategy was seen as a bundle of coherent sub-strategies, with small and medium-sized enterprises as the main target group. SMEs were considered to be the most important actors for creating jobs, which they could do through innovation. Improvements in infrastructure and qualification would promote the conditions that allow them to achieve this. The programme emphasised that the strategy was designed for the medium-to-long term. The programme text already expressed the expectation that it would be difficult to identify concrete effects, because several programmes run by different actors such as the federal level and the state overlapped with ERDF interventions.

Although a well-defined strategy was clearly set out in the document, the definition of objectives was vague. The programme argued that due to the medium-to-long-term effects and the overlap with other programmes, the effects of the intervention were hard to grasp. Proposed results

indicators related to employment in SMEs, the labour market situation and ecological conditions (p. 27). None of these was further operationalised.

A broad mix of instruments was applied in the programme, as follows.

- In the first priority ('diversifying the industrial structure'), 11 different instruments were used. Some of them would also be applied in several subsequent programmes: for instance, investment grants for enterprises, the provision of service and advice for enterprises or regional development agencies. Others, such as investment in technology centres or employment initiatives were not taken up by later programmes. Remarkably, there was already an innovation credit programme in this first programme.
- The second priority ('re-use of industrial wasteland') had three instruments, related to the re-use of wasteland, the re-use of old industrial buildings, and the improvement of the environmental situation. These types of instruments would be continued in subsequent programmes.
- The third priority ('cross-border development') was devoted to the specific aspect of co-operative development strategies. The background history included that the first structures for cross-border co-operation were established in NRW. This feature would also be part of the following period's programmes, but later on would no longer be pursued by the ERDF programmes.

The programme highlighted that the strategy was embedded in NRW's efforts to overcome structural problems. In 1987, two major initiatives were launched: the 'initiative for the future of the mining regions' and the 'initiative for the regions of NRW'. With these initiatives, NRW implemented the so-called 'Regionalised Structural Policy' concept, which affected the strategy development and implementation processes (see Section 3.2). A number of specific instruments were used to implement the strategies. These initiatives and the ERDF programme were closely linked: without ERDF funding, many projects could not have been financed. On the other hand, the projects and measures financed under the ERDF programme had their roots in the initiatives of Regionalised Structural Policy.

A larger bundle of projects was grouped around the valley of the river Emscher near Duisburg. Heavily industrialised, the region used the river as an open sewer. Under the heading of an 'International Building Exhibition', a comprehensive bundle of different projects was integrated in the period from 1989 to 1999 to improve the situation. Activities in the Emscher region formed part of all programmes until 2000.

Summing up, the first programme contained a comprehensive strategy to support structural re-adjustment, and the mix of instruments fits well with the needs. What was specific for the situation in the Ruhrgebiet was a targeted approach to deal with the old industrial legacy in the form of contaminated sites and old buildings. Large sites that were formerly used by declining industries were often located in the heart of the cities in the Ruhrgebiet. From the interviews, there is little to add; in retrospect, however, the concept of supporting innovation seemed rather rudimentary to some of the interviewees. The second OP (1992-1993) referred explicitly to the first one for a detailed description of the development objectives and strategy. The priorities and



instruments of the first programme were also applied in the second one. A new ESF component was introduced with a separate 'qualification and employment' priority with financing for training and qualification instruments to support readjustment and ecological and social modernisation.

### **3.1.2 1994-99 Maintaining the effort**

The third OP (1994-1996) repeatedly emphasised continuity. The main objectives were to create jobs and to accelerate economic development and modernisation. But four clearly defined sub-objectives were now included:

- diversification of the economic structure;
- adjustment and modernisation of enterprise-related infrastructure;
- re-use of wasteland; and
- support for human capital.

The main elements were meant to reinforce each other. Although this approach appears a bit different from the previous one, the content remained much the same, and even the instruments were mostly the same. Some new elements appeared, such as a small programme to support marketing in tourism.

This programme introduced some changes in the quantification of objectives. At the level of single instruments, a number of quantified objectives were defined. Formally, this is part of the ex-ante evaluation, but the programme addressed quantified values.

From the link to the domestic approach of Regionalised Structural Policy, a new aspect was emphasised in the programme - without actually being new: networking and cooperation were seen as important elements of the strategy. The programme listed a number of areas where cooperation could be used to improve effectiveness and efficiency, e.g. research and innovation, training and education and the development of sectors and branches. In contrast to how it is perceived nowadays, the programme did not foresee specific instruments to improve cooperation and networking. Instead, cooperation acted as a guiding principle of Regionalised Structural Policy.

The fourth programme (1997-1999) presented a certain shift in strategic orientation. Whilst the first three programmes were predominantly designed to support structural adjustment, this programme shifted the emphasis to employment. The most important objective was to reduce unemployment; competitiveness of the economy ranked second behind this. As a consequence, some changes occurred in the development priorities:

- prepare enterprises for global competition;
- increase the number of start-ups;
- improve competitiveness by using new technologies;
- develop NRW into a leading location for media;
- use the employment potential of services;
- support qualification and employment;
- link work and the environment; and
- equal opportunities.

Although this list differed from the priorities set in the previous programmes, the set of instruments used to implement the strategy remained mostly unchanged. Nonetheless, some new issues appeared on the agenda: the sectoral focus on the media was new and ranked high in the strategy, the support of start-ups gained additional weight, and generally the focus on employment effects - for instance in services - dominated the structural re-adjustment.

This programme did not contain any quantified objectives.

The programme remained explicitly embedded in the context of national policy, this time under the heading of 'dialogue- and process-oriented action strategy'. Under this heading, Regionalised Structural Policy appeared together with other elements: a start-up initiative, sectoral initiatives that form a nucleus for the cluster strategy in later periods, and the Emscher area project bundle. In this programme, Regionalised Structural Policy was not the most prominent reference in domestic policies. This reflects the development of Regionalised Structural Policy at that time (see below).

At the level of instruments, the programmes of this period again continued with the mix developed in the second programme with only a few minor changes. So finally, what looks like a strategic re-adjustment in the fourth programme, appeared as a bit cosmetic. Changes in the actual mix of instruments were limited. An explanation could be that, as several interview partners stated, when Wolfgang Clement became Minister of Economics of NRW in 1995 a new policy style was developed. Specific attention was given to larger and more visible projects. Driven by the new political actors, flagship projects were given preference over the steady work of developing small projects. Some changes in the strategy, such as giving media a prominent place, followed this philosophy.

### **3.1.3 2000-2006 Looking for new directions**

The fifth programme (2000-2006) was the first to present a structured system of objectives, consisting of one main objective, three sub-objectives and several cross-cutting objectives. Previously, strategies had been described in a structured way, but not condensed into a systematic system of objectives.

The main objective was exactly the same as in the previous programme: creating new jobs and maintaining existing ones by improving the competitiveness of the region. The three sub-objectives also continued strands of intervention that formed part of previous programmes:

- supporting investment in enterprises and start-ups;
- development of regional competences; and
- improving infrastructural framework conditions.

The structure of the priority axes in the programme was slightly changed. The core elements (enterprise and start-ups, innovation and competence development, and innovation-related infrastructure) remained the same. The axis 're-using industrial wasteland' was cancelled, but the content was integrated into 'innovation-related infrastructure'. The most important change is that the ESF-related instruments were integrated into the remaining axis instead of being kept together in a separate one. This led to a new axis - 'target-group-oriented support' - where some of the ESF-type interventions plus integrated development initiatives were grouped together.

Based on experience in the previous period, the main objective was quantified: the programme aimed to create or maintain 138,000 jobs, 108,000 of which were to be new ones. A larger number of additional target indicators were also defined.

With regard to instruments, some new elements to support start-ups were launched (a fund for spin-offs, for example). Under the second axis a number of different instruments with specific focuses appeared: energy, services, tourism, media and health. Those that remained comprised mostly instruments already known from previous periods. The programme financed as many as 25 individual instruments.

The programme still highlighted the link to the 'Regionalised Structural Policy', but it also mentioned a number of aspects for the first time that were relevant for future funding (and the findings of this case study):

- For the first time, fields of competence appeared in the strategy.<sup>8</sup> The perspective expected by focusing on selected fields of competence was described in a rather general way, but the approach had not yet been systematically elaborated and translated into instruments.
- A second element found in this programme, but which gains much more weight in the following one, was competitive procedures. The expectation was to generate projects of higher quality.
- Two other new aspects were also mentioned in this programme. Both become relevant later, in the case study. The first was a lack of general orientation or strategic vision in the Ruhrgebiet, which made it difficult to pool resources and find synergies between the efforts undertaken by different actors. The second point was the need to change mentalities. The domination of the region by large industrial enterprises had reduced the level of readiness to take risks and think as entrepreneurs.

This programme was still in the tradition of the earlier ones, with its main content formulated in terms of priorities and instruments. Nevertheless, a number of changes that would arise with the programme of the current period were already visible.

### **3.1.4 2007-2013 A new start**

The sixth programme (2007-13) introduces a fundamental change in ERDF strategy. Now, neither support for structural adjustment nor employment is the main objective, but instead competitiveness and adaptability. Simultaneously, the territorial focus on the Ruhrgebiet has been discontinued: the whole state is now eligible. The strategic orientation is twofold: first, to develop strengths and exploit them by innovation to increase competitiveness, and second, to improve the competitiveness of the disadvantaged parts of the state. This shift in the strategy was the result of a longer process of reorientation. In the previous period, it had become evident that the regional

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<sup>8</sup> In 2001, a study from the consulting firm Roland Berger analysed the development potential of the Ruhrgebiet. The study identifies four "fields of competence" (energy, transport/logistics, information and communication, new materials, micro-system technology and medicine technology). Based on this study, the policies have been oriented to support the development of these "fields of competence" in the 2000 to 2006 period. Both enterprise support and infrastructure should be oriented to supporting the pre-defined fields.

basis of Regionalised Structural Policy eroded over time; after an enthusiastic start in the early years, the bodies involved in regional strategy development became more and more sclerotic and inflexible, political participation was reduced, and an administrative style of lobbying for the very specific interest of every single local authority became dominant. Simultaneously, in the early 2000s the search for a new concept to guide development focused on innovation, and research began. A cluster policy was soon developed. Accordingly, the combination of the decline of regionalised policy and rise of cluster policy finally resulted in this strategic shift.

The strategy is translated into three priorities:

- Priority 1 ('Improving the entrepreneurial basis') contains instruments providing financial incentives to enterprises as well as those offering advice and support.
- Priority 2 ('Supporting innovation and developing a knowledge-based society') comprises measures to support cluster and networks, research infrastructure, innovative services, and interregional co-operation.
- Priority 3 ('Sustainable urban and regional development') combines integrated strategies for selected urban or rural areas with targeted support to overcome (infrastructural) bottlenecks in the development of the old industrialised regions.

Support for clusters and networks is now more important than it was in previous programmes. It has been integrated into a separate measure. An additional new element is an explicit 'cluster policy' that follows the lead markets of health, transport and logistics, energy, knowledge-intensive production and services, and production material and process engineering. Simultaneously, some other elements of the programme look very familiar. Generally speaking, Priority 1 is more or less the same, although the importance of revolving instruments has been strengthened.

A limited number of indicators have been selected for the definition of quantified objectives.

The reference to concepts such as 'Regionalised Structural Policy' is no longer part of this programme. Regional cooperation is only mentioned in a rather unspecific way.

Although it introduces some fundamental changes, the development strategy does not change completely. On the measures and instrument level, some core elements of previous programmes remain very important, such as financial support to enterprises, advice and other support to enterprises, and research infrastructure. At the same time, the programme now has a completely different profile due to the fact that there is no longer a territorial focus on the Ruhrgebiet. In addition, the implementation now makes extensive use of competitive tendering procedures.

### **3.1.5 Conclusions**

The development of ERDF strategies in NRW shows a striking continuity. Particularly when looking at certain types of instruments, the backbone of all the programmes remains stable:

- Financial support to enterprises (mainly SMEs, partly focused on start-ups)
- Advice and other support to enterprises

- Research infrastructure
- R&D in enterprises
- Other infrastructure (mainly re-use of industrial wasteland).

But at the same time, the mix of instruments has been constantly re-adjusted over time:

- The relative weight of the components has significantly changed (see Chapter 4)
- The emphasis in R&D has shifted from infrastructure to enterprises
- Instruments to support start-ups have been developed and differentiated
- Integrated approaches to urban and regional development have gained weight.

These developments on the level of instruments reflect some of the changes on the level of strategies. The most important ones can be summarised as follows:

- Supporting structural change -> Competitiveness
- Focus on the Ruhrgebiet -> no pre-defined eligible territory
- Link to Regionalised Structural Policy -> Cluster policy

These developments are evolutionary, so the categories should not be understood as mutually exclusive. Competitiveness was already present in the first programmes, e.g. in the form of 'modernisation'; the eligible territory has been changed repeatedly over time, but the Ruhrgebiet remains at the core of it; and cluster policy has not completely replaced the role of regional strategy development.

All in all, the following 'imputed objectives' can be identified behind the official strategies.

In the 1989-93 period, the main objectives were in the field of structural adjustment and regional spatial cohesion together with infrastructure. Social cohesion and urban cohesion played no role in this early phase. The importance of labour market activities ranks low in the assessment, as this theme was strongly focused on adaptation of those target groups affected by structural change. The assessment of achievements is positive for environmental sustainability, as the programmes combated the most severe environmental risks in the region (e.g. in the Emscher region) from an early stage, and for infrastructure, which mainly dealt with the legacy of the old industries. Other fields developed more or less in line with what could have been expected.

The 1994-1999 period utilised exactly the same structure of objectives, as the strategy remained unchanged. Among the achievements, there was greater effort and better results in the field of innovation, but besides this only little change.

The 2000-06 period was marked by a shift in objectives and generally a more differentiated strategy, leading to a higher value for the objectives set along many of the thematic axes. In terms of achievements, the enterprise sector gained importance as did - linked to this - structural adjustment. On the other hand, infrastructure lost relative weight, and for the first time urban development appeared in the programmes, leading to good results.

Finally, in the 2007-13 period, innovation and structural adjustment are the main focus of the strategy, and infrastructure continues to lose weight. The other fields appear in a broad and

balanced strategy. The achievements - as far as can be determined at present - are favourable for the innovation and structural adjustment fields. Environmental measures remain important.

Technically speaking, the quality of the strategy formulation in the programme documents has improved over time. The first programmes present the strategy as a narrative, but in a structured and systematic way; in any case, they do not present a structured hierarchy of objectives, and they explicitly decline to formulate or quantify clear objectives. All this changes over time, and from 2000-2006 the programmes present what can be assessed as a technically well-developed strategy. Nonetheless, the impression is that improving the technical quality does not necessarily improve the substance. In fact, the short and concise description of the strategy in the first programme (p. 20) gives a better impression of the strategic orientation than does the extensive description of the strategy in the 2000-2006 programme. Whereas the former needed only four pages for the description of the strategy, the latter needed 20 pages to describe the core elements alone - followed by an additional 20 pages on strategic guidelines. In the 2000-06 programme, the strategy comprised multiple cross-cutting objectives and guiding principles as well as numerous cross-references to potential synergies, and last but not least four pages of quantified objectives. All tend to obscure the actual strategy rather than clarify it. A good strategy for the programme would be a clearly focused and condensed strategy, together with a sophisticated technical translation into a system of objectives and a small number of relevant indicators.

### **3.2 Relevance of programmes to regional needs**

To understand the role of ERDF in the development of NRW and the Ruhrgebiet, it is important to put it into context. The ERDF intervention in NRW started only a short while after the launch of the 'Regionalised Structural Policy' by the state government. Based on the perception that the state of NRW was too large to solve development problems with a one-size-fits-all solution from above, and acknowledging the need to cooperate with the important actors on all levels to overcome the problems, the concept of Regionalised Structural Policy was developed. The focus here is on a number of core aspects, and more details can be found in the literature (see for instance Rehfeld *et al.*, 2000; Ministerium für Wirtschaft, Mittelstand und Technologie, 2002; Bade, 1998). The starting point of the Regionalised Structural Policy was the perception that an appropriate level to answer the severe structural changes was missing. Neither the Land level (too big) nor the local authorities (too small) could react properly. The idea of Regionalised Structural Policy was that the actors in pre-defined sub-regions of NRW should develop their own development concepts and also be involved in the development and selection of projects. To do so, separate bodies, the so-called regional conferences, were established. Depending on the region, some 20 to 200 representatives of the local authorities and other actors such as labour administration participated in the conferences. The involvement of civil society representatives varied, but generally the conferences were dominated by representatives from local authorities. One important product of this work in the regions was the regional development concepts. The first regional conferences were held between 1986 and 1992, depending on the sub-region.

When ERDF was programmed for the first time, it had to be implemented in the context of the processes of Regionalised Structural Policy that were about to start. While actual management for ERDF programmes was done on Land level, the interaction with the structures and processes of Regionalised Structural Policy was important for ERDF interventions in two ways: 1) Regionalised Structural Policy was contributing to the operationalisation of the broadly defined ERDF strategies

and 2) ERDF projects have been developed from the processes of Regionalised Structural Policy. So, in substantiating the strategy and in developing projects, ERDF and Regionalised Structural Policy have been interlinked. But formally, local actors have not been responsible for the management of ERDF programmes, but they were strongly involved in formulating and implementing specific measures and activities under the ERDF programmes.

Actually - as interview partners described it - the first ERDF programmes were written as a strategic framework offering a general orientation and tool set. The details of linking the strategy to concrete problems on the ground and selecting the relevant instruments were left to the Regionalised Structural Policy processes. Therefore on the one hand, ERDF programmes were a framework for the regional strategies, whilst the development and selection of projects was mainly performed by the regional actors. On the other hand, the ERDF allowed for substantial financial resources for the regional development processes. However, as the structures and bodies of regionalised policy were organised on a level between the local authorities and the *Land* government, it was not as simple as taking existing project ideas and using ERDF funds to implement them. Instead, a discussion on strategy and project development was induced within this newly established layer of governance.

The ERDF and Regionalised Structural Policy can thus be seen as mutually reinforcing (Friedrich-Ebert-Stiftung, 1994: 7). The evaluation of one of the first programmes goes so far as to say that 'in a certain sense, the ERDF programme is not an independent programme' (Forschungsinstitut der Friedrich-Ebert-Stiftung; 1992: 52). In relation to existing domestic instruments, the ERDF offers some additional opportunities and instruments that otherwise could not have been offered. And ERDF leaves scope for regional actors to introduce their own strategies and projects. Simultaneously, while substantiating the ERDF strategies in the light of their own preferences, regional actors obtain access to additional financial resources. So both the ERDF and the regional strategies were interacting, the former as a kind of strategy-guided financial framework and the latter as a means to implement the funds.

This close link between ERDF programmes and domestic strategy development influences the way that the strategies are written. The ERDF programmes are framework programmes, at least in the first periods. They are not meant to be implemented immediately and directly, but through the more concrete strategic approaches developed at regional level. Thus, the strategic framework developed on ERDF OP level remained stable for a long time. The necessary adaptation could be effected on the level of regional strategies. Only when the structures of Regionalised Structural Policy slowly lost importance (and strategic competence) was the approach at an OP level questioned.

During the first years, the Regionalised Structural Policy developed very dynamically. However, even at that time different trends were already becoming visible in different regions. The regional conferences choose different ways to organise their work and the participation of the economic and social partners varied. In the second half of the 1990s, the regional conferences lost relevance. Interview partners described the work as becoming more formalised and rigid. The participation in the regional conferences changed. Whereas in the first years the local authorities were often represented by politicians, in later years it was mainly administrative staff. All in all, the regionalised policy lost momentum and importance. Again, the pattern varies between the sub-regions. The interview partners agreed that from the 2000-2006 period Regionalised Structural

Policy was hardly relevant any more for the implementation of ERDF programmes. Given this background, it is no coincidence that the 2000-06 programme gives the impression of being a programme in transition. In the 2007-13 programme, the strategic gap was only partly filled by approaches such as cluster policy.

With regard to the relevance of ERDF for regional needs, the mere fact that the types of instruments applied remained comparatively stable over time indicates that the approach is indeed relevant. The strategy of the first programmes addressed factors that were crucial for the re-adjustment of economic structures: investment, innovation, qualification and infrastructure. This was a very broad and coherent approach. Nonetheless, the conclusion on the development of the Ruhrgebiet was 'A lot achieved - little gained' - an impression that was shared by most of the interview partners. No doubt, significant achievements can be registered (see Chapter 5), but serious development problems persist in the Ruhrgebiet. Consequently, the basic underlying objective of successfully overcoming structural readjustment has not yet been met.<sup>9</sup>

In retrospect, it seems as if the character of the change and adjustment was not discerned when the first programmes were written. After such a fundamental breakdown of dominating industrial structures, change is not simply an economic problem, but also has societal and cultural aspects. Thus, what a number of interview partners formulated in different ways is not so much that there were obvious needs that were not addressed, but rather that there was an incomplete understanding of the change taking place. From today's perspective, the following aspects were mentioned in the interviews as having been overlooked or underrated in the ERDF strategies:

- The relevance of education, not only vocational training, but also basic education. The strategy focused on adapting the qualifications of people who had lost their jobs. Perhaps it should have taken up the need to qualify and train the younger generations as well as possible.
- Culture and tradition. The large industrial structures were not only dominant in shaping the economy; the large enterprises were also important actors in organising sport and culture. On the other hand, there was also a tradition of working in the same enterprise over generations. A breakdown of these enterprises then leads to problems in civil society and culture. In a way, there is a need to re-invent a whole region - not only economically, but also in terms of self-conception and culture.
- Long-term task. Fundamental change of economic structures is a long-term task that takes a generation or longer. This can be seen in East Germany, but also in the Ruhrgebiet.

Although not mentioned explicitly in the interviews, there is one additional point of relevance:

- Development in an urbanised region: the Ruhrgebiet can actually be seen as one large urbanised agglomeration, but the actors are organised in a number of cities and districts, each with its own strategies and aims. However, none of the larger cities is in the normal situation of sharing functions with their surroundings. Instead of the normal rural hinterland, the cities are situated very close to each other, making it difficult to pursue the

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<sup>9</sup> Whether profound structural change can be completely dealt with in 20 years remains a question.



usual development strategies. There is a need for coordination to ensure that different cities do not develop similar - and thus competing - specialisations.

All in all, the ERDF strategy cannot be assessed simply in terms of whether it fitted existing needs. On the one hand, it was designed as a framework strategy for the regional initiatives. Linking concrete problems and activities in order to influence them was the task of the regional level in this conception. The purpose of the ERDF was only to offer a framework to work with. Superficially, the decline of Regionalised Structural Policy did not affect ERDF implementation directly. The single instruments from which the programme was composed were still able to rely on their specific implementation procedures, so that implementation in terms of delivery and finance was not affected. But after the decline, an institutional arrangement for co-ordination of strategy development and project selection was absent. This does not signify that there was no co-ordination in the implementation of different instruments. Local authorities or specific initiatives allowed for a certain degree of coordination in implementation and project selection. However, in comparison with Regionalised Structural Policy, these efforts have been more limited and less systematic, only covering smaller geographic units. So, the decline of Regionalised Structural Policy caused a loss in strategic coordination across various instruments of the ERDF programmes.<sup>10</sup>

Having said this, the strategy is generally assessed as well defined and tackles a number of important factors to support structural re-adjustment. In the framework given by the European rules, the strategy is well focused on regional needs.

The theme raised in several interviews was not so much whether certain specific needs could be met in a better way, but rather a concern that the character of the on-going processes was not completely understood. Profound structural change is not only economic, but also social and cultural. This raises the question if the limited resources of ERDF could have been spent more efficiently by addressing the rather soft, cultural and societal factors earlier and more explicit. Whereas the strategy might look somewhat incomplete from today's perspective, it is difficult to judge whether it could have been designed very differently. As mentioned above, the first ERDF strategy contained elements that were not very high on the regional development policy agenda at that time (emphasis on innovation, adjustment of qualification).

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<sup>10</sup> So, certainly, the quality of single projects was not affected. The interesting question is in how far a better coordination of project selection across instruments makes funding more effective and/or efficient. This question cannot be answered completely in this study. Beyond rather general statements, none of the available evaluations covers this aspect systematically.

**Table 5: Needs compared with imputed objectives for eight thematic axes**

Thematic axis		1989-93		1994-99		2000-06		2007-13	
		Needs	Imputed Objectives	Needs	Imputed Objectives	Needs	Imputed Objectives	Needs	Imputed Objectives
Enterprise		+	3	+	3	+	4	+	4
Structural adjustment		++	5	++	5	++	5	++	5
Innovation		+ / ++	3	+	3	+	4	++	5
Environmental sustainability		++ / +	3	++	3	++	3	+	3
Labour market		++	2	++	2	++	3	++	2
Social cohesion		= / +	2	=	2	=	3	+	4
Spatial cohesion	Regional	++	5	++	5	++	5	++	4
	Within Subregion /city	+	2	+	2	+	3	+	4
Infrastructure		+	5	++	5	++	3	+	2

**Needs Scale** (evaluation of the region at the start of the period)

- ++ Very high need: the region is highly deprived in this thematic axis
- + High need: the region is somewhat deprived in this axis
- = Average need: the region is an average one in this axis, whose values are around the national mean so that there is not the need for a strategy specific for this region
- Low need: the region is better than the average in this axis, or above the national mean
- Very low need: the region is already a front-runner in this axis, not only at national level but also at European level

**Imputed Objectives** (average effort in the period by structural fund support in the region)

- 5 Very high effort: this axis is central to the regional development strategy co-financed by the ERDF (and, if relevant, the Cohesion Fund) development strategy
- 4 High effort: this axis is often mentioned in the regional development strategies and a significant effort is put on it
- 3 Average effort: this axis is considered in the regional development strategy but not its focus
- 2 Low effort: this axis is only marginally considered in the regional development strategy
- 1 No effort at all in this axis is provided by ERDF

## 4. EXPENDITURE ANALYSIS

### 4.1 Financial allocations

NRW has participated in ERDF funding from the introduction of the programme approach in 1989 to the present. The allocation of EU funds has increased steadily over time (see Table 6). In the first period, the annual average allocation of EU funds was €27.23 million (€19.88 million ERDF, €7.35 million ESF). In the current period, €183.35 million of ERDF funds are allocated to NRW each year. In the last two periods, the ERDF OP for NRW was amongst the largest in Europe under both Objective 2 and Competitiveness.

As data on the original financial allocation in the Community Initiatives (CI) programmes are incomplete, some selected figures are presented here. Nevertheless, it is obvious that CI funding is relevant: in the 1994-1997 period, RESIDER and RECHAR programmes contained EU funds that were nearly half the size of the ERDF OP for 1994-1996.

**Table 6: NRW ERDF programme allocations 1989-2013 (in million Euros/ECU, unadjusted values, nominal)**

Programme	Period	€ ERDF	€ ESF	€ Total
<b>ERDF OP</b>				
ERDF OP	1989-1991	59.65	22.04	81.69
ERDF OP	1992-1993	136.64	34.16	170.80
ERDF OP	1994-1996	263.60	97.57	361.17
ERDF OP	1997-1999	335.95	114.62	450.57
ERDF OP	2000-2006	859.68	153.14	1012.82
ERDF OP	2007-2013	1,283.43	-	1,283.43
<b>Community Initiatives</b>				
RESIDER II	1994-1997	71.328	30.566	101.89
RECHAR II	1994-1997	46.515	19.935	66.45

Notes: Complete figures on Community Initiatives are not available.

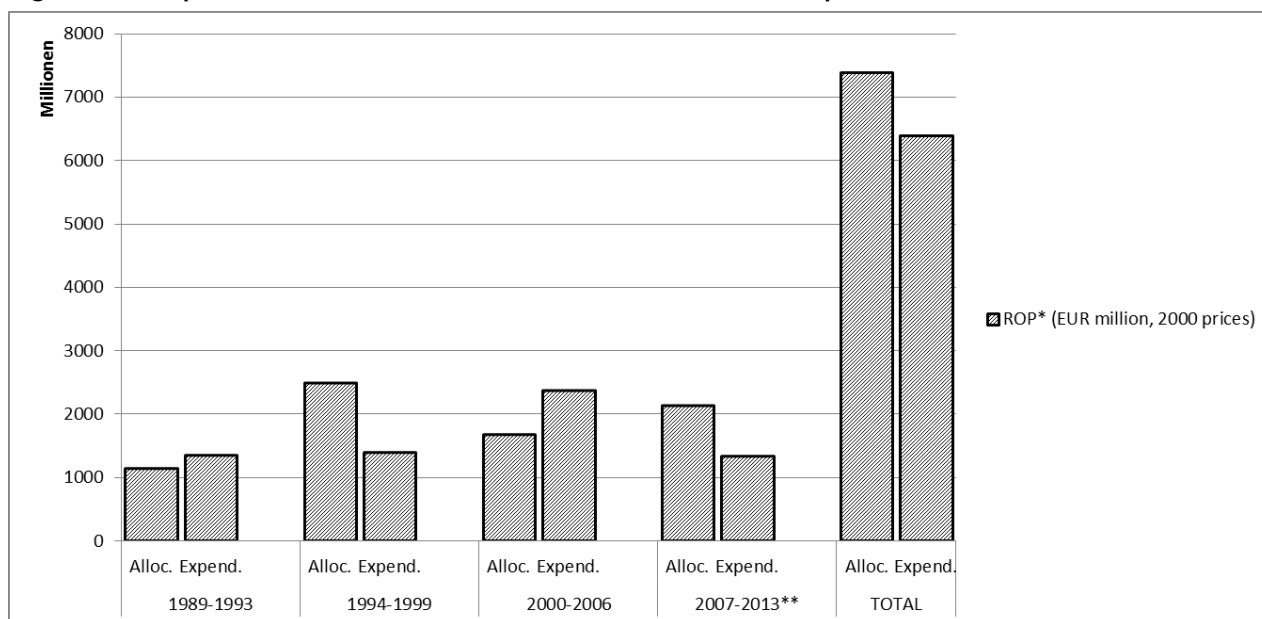
For most of the programmes, complete or nearly complete implementation of the planned EU budget could be achieved. The final reports often refer to administrative difficulties, e.g. as a result of review findings, that required changes in procedures, but the funding seems to have been spent relatively smoothly overall. For the 2000-2006 period, not all the funds could be spent, and a reduction of the ERDF contribution was revealed in the final report.

### 4.2 Expenditure compared with allocations

Having discussed the allocation of EU funds, this section presents an analysis of the total expenditure of the programmes (public funds from EU and national sources, plus private investment). In some cases, when the total expenditure is not available, total public expenditure is used instead. In any case, 'total expenditure' here is taken to mean 'total eligible expenditure', given that the actual total expenditure is higher, depending on the eligibility rules of the instruments applied. Lastly, the following figures only cover the mainstream ERDF programmes, because data on CIs were incomplete.

The total expenditure induced by ERDF in NRW from 1989 to 2011 amounts to €6.39 billion<sup>11</sup> (see Figure 2). This total is lower than the allocation of €7.34 billion, the difference being attributable to a number of different factors, e.g. eligibility and administrative aspects, changes in the relative weight of different project types with different combinations of financial sources, or simply the aforementioned missing data for private funding. Accordingly, a number of different reasons can lead to expenditure differing from allocation. For the current funding period, expenditure is below the allocation as the funding period is still in progress. It is impossible to identify the detailed reasons for these differences in the other periods, so no detailed discussion is presented for this figure.

**Figure 2: Comparison between financial allocations and actual expenditure**

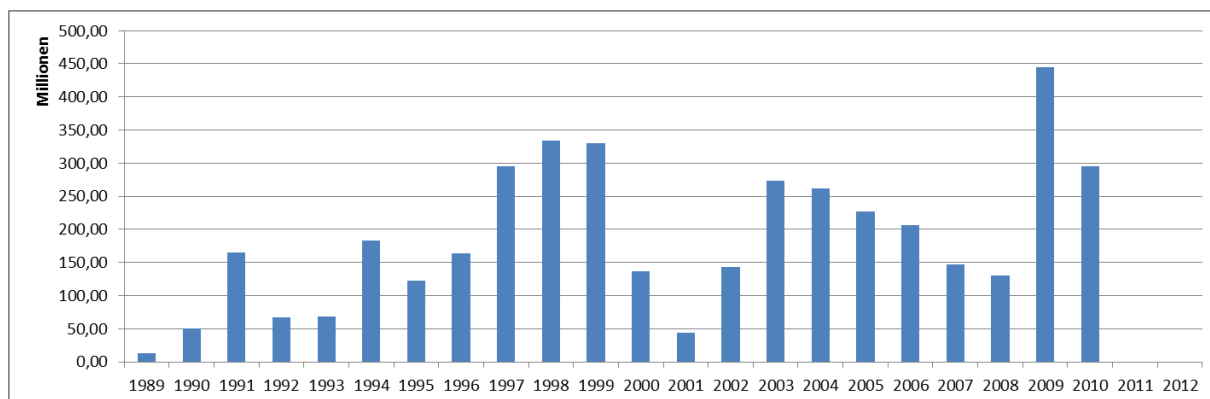


Source: Operational Programmes, author’s own calculations.

Looking at the annual pattern of expenditure (see Figure 3), the growing volume of funds is striking. As a trend, the annual spending increases over time. There is no obvious explanation for the variation in 2000-2002; most likely there are problems with the data basis. In general, the breakdown of expenditure on an annual basis must be treated with caution, as there are a number of doubts concerning the reliability of data.

<sup>11</sup> If not indicated otherwise, €-figures are deflated and calculated in €/2000 values

**Figure 3: Annual expenditure**



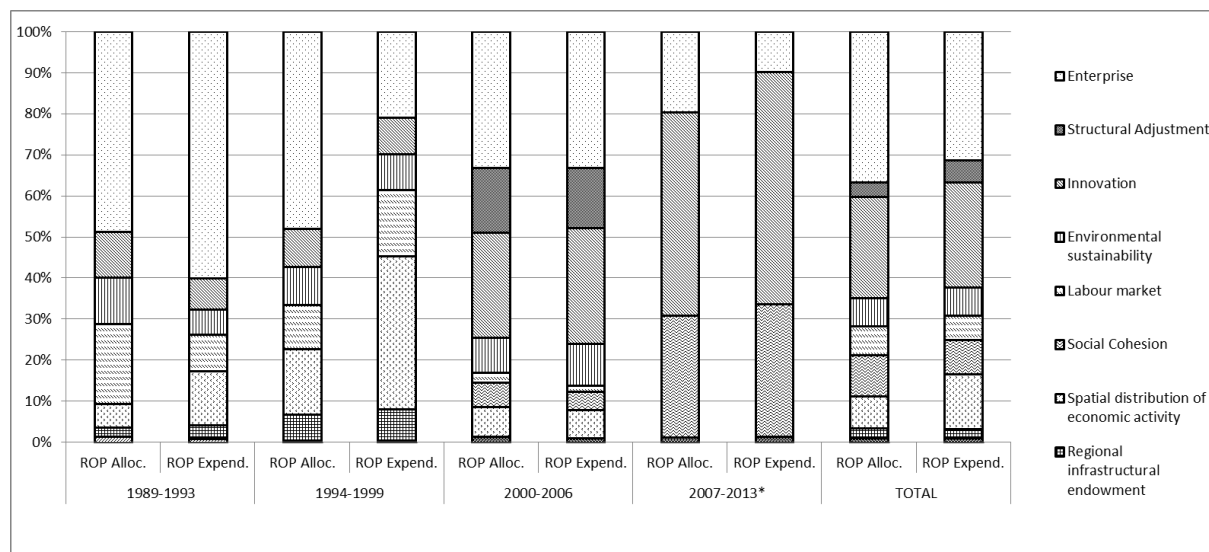
\*Data are missing for 2011 and 2012. Annual expenditure data for this region must to be treated with caution, due to the complexity involved in its compilation.

For the analysis of expenditure over time, the financial figures have been assigned to different thematic axes. Each axis comprises instruments with the same objective. The ‘enterprises’ axis therefore contains not only direct support to enterprises, but also infrastructural measures with a clear objective of supporting enterprises.

For NRW, over the entire period from 1989 to 2012, more than two-thirds of the expenditure was concentrated on three thematic axes (see Figure 4). The highest share (31 percent) went to enterprise support, one-quarter (26 percent) went to innovation support, and 13 percent was spent on influencing the spatial distribution of economic activities. These three axes account for 70 percent of the expenditure and thus dominate the profile of ERDF funding in NRW.

Direct financial support forms a standard element contributing to the development of enterprises. On the one hand, this is the common grant for investment in enterprises. But on the other hand, NRW started remarkably early with revolving instruments, and it had already launched an instrument to reduce interest rates for credit during the first programme (as early as 1989). Similarly, a credit programme was implemented during the 1994 to 1999 funding period. Support for infrastructure, mainly technology centres and start-up centres, played an important role in the first programmes. Later, infrastructure was targeted to logistics and transport (2007-2013). Start-ups have been supported in different forms over time: either with financial incentives or with advice offered and financed by the programme. Supporting services for enterprises (mainly SMEs) also formed part of this axis. In addition to support for start-ups, general management support and export-oriented advice was offered. The relative weight of the expenditure under this thematic axis varies, with the first period dominated by interventions under this axis, whereas they account for only around 10 percent in the current period.

**Figure 4: Allocation and Expenditure by thematic axis (percentage)**



Source: Operational programmes, annual implementation reports, author's own calculations.

Innovation, accounting for 26 percent of the total expenditure, is the second important thematic axis. Whereas enterprise support was very important in the beginning, innovation played only a minor role in the programmes during the first two periods. Only in the 2000-2006 period did the share of innovation-oriented instruments increase to reach more than a quarter. Finally, the current period shows an innovation-dominated pattern of expenditure: more than 50 percent was spent on innovation support during the first years of the current programme. The instruments utilised were classical grant schemes, transfer programmes and, in a more minor role, infrastructure.

More than half of the total expenditure has been spent on enterprise support and innovation. The 'spatial distribution of economic activity' axis contributes 13 percent. This axis is dominated by a typical approach for the development of the formerly industrialised Ruhrgebiet area, focused on the re-use of industrial wasteland, mainly for economic purposes.

The remaining axes, together making up 30 percent of the total expenditure, are social cohesion (8 percent), environmental sustainability (7 percent), the labour market (6 percent), structural adjustment (5 percent) and regional infrastructural endowment (2 percent).

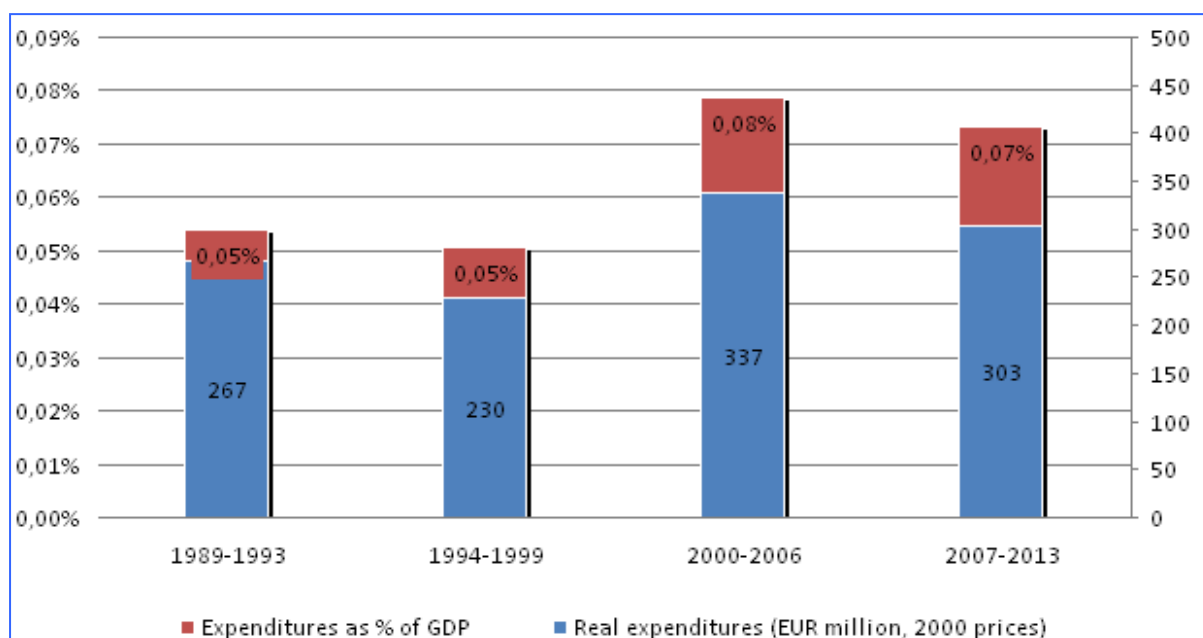
Compared to the strategic profile of the programmes (Chapter 3), the relatively small weight of the measures targeted towards structural adjustment may seem surprising. However, the strategic objective of supporting structural adjustment does not necessarily require instruments with a sectoral focus, but can also be pursued by general support for investment and start-ups. What might be underestimated when considering the thematic axis is the importance of infrastructure: different kinds of instruments grouped around the re-use of industrial wasteland can be found under different axes - depending on the final purpose of the re-use. In addition, some typical infrastructural programmes, such as investment in technology centres in the 1990s and urban development since 2000, also allowed for infrastructural investment. Therefore, infrastructure played an important role in the ERDF programmes over the whole period. The shift from standard support for investment and start-ups to a more innovation-focused strategy over time is visible and

in line with the stated aim of the strategies. Recently, the ‘social cohesion’ axis has gained importance; this heading mainly covers integrated urban development.

In general terms, the development of ERDF intervention in NRW started with a period of enterprise support, and the first years were dominated by expenditure under this axis. The importance of innovation has increased and has finally come to dominate the programme for the current period. Complementary types of intervention, mainly related to infrastructural activities with varying profiles over time, make the typical pattern complete.

The total expenditure under the ERDF programmes amounts to some 0.05 to 0.08 percent of the GDP of NRW. Looking at the Ruhrgebiet in isolation, the share is some 0.2 percent. In macro-economic terms, the ERDF intervention only leads to a very small additional impulse, too small for the effects to be grasped by macro-economic models such as the HERMIN model.

**Figure 5: Evolution of annualised expenditure across the four programme periods**



Source: Operational programmes, annual implementation reports, author’s own calculations.

For a few years between 1995 and 2006, the ERDF contribution can be considered in context with other national spending in the Ruhrgebiet area (see Lackmann 2008 for the following). The comparison only includes those funds spent by the federal level. From 2000 to 2004, the Ruhrgebiet received some €123 per capita from the ERDF programme (see Table 7). The major instrument of domestic regional policy, the Joint Task ‘Improving Regional Economic Structure’ spent €100 per capita, but over a longer period. As ERDF funding was also spent on a roughly similar level from 1996 to 1999, the ERDF contribution per year is more than twice as high as the Joint Task’s intervention. Other programmes such as the Joint Task ‘Constructing Universities’ also spent significant amounts - the role played by the universities founded in the 1980s in the regional development processes is discussed later in the report. What is striking is that the sectoral support to the coal industry outweighs by far all the efforts to support structural adjustment. Whereas some €24.6 per capita and year were spent under ERDF, the coal sector subsidies amounted to

€176.4. Coal subsidies on the one hand, and ERDF along with the Joint Task on the other, have different objectives. Whereas the coal subsidies aim to cushion the breakdown of existing structures, the ERDF and Joint Task want to support and actually speed up structural change. This context should be kept in mind when discussing the potential effects of ERDF intervention. In a way, ERDF attempted to support development processes that have been slowed down by other interventions with substantial financial means. Consequently, all the effects cannot be attributed to ERDF intervention as it overlaps with significant other interventions spent in the same area.

**Table 7: Spending of different federal programmes in the Ruhrgebiet**

Programme	Period	€/capita	€/capita and year
ERDF	2000-2004	123	24.6
Joint Task 'Improving Regional Economic Structure'	1996-2006	100	9.1
Joint Task 'Constructing Universities'	1996-2006	77	7.0
Sector subsidies (coal)	1996-2006	1.940	176.4
Active labour market policy	1996-2006	3.800	345.5

Source: Lackmann 2008, own calculation, unadjusted values.



## 5. ACHIEVEMENTS ANALYSIS

This chapter examines the achievements of the ERDF programmes in Nordrhein-Westfalen throughout the period from 1989 to the present. It examines the achievements reported in programme reports over each of the periods and presents an analysis of the achievements by theme. It also examines complementarities and synergies with other EU-funded programmes and with domestic programmes.

### 5.1 Reported & actual achievements

The analysis of achievements explores both programme and thematic perspectives. For each programme, the available achievement data illustrate the outputs and results of the measures in terms of what they delivered and the impacts they had on the region.<sup>12</sup> An alternative perspective is to examine how particular themes of intervention developed over time and to identify the evolution of achievements within each of these themes.

In the following analysis, the emphasis is initially on the achievements described in the final reports and evaluations of the programmes. The second part of the analysis - the achievement analysis by theme - goes further by describing in more detail the evolution of the themes, thereby placing the reported achievements in the context of evidence of actual achievements.

#### 5.1.1 Programme-level achievements

The main sources for the reported achievements are the final reports. The degree of detail and accuracy of the reports has improved over time. In the first funding periods, the final reports mostly contained descriptions about the supported projects but had hardly any quantitative data about the results achieved. In these periods, reports about material achievement were primarily established by evaluations. Since 2000-2006, the official final reports have included more detailed (quantitative and qualitative) monitoring information on material achievements.

The 1989-93 programmes did not produce final reports outlining material achievements, and reporting was conducted mainly on financial grounds rather than in terms of results. However, for the programme phase I (1989-1992), a report on material achievements formed part of the evaluation undertaken by the Friedrich Ebert Foundation (Friedrich-Ebert-Stiftung, 1994). On the basis of the programme targets, the evaluators developed quantitatively or qualitatively measurable indicators for every measure with information assigned from funding files and official statistics. An overall result of the evaluation was that the programme displayed mainly positive effects, and therefore continuation of the funding approach was recommended. An overview of the main outputs and partial results achieved in the implementation phase I (1989 to mid-1992) is provided in Table 8.

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<sup>12</sup> [http://ec.europa.eu/regional\\_policy/sources/docoffic/working/doc/indic\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/working/doc/indic_en.pdf),  
[http://ec.europa.eu/regional\\_policy/sources/docoffic/2007/working/wd2indic\\_082006\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/2007/working/wd2indic_082006_en.pdf),  
[http://ec.europa.eu/regional\\_policy/sources/docoffic/2014/working/wd\\_2014\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/2014/working/wd_2014_en.pdf).

**Table 8: Main reported achievements of the 1989-94 programme (phase I, 1989-1992)**

Subject area of funding	ERDF funding (subsidies, in million DM)	Outputs	Results
Support for investments in enterprises	26.9	approx. 1,200 investment projects	above 1 billion DM (about 522 million Euro) total amount to be invested approx. 4,000 new jobs approx. 6,300 safeguarded jobs
Construction and extension of infrastructure for SMEs (technology centres, start-up centres etc.) and for Education and Training	99.8	13 new or extended technology and start-up centres 78 new or extended education and training centres	approx. 3,000 new jobs approx. 1,200 safeguarded jobs approx. 2,500 courses with 44,000 participants
Support for guidance and technology transfer, in particular for SMEs	35.6	49 projects of technology transfer and technological guidance approx. 2,000 business and start-up consultations support of 3 regional development agencies support of 12 regional agencies 'women and profession'	above 127 million DM (about 66 million Euro) total amount to be invested approx. 650 new jobs approx. 2,000 safeguarded jobs
Re-utilisation of industrial wasteland for economic purposes	41.7	Re-utilisation of 116 ha industrial wasteland	above 128 million DM (about 67 million Euro) total amount to be invested creation of the preconditions for approx. 4,800 jobs
Re-utilisation of factory buildings and construction of trade parks on industrial wasteland	28.4	Re-utilisation of 17,200 square metres utilisable space of land	above 58 million DM (about 30 million Euro) total amount to be invested creation of the preconditions for 500-700 jobs
Improvement of environment and environmental conservation	20.1	development of 90 ha industrial wasteland	above 131 million DM (about 68 million Euro) total amount to be invested creation of the preconditions for 1,530 jobs

Source: Friedrich-Ebert Stiftung 1994. All €-figures at current prices (as the totals have not been broken down to annual components, they cannot easily be deflated).

In interpreting the results, it should be taken into account that the funding rates differed considerably between measures. Whereas the maximum funding rate for investments in enterprises was 18 percent, infrastructure projects were funded by up to 80 percent of the recoverable total costs. Therefore the total amount to be invested was much higher in the funding area of industrial investments than in other funding areas.

The main outputs and results were the redevelopment of industrial wasteland, improvements in infrastructure for economic purposes, technology transfer, start-ups and further education, and the support of businesses investments. With regard to the results and impacts of the programme, both direct and indirect employment effects were reported. According to the evaluation of phase I (1989-92), overall 17,000 jobs had been safeguarded or created directly and further 7,000 jobs

were expected in the long term as a result of the infrastructure measures. In relation to this, the total number of unemployed people in the Ruhrgebiet was 211,392 in November 1991 (Friedrich-Ebert-Stiftung, 1993: 24 *et seq.*). The interim evaluation report included an estimate of the contribution of regional economic development funding to the total job-creation in the NRW Objective 2 programme areas. Impact coefficients were set up to show the relationship between the number of funded jobs<sup>13</sup> and the total number of new jobs in the Objective 2 areas. With regard to the overall funding (Objective 2, RESIDER, and national and regional funding programmes), the evaluation calculated a mean degree of effectiveness of 40 percent. The result for the Objective 2 funding was a mean degree of effectiveness of 7 percent, which shows that the contribution of the Objective 2 funding was only a small part of the regional economic development funding effects in NRW (Forschungsinstitut der Friedrich-Ebert-Stiftung, 1992: 184).

On the basis of these reported achievements, the Managing Authority<sup>14</sup> made projections and estimates for phase II (1992-1994), which were reported in the Operational Programme 1994-1999. Besides these estimates, which will not be elaborated here, there are no quantitative data for the achievements of the whole funding period.

In the 1994-99 funding period, programme monitoring with output and result indicators was introduced and subsequently analysed and assessed in the external evaluation. The final report of the programme includes a summary of the evaluation results. However, according to the final report, there were difficulties with the quantitative data again because the monitoring system was only finalised in 1996. Because of that, continuous data were only available for a few indicators and the evaluation results are mostly of a qualitative nature (Ministerium für Wirtschaft und Arbeit des Landes Nordrhein-Westfalen, 2003: 60).

In comparison with the 1989-1993 funding period, the main emphases in 1994-99 were almost the same but with a larger financial budget. The main reported achievements were:

- Improvements in infrastructure: approximately 2,500 hectares of re-utilised industrial wasteland (1,400 hectares usable for economic purposes), approximately 400 hectares of redeveloped industrial wasteland for environmental sustainability, 22 new or extended technology and start-up centres with approximately 80,000 square metres of newly utilisable land area, 86 new or extended education and training centres with 17 hectares of new and 50 hectares of modernised utilisable land; and
- Job creation and safeguarding: approximately 6,800 new jobs (including 1,800 for women) and 9,000 safeguarded jobs through investment projects, approximately 5,600 new jobs and 4,600 safeguarded jobs through innovation and technology support (infrastructure and consultation), creation of the preconditions for approximately 23,000 jobs through infrastructure projects for economic or innovation-oriented purposes (MR/InWIS/NEI 1997 and MR/InWIS/NEI 2000).

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<sup>13</sup> It should be taken into consideration that the data basis for these estimates included only the intended values and not the actual values of created jobs or the values of long-term employment impacts.

<sup>14</sup> Although only introduced in the 2000-2006 period, the term “Managing Authority” is used to refer to the body responsible for the programme according the respective regulations. “Managing Authorities” refers to the entire set of functions assigned to the Managing Authority in the regulations. Some tasks have been delegated (e.g. to the secretariat).

In addition to these reported quantitative data concerning outputs and results of the funding, another part of the monitoring was an assessment of the contribution of the projects to eight operational programme targets (development targets). To this end, the funding departments had to estimate the impact of every project during the approval process. The basis for the estimate was a four-stage scale from ‘large impact’ to ‘no impact’. An overview of the impact estimates for the eight development targets for all projects is presented in Table 9. The estimates vary between the development targets. A large impact was mainly expected only with regard to the development target ‘Support of qualification and employment’. An average level of impact was anticipated in particular for the targets ‘Preparing enterprises for the challenge of global competition’, ‘Improving the competitiveness of SMEs through the development and use of new technologies’ and ‘Using the employment potential of the service sector’. The contribution to the other development targets was estimated mainly to have either a weak or no impact. With regard to the development target ‘Transforming NRW into a leading media location in Europe’, which was assessed to have had no impact in 57.2 percent of cases, the evaluation raised the question as to whether this specific measure was really intended as a development target. With respect to the project contribution to the targets ‘Increasing the numbers of start-ups’, ‘Connecting employment and the environment through sustainable development’ and ‘Creation of equal employment opportunities for women and men’, which were mainly appraised as having a weak or no impact, the evaluation recommended that they be taken into greater consideration in some measures. Altogether, the estimated impacts in relation to the different targets were seen as demonstrating the multi-dimensional funding approach that would fit in with the overall strategy (MR/InWIS/NEI, 2000: 74). However, it should also be taken into consideration that the designated impacts are only estimates and do not describe the realised contribution of the projects.

**Table 9: Expected project impacts of the 1994-99 programme**

Development target	Intensity of the impact for all projects (as percentage of all projects)			
	large impact	average impact	weak impact	no impact
Preparing enterprises for the challenge of global competition.	22.6	<b>32.6</b>	23.3	20.8
Increasing the numbers of start-ups.	14.5	19.4	26.0	<b>39.4</b>
Improving the competitiveness of SMEs through the development and use of new technologies.	24.7	<b>30.4</b>	19.9	24.4
Transforming NRW into a leading media location in Europe.	9.2	14.8	18.2	<b>57.2</b>
Using the employment potential of the service sector.	20.0	<b>35.2</b>	23.1	21.1
Support of qualification and employment.	<b>45.8</b>	38.5	10.9	4.1
Connecting employment and environment through sustainable development.	12.9	24.3	<b>33.8</b>	28.4
Creation of equal employment opportunities for women and men.	17.0	23.0	<b>32.8</b>	26.6

Source: MR/InWIS/NEI 2000, p. 68.

In the 2000-06 funding period, the programme reports included for the first time a monitoring system with quantified targets and results. Nevertheless, a direct comparison of quantified targets and results was only partially undertaken. The final report of the programme described the

achievements with respect to the main target, three strategic targets and two cross-sectional targets.

The main target of the programme was the creation and safeguarding of jobs via the improvement of regional competitiveness. In the ex-ante-quantification, it was estimated that 108,000 jobs should be created (20,000 in the short term and 88,000 on a long-term basis) and 30,000 jobs should be saved. According to the details of the beneficiaries, the programme (ERDF and co-financing) had the following direct and indirect employment impacts (gross value) (MWEBWV, 2011: 18):

- 12,500 new and 12,500 safeguarded jobs through industrial investment funding. According to the mid-term evaluation, these employment effects are direct and short-term and the creation and safeguarding of jobs is an integral part of the measures (IAT, ÖIR, EPRC, 2003: 183).
- 1,600 new and 2,300 safeguarded jobs through industrial innovative funding. The employment effects of innovation-oriented funding occur mainly over the long term and are difficult to measure (IAT et al., 2003: 183).
- Creation of the preconditions for 19,000 new and 6,000 safeguarded jobs through infrastructure improvements and the creation of industrial sites. In this funding area, employment effects are indirect and medium- or long-term. According to the evaluation and the interviewed experts, there were large interregional differences in the potential and dynamic of employment effects. Successful examples were the development of industrial parks in a technology-oriented environment or in an area with potential for a logistic centre (IAT et al., 2003: 183).
- Indirect contribution to approximately 17,000 new and 45,000 safeguarded jobs through advice for start-ups and SMEs. Following a consultation measure, the reported number of new jobs mostly comprised the establishment of new start-ups. The number of safeguarded jobs was based on estimates by the consulted enterprises and seems very high. Since the data came from the beneficiaries, it can be assumed that there were some variations in the interpretation of the indicator. Overall, it should be considered that start-ups or new and safeguarded jobs after a consultation cannot be interpreted as direct employment effects of the measure. The advice for start-ups and SMEs only supports the establishment of an enterprise or the creation or safeguarding of jobs and there is no direct causality (IAT et al., 2003: 183).

Because of the different kinds of employment effects, it should be considered that a comparison or an aggregation of the employment effects over the whole programme is inadmissible, and that information about the funding context (priority, instrument etc.) is always important for the interpretation of monitoring data (IAT *et al.*, 2003: 173). Furthermore, it is apparent that most of the employment effects arise only in the medium or long term, which means that the numbers are mainly estimates or incomplete. In particular, innovation-oriented measures aiming to make a sustained contribution to regional competitiveness have difficulties in estimating the long-term employment effects, because the funding is involved mainly during the period before the product is ready for the market (IAT *et al.*, 2003: 184).

The targets and achievements for the strategic and cross-sectional targets are described in Table 10. Regarding the overall perspective, the targets and achievements do not always fit together, and some of the targets have not been achieved. The final report mentioned these deviations only in part and did not include any detailed reasons for these differences.

**Table 10: Strategic and cross-sectional targets and results of the 2000-06 programme**

Strategic Target / Indicator	Targets	Achieved Outputs or Results
<i>Enhancement of investment activity including businesses set up</i>		
Annual investment volume in the funding area	€510 million	€360 million
Number of supported businesses set up	13,000	3,000 through foundation premium 17,000 through consultation
<i>Development and strengthening of regional competence</i>		
Employment of R&D-personal	Increase	Investment of €372 million in R&D-projects
Businesses set up in technology-oriented service industries	Increase	New R&D products and procedures
Number of supported enterprises with increased competitiveness	21,000	41,000 advised enterprises
Number of qualified persons	21,000	-
<i>Improvement of infrastructural conditions</i>		
Size of developed floorspace used for businesses	950 ha	509 ha
Size of developed utilisable office space	40,000 square metres	85,000 square metres
Number of created or extended research institutes	15	-
Number of created or modernised educational and training places	19,600	17,600
<i>Sustainable and environmentally suitable development</i>		
Proportion of the projects with a positive environmental contribution	50%	56%
Creation of equal employment opportunities for women and men		
Proportion of jobs for women among all new jobs	40%	30% (industrial development)

Source: Author's own depiction on the basis of MWEBWV 2011, p. 15 *et seq.* All €-figures at current prices (as the totals have not been broken down to annual components, they cannot easily be deflated).

In the update mid-term evaluation, the aggregated results were partly assessed as positive, because the programme gave important impulses to support the competitiveness and employment of the region. But it should be considered that the employment effects are mostly medium- or long-term and indirect and that the programme can hardly influence the gross national product (MR, 2005: 149).

Aggregate results for 2007-13 cannot be provided, of course, as the programme is still underway, although interim results were produced for the annual reports and interim evaluations. The monitoring system includes quantified targets with regard to the main objectives and the three

priorities of the programme. Overall quantified targets according to the main objectives (increasing innovative and competitive ability and creation of jobs) are:

- €5 billion<sup>15</sup> in investment support (€750 million annually), creation of 80,000-100,000 jobs (gross value), including 20,000-25,000 directly created jobs and 60,000-85,000 indirectly,
- Including 32,000-44,000 jobs for women,
- Safeguarding of 90,000-120,000 jobs.

By 2011, investment totalling €2.258 billion had been approved. On the basis of a combination of potential and actual results reported by the beneficiaries, 21,785 jobs had been or would be created directly and 37,085 indirectly. 18,579 jobs are/were to be saved. The proportion of jobs for women is significantly below the target quota of 40 percent (MWEBWV NRW, 2012: 3). However, as most of the statements are estimates, it is still too early for an assessment of the results.

The economic development in NRW was also affected by the global financial crisis. In 2009, the gross domestic product went down by 4.7 percent nominal (in Germany there was a decline of 3.5 percent). The export-oriented economy was particularly affected by the crisis (MWME NRW, 2010). Nevertheless, in 2010 NRW was already recovering with nominal growth in the gross domestic product of 3.5 percent (in Germany by 4.2 percent). Therefore, the German regions did not have the same kind of downturn as other European countries. According to the annual reports, the financial crisis had only minor impacts on application and investment behaviour. Only in the case of investment measures was there was a significant decline in demand in 2009, with a revival of demand afterwards (MWME NRW, 2010).

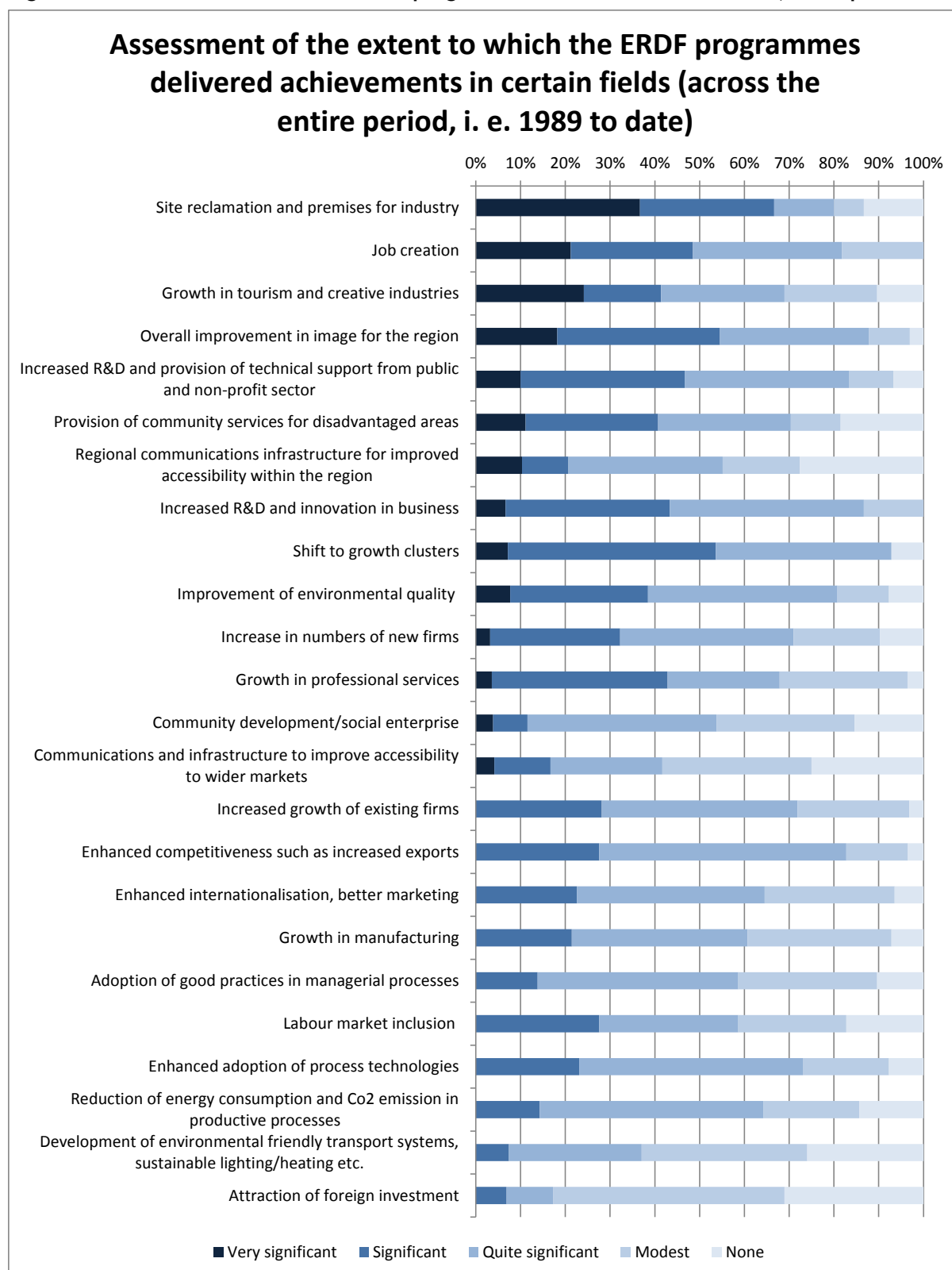
### **5.1.2 Analysis by theme**

As explained above, the ERDF programmes in Nordrhein-Westfalen started with a broad thematic funding approach as early as 1989. Funding priorities have remained relatively stable over time, which is also evident with regard to the achievements of the funding. The broad funding approach also becomes clear regarding the results of the online survey. Figure 6 presents an overview of the assessment of ERDF programme achievements in different fields.

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<sup>15</sup> €-figures at current prices.

Figure 6: Assessment of extent to which programmes delivered achievements, 1989-present





As can be seen, the interviewed experts assessed the ERDF achievements as significant in a number of different fields. The main areas identified in the regard were 'site reclamation and premises for industry', 'job creation', 'growth in tourism and creative industries', 'overall improvement in image for the region' and 'increased R&D and provision of technical support from public and non-profit sector'.

The following section provides a detailed exploration of the programmes' achievements by theme (seen in Annex III) and examines both the aggregate reported achievements<sup>16</sup> and detailed examples as reported through interviews and other sources. They also relate to the evolution of regional performance data over the period.

### *(i) Infrastructure*

Infrastructure measures have been a main activity in all programmes but with different weight and priorities. Overall, three kinds of infrastructure measures and achievements can be distinguished:<sup>17</sup>

- In the 1989-93 and 1994-1999 funding periods, the main emphasis of infrastructure measures was the redevelopment of industrial wasteland and former factory buildings for economic purposes. According to the final reports and evaluations, more than 3,000 hectares of industrial wasteland were redeveloped, providing more than 1,400 hectares of utilisable land for businesses. Furthermore, over 24,000 square metres of utilisable space in former factory buildings were renovated at that time. Since 2000, the development of wasteland for economic purposes has been limited to areas connected with cluster funding (described in the 'Innovation' part of Chapter 3). Overall, the funding resulted in approximately DM 1,200 million in total investment. A further result was the creation of the preconditions for approximately 30,000 jobs. According to the programme evaluations (e. g. MR, 2005), there are variations between individual projects depending on the overall conditions of the location and the type of project. A successful example for wasteland development is the case of Logport I in Duisburg port, where the area of a former steel mill was cleaned up and developed into a tri-modal logistics centre between 1999 and 2005. The total costs for investment were €200 million including €43,892 of ERDF funding. By 2011, over 90 percent of the newly developed area with a size of 265 hectares had been marketed and 49 companies (in particular international logistics firms) with a total of 3,300 employees had been established (e. g. Project sample 1 in Annex 1). Another successful example is the development of the area of a former steel mill in Dortmund (Phoenix West) into an industrial site connected with innovation-oriented investment funding and technological infrastructure. The area of 110 hectares was redeveloped with investment funding of €74.9 million including €31.3 ERDF funding. The industrial site is located near the technology centre (also funded with ERDF) and the University of Dortmund. The project started in 2001. By 2009, 14 percent of the 37.3 hectares of industrial utilisable area had

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<sup>16</sup> It must be taken into consideration that the indicators and the data quality have changed over time. Therefore, the aggregated reported data include estimates and missing values and can only be interpreted as rough values.

<sup>17</sup> As already mentioned, the data are not always complete for all funding periods, and the quality of the data changed over time because of changes in the monitoring system. In particular, there were data gaps at the beginning of the funding, e.g. there were only estimates for the 1992-93 funding phase, and these have not been included in this overview.

been marketed and 35 technology-oriented firms with 363 employees had been established. According to the evaluations and interviewed experts, the ERDF funding made an important contribution to strengthen the position of Dortmund in sectors with future potential (GEFRA/MR, 2010). The development of wasteland for environmental sustainability has been included in all programmes. Overall, more than 1,000 hectares of wasteland have been redeveloped with the aim of improving its environmental sustainability. The funding has also helped to create the preconditions for another 1,700 jobs, for example through the redevelopment of a former contaminated area for industrial use. Further results or impacts were the reduction of CO<sub>2</sub> (2,250,000 kg/a between 1994 and 1996) and more than DM 180 million in total investments.

- Another kind of infrastructure funding that has been part of all programmes is the development of innovation-oriented infrastructure. By 1999, a main activity in this priority was the creation or enhancement of technology and start-up centres. Overall, 43 technology and start-up centres were created or modernised at that time. For the success of the projects, an innovation-oriented environment (such as a university or the proximity to technology-oriented enterprises or institutions) was decisive. Successful project examples include the technology centre in Dortmund and the start-up centre in Essen. Another main emphasis was the creation or enhancement of education and training centres. Between 1989 and 2011, over 232 centres with more than 660,000 square metres of utilisable space for qualification infrastructure were created or modernised, and the capacities for more than 70,000 training places were created. Further results or impacts of the funding were approximately 6,200 new and 5,600 safeguarded jobs and the creation of the preconditions for approximately 26,000 new and 6,000 safeguarded jobs.

Over time, infrastructure measures centred on general wasteland development became less important. As reported in several interviews, the infrastructural bare necessities were mainly covered. Furthermore, one experience of the funding in the 1990s was that only infrastructure projects with certain preconditions were successful. For example, technology centres developed much better when there was a university nearby, and therefore the selection criteria for infrastructure projects were changed over time. Nowadays, only infrastructure projects with certain quality characteristics will be eligible for funding. According to the programme secretary and the managing authority, it is important that the project is embedded in an integrated approach and fits well with the potential of the region, as occurred in the instances of Duisburg Logport and Dortmund Phoenix.

### *(ii) Enterprise development*

The support of enterprise development has been a main part of all programmes including investment projects, support of start-ups and technology transfer. Over time, there has been a development away from mainly infrastructural measures towards soft measures such as consultations or network and cluster projects. In addition to the infrastructure measures already described, the following kinds of enterprise support can be distinguished:

- **Support for investments** in enterprises has been a stable funding priority in all programmes. It is the main instrument for increasing the competitiveness of enterprises and the creation of jobs. Overall, more than 4,700 investment projects have been

supported. As a result of the funding, total amounts of DM 2.6 billion (around €1.3 billion) (1989-99) and €900 million (2000-11) have been invested. The size of the projects varied between the measures, but a large part of the funding has been spent on projects with an investment volume lower than €1 million. The funding rate for investments in enterprises was in most cases around 18 percent. The investments were used particularly for the enhancement or construction of business premises or for new operating equipment. Results of the funding were the creation of approximately 23,000 jobs and 900 training places and the safeguarding of approximately 27,500 jobs. In the 1994-1999 funding period, there was also special support for 23 environmental investment projects, which resulted in a CO<sub>2</sub> reduction of over 3,400 t/a. A decrease in environmental damage was also an aim of the investment funding in the following periods, but there were no quantified indicators for the environmental effects (e.g. IAT/ÖIR/EPRC, 2003: 100).

- Another part of enterprise funding concerns the support of start-ups (start-up premium or tax allowance) and business and start-up consultations, which has been included in all programmes in different priorities (investment funding or support for innovation, technology transfer and guidance) and which has gained in importance over time. Altogether more than 108,000 business and start-up consultations have been carried out. The main programme period was 2000-2006 with an output of more than 74,000 business and start-up consultations. Since 2000, the number of newly-created start-ups has been counted and it exceeded 23,000 by 2011, including 83 technology-oriented start-ups since 2007. As reported in the final report of the 2000-06 period, the consultation measures indirectly contributed to approximately 17,000 new and 45,000 safeguarded jobs. As already mentioned, it must be borne in mind that start-ups or business consultation can only support the creation or safeguarding of jobs, and there is no direct causality in regard to employment effects (IAT/ÖIR/EPRC, 2003). Examples of consultation projects include the technology-oriented advice for university start-ups that were connected with financial support. The main emphases of business advice were the attraction of new customers or an increase of turnover (MWEBWV NRW, 2010). Furthermore, there has been support for enterprises through the funding of technology transfer and cooperation projects, which is closely linked with consultations and further innovation-oriented measures. In NRW, the funding of technology transfer projects started as early as 1989 and has also been included in all programmes, although it gained in importance in 2000 and once again in 2007. The aims of the business-oriented technology transfer measures were the strengthening of technology competence and the use of new technologies in enterprises. Between 1989 and 1999, 246 technology transfer and technological guidance projects were supported. In the 2000-06 period, 203 new procedures and product developments received funding. By 2011, the number of developments of procedures and products in technology-intensive fields in the current period was 1,932. In connection with the innovation-oriented soft measures (including consultation), total amounts of DM 423 million (1989-99) and over €2,500 million were earmarked for investment. Regarding the employment effects, approximately 6,000 jobs were created and approximately 8,800 jobs were safeguarded. However, it must be taken into consideration that the employment effects of innovation-oriented measures are mostly long-term. The mid-term evaluation of the 2000-06 programme indicated that there is a certain inconsistency when seeking to identify long-term employment effects of innovation-oriented measures. Most of the innovation-oriented measures only support

activities that take place before a product is ready for the market. The aim of these measures is to strengthen the regional competitiveness within a long-term process. However, the project managers are unable to estimate the long-term employment effects at the time of the funding (e. g. IAT/ÖIR/EPRC, 2003: 184). Therefore, such effects are not included in these data, and it is assumed that the actual long-term achievements are higher than the reported achievements.

- Another kind of business support has been established through the funding of regional agencies for ‘women and work’, supporting businesswomen as well as regional networks and actors in integrating women into the labour market. Between 1989 and 1999, 46 agencies received funding. The main activities of the agencies were the organisation and carrying out of workshops and qualifications projects and individual advice. According to the evaluation of the period 1994-99, the agencies were especially successful in the support and consultation of women who wanted to start their own businesses, whereas the involvement of business and the company promotion of woman only played a secondary role (MR/InWIS/NEI, 2000). The funding ended in 2000 but has been restarted with a similar approach in the current period.
- One more field of enterprise support has been established in the context of local economy funding, implemented for the first time within the Community Initiative URBAN and which is part of the integrated urban development funding in the current period. An aim of the funding is to establish additional instruments for economic development in socially disadvantaged neighbourhoods that fit the needs of local enterprises and residents. As the projects only started in 2011, it is still too early to report on any achievements.

According to the evaluations and the expert interviews, the ERDF funding made significant contributions towards improving the competitiveness of SMEs in the programme area and towards strengthening business innovation (e.g. GEFRE/MR, 2010). But the evaluations and experts also identified a number of problems. One difficulty arising from programme implementation was the inability to reach SMEs in all relevant areas as a target group of the funding. This criticism has been expressed in particular in relation to the (high-) technology-oriented funding in the current period. According to some regional experts, spin-offs from nearby universities were over-represented in the technology-oriented competitions, whereas older enterprises without this kind of contact were under-represented. Reaching other enterprises that are not yet part of the innovation-oriented networks still remains a major challenge. As an evaluation of the competition procedures in the current funding period shows, businesses had submitted 49 percent of the project applications for technology-oriented and cluster competitions by June 2008 (MR, 2008). Other applicants came from science or research institutions (36 percent) and local authorities or non-profit associations (15 percent). Therefore, it cannot be said that the involvement of enterprises has not been successful; but further data in regard to the size and type of enterprises would be needed to assess this aspect. Compared to the technology-oriented competition, the involvement of businesses in other competitions was significantly lower, particularly in the competitions in the areas of nature, tourism and start-up businesses, where the participation of enterprises was below 15 percent.

Another critical statement in this context was that regional enterprises had developed a certain ‘subsidy mentality’ in the fields of technology-oriented funding. According to the expert interviews, the high funding rates for technology-oriented projects in SMEs in the beginning of the funding

period resulted in a kind of ‘dependence culture’ in enterprises. Because of the high funding, SMEs became used to the public support, leading to a weakening of entrepreneurial thinking. Consequently, the funding rates were reduced over time.

### *(iii) Innovation*

As already described, NRW started very early with the funding of innovation-oriented measures in ERDF programmes, but there have been some developments concerning the instruments and the strategic embedding of the funding. The reported outputs and results of the innovation-oriented measures have already been described in the parts about infrastructure and enterprise development and are not repeated here. This section refers to some further results from evaluations and expert interviews.

Overall, three phases of innovation funding can be distinguished:

- 1) The first phase includes the 1989-93 and 1994-99 funding periods. At that time, innovation or technology-oriented measures were mainly concerned with infrastructure improvements (creation of technology centres and modernisation of technology infrastructure) and to some extent technology transfer and technological guidance projects.
- 2) In the second phase - the 2000-2006 period - innovation and competence development was the main priority of the programme. In this period, the innovation-oriented infrastructure funding was concentrated on projects related to a ‘competence field’ of the region. On the basis of a study from Roland Berger, six competence fields (energy, transport/logistics, information and communication, new materials, micro-system technology and medicine technology) were identified in 2001 and have been enhanced over time (e. g. IAT, ÖIR, EPRC, 2003; Hartmann 2009). Furthermore, the soft measures were concentrated increasingly on support for state-of-the-art-technology. In 2006, the *Land* of NRW passed an innovation strategy that identified 16 sectors and technology clusters with particular potential for economic growth and which has since served as a basis for the planning of further funding policy. In the programme evaluations (mid-term and mid-term up-date), the orientation towards competence fields or clusters was welcomed. But it was also critically remarked that a specification and operationalisation of the approach would be needed and that the development of regional clusters cannot be achieved in the short term. Otherwise, there would be the danger that infrastructure projects could be legitimated too easily through an indefinite cluster term (IAT, ÖIR, EPRC, 2003; MR, 2005).
- 3) The 2007-13 funding period marked the start of a third phase of innovation funding. In this period the cluster-based funding approach has been continued, but a main change is that the funding has been opened up to include the whole region of the federal state. Another new characteristic is that a large part of the funding is being implemented within competitions, which particularly concerns innovation funding. In this context in particular, locations with universities, such as the city of Aachen, participated in the funding. By 2011, the main outputs were 43 supported networks and clusters, 266 projects for energy, resource efficiency and the development of environmentally friendly energy, 183 projects in the field of innovative services and 21 intra- or interregional pilot projects. As a result of

the funding, 1,932 developments of procedures and products in technology-intensive fields have been initiated.

On the basis of the expert interviews and the review of programme documents and evaluations, different results and impacts of the innovation-oriented funding have been identified.

- One result of the innovation-oriented infrastructure funding is that quite a number of technology centres have now been established in the Ruhrgebiet that would not have these dimensions without ERDF funding. Some of them have influenced economic development in the region. A successful example is the technology centre in Dortmund. On the area around the centre and later in an industrial park on the city outskirts, new technology-oriented enterprises have been established and have resulted in the creation of high-quality jobs. Through the funding connected with innovation-oriented investment and infrastructure funding (see above), the development of sectors with future potential was strengthened in Dortmund. For example, the number of employees in the field of micro- and nanotechnology grew from 925 in 1999 to 2,274 in 2008. But not every new technology centre has had such regional impacts. According to the evaluation of the 1994-99 funding period, only 3 of 14 supported technology centres had cooperated with enterprises or other research institutions by the end of the project, and this did not fulfil the aim of technology transfer (MR/InWIS/NEI, 2000: 119). One criterion for the success of a technology centre project was that the location had to be close to a university or other research institution or that it had to be related to an innovative milieu or regional competences.
- The competence field approach - which was a result of these experiences - has been assessed differently by experts and evaluations. A positive factor would be an increase in funding effectiveness via the orientation towards regional strengths. For example, the cluster or competence-field approach could be used to support the diversification of the regional economic structure as happened in the case of Dortmund (MR, 2005). But this kind of implementation only worked in individual cases with appropriate preconditions such as a regional cluster reference (which is hard to find in every sub-region) and cluster-oriented networks which include all relevant actors (technology and research institutions, economic development associations, firms etc.) (IAT, ÖIR, EPRC, 2003). As described in the mid-term evaluation for the 2000-2006 programme, municipal competence-fields approaches differed considerably. Only individual cities like Dortmund had a clear profile and began strategic implementation. Most of the cities referred to individual competence fields such as logistics or design but without a clear profile (IAT *et al.*, 2003). Therefore, it should be taken into account that the development of competence fields or clusters is a long-term process connected with a range of quality requirements for regional actors. The differences in local preconditions mean that clear criteria and realistic targets for development would be needed (IAT *et al.*, 2003). Another critical statement made in the mid-term evaluation update was that, in structurally weak areas, it was only possible to find relatively small starting points for competence-field or cluster approaches. Accordingly, it would also be important to have compensation funding alongside the competence field or cluster approach (e. g. MR, 2005).

With regard to the innovation-oriented funding of the current period, one result is that the cluster-based competitions have activated a high number of businesses, universities and

colleges as applicants who did not previously participate in the funding. As regional experts reported, the universities now pay more attention to enterprises and regional economic development, and the exchange and cooperation between science and economy has been strengthened. Furthermore, the funding has resulted in a strengthening of state-of-the-art-technology, in which the Aachen region has been especially successful. In this region, different factors came together. The main factor is that the region already had a powerful innovation and technology-oriented infrastructure with the RWTH University (*Rheinisch-Westfälische Technische Hochschule*) and numerous research institutes and organisations (Technical University of Aachen, four Fraunhofer Institutes, Jülich Research Centre etc.). In particular, the RWTH University has operated as a driver for innovation and as a successful applicant in the competitions. Another success factor was the support of the regional development agency for the technology region Aachen (AGIT), actively supporting the initiation of projects and acting as an interface between all project partners (e. g. GEFRA/MR, 2010). A criticism of this approach was that the funding tended to be too heavily oriented towards technological projects and would only support the state-of-the-art technology. In this context, SMEs that were well placed in conventional technologies but not in state-of-the-art ones would hardly have a chance to participate. To enable them to participate on a larger scale, it would be helpful to have more time during the application process. Furthermore, regional conditions (strengths and needs) should be taken into account to a greater extent. According to the regional experts, NRW should identify areas where NRW could play a leading role in Germany, such as tele-medicine, electro-mobility or power station technology. Another approach could be the development of regional concepts regarding main trends such as urbanisation or demographic change.

#### *(iv) Environmental sustainability*

Another relatively stable part of the ERDF funding in NRW was the funding of measures to improve environmental sustainability. In this context, two kinds of instruments can be distinguished.

- As already described, an element of all programmes was infrastructure development for environmental sustainability. Overall, more than 1,000 hectares of wasteland were redeveloped in order to improve its environmental sustainability. The funding also helped to create the preconditions for another 1,700 jobs. Further results or impacts included a reduction of CO<sub>2</sub> levels (2,250,000 kg/a between 1994 and 1996) and more than DM 180 million in total investments. According to expert interviews, programme reports and evaluations, the support for environmental measures was of great importance because of the considerable environmental damage connected with the coal and steel industries in the Ruhrgebiet. A main emphasis was the improvement of the environmental and living situation in the Emscher-Lippe region, where the ERDF funding was combined with the funding of a federal programme (*Ökologieprogramme Emscher Lippe*, ÖPEL) that started in 1991 and is still going. Further funds came from the *Internationale Bauausstellung* (International Building Exhibition) *Emscher Park* (IBA) that was implemented in the Ruhrgebiet between 1989 and 1999. The main project activities were the redevelopment of industrial wasteland into green spaces and restoring them to nature, as well as the creation of bicycle routes and footpaths to open up the area. In most cases, the funded activities have been combined with other measures (development of industrial sites, establishment of cultural happenings, economic development, urban development etc.) with the aim of

developing the region into a location of creative industry and tourism. In this context, a project example is Zeche Zollverein, where a former coal mine had been developed through an integrated process into a place with cultural, touristic and economic significance (e. g. Annex I). As the programme evaluation of the 2000-06 programme shows, a number of environmental and living improvements have been achieved with the funding. However, for a long time, the outward effects at national or international level were very limited (MR, 2005). In recent years, the position of the Ruhrgebiet as a tourism location has been supported by the nomination of the Ruhrgebiet as the European Capital of Culture in 2010. Furthermore, a 'route-oriented industry culture' has been created that connects the different locations and helps to publicise individual offers.

- Additionally, environmental improvements have also often been part of other infrastructure projects with mainly economic targets, and environmentally friendly sustainable development has been included as a cross-sectional target in all programmes. In the 2000-2006 programme period, a special monitoring system was developed to assess the implementation of the cross-sectional target of environmental protection and sustainability. One result of the monitoring was that 56 percent of the ERDF-funded projects made a contribution to the cross-sectional target; the quantified target was a quota of 50 percent (GEFRA/MR, 2010).
- Furthermore, there was support for environmental investment or technology projects in businesses or cooperation, but only rudimentary data are available for these kinds of projects. For example, 23 environmental investment projects were supported between 1994 and 1999, resulting in a 3,400 t/a reduction in CO<sub>2</sub>. Project examples include the reduction of emissions and measures to improve energy efficiency or the development of solar panels. In the 2000-2006 period, 57 'future energy' projects were implemented, which resulted in a reduction of 144,000 t/a of CO<sub>2</sub>. The main areas of funding were fuel cell technology, combined heat and power schemes, and bio-energy. According to the final report, the funding made a contribution to strengthening the profile of the Ruhrgebiet as a competence region for future energies (MWEBWV NRW, 2010). Since 2007, 266 projects for energy and resource efficiency and for the development of environmentally friendly energy have been supported in the current period.

#### *(v) Structural adjustment*

The diversification of the regional economy has been one of the main objectives of the funding in all periods. After the decline of the coal and steel industries, there was a need to develop and strengthen new industries and SME sectors in the Ruhrgebiet. Even if it is difficult to measure the impact of the ERDF funding in this context, the following achievements or contributions of the funding can be identified on the basis of evaluations and expert interviews.

- One contribution can be seen in the improvement of economic and technology-oriented infrastructure. According to evaluations and expert interviews, the redevelopment of industrial wasteland for economic purposes and the development of industrial parks were important preconditions for the establishment of new enterprises and therefore for the diversification of the regional economy (Friedrich-Ebert-Stiftung, 1994; MR, 2005).



- Another funding area with expected impacts on the diversification of the regional economy is the support and consultation for start-ups and SMEs. According to the programme evaluation of the 1994-99 period, a large number of different kinds of consultation were supported and they were able to make full use of regional potential (MR, 2000). The evaluation of the 1989-93 period also identified a contribution to the diversification of the economic structure, in particular for technology-oriented projects (Friedrich-Ebert-Stiftung, 1994). However, with regard to support for start-ups, the evaluators made the critical note that there had been an above-average funding of retail sector businesses that were not the type of businesses that had a promising future. Furthermore, a high proportion of business enterprises had a more structurally conservative character (Friedrich-Ebert-Stiftung, 1994).
- In the 2000-2006 period, the contribution of investment funding to the diversification of the regional economy was assessed as high, because new service-oriented sectors (such as data processing or business-related services) dominated the projects (IAT, ÖIR, EPRC, 2003). Furthermore, the cluster policy was assessed as an instrument that could ideally be used as a typical target-oriented instrument for the diversification of economic structures in the region. In this ideal sense, clusters could create the preconditions to react flexibly to radical structural changes that could represent a development opportunity, especially for structurally weak regions (MR, 2005).
- Another contribution to the diversification of economic structure was achieved by projects related to tourism and the creative industries (in particular in the 2000-2006 period), which aimed to use the potential of the creative industries and strengthen tourist-oriented businesses. According to the evaluations of the 2000-06 programme, the establishment of the Ruhrgebiet as a touristic region in national or international perceptions is a longer process and has not been realised yet. Nevertheless, there are some successful examples (such as Zeche Zollverein or the 'route-oriented industry culture') that show that potential exists to strengthen the Ruhrgebiet via further tourism and cultural activities.
- One main objective of the current funding period is the creation of an innovation- and knowledge-based economy. An interim evaluation of the cluster-based competition procedures showed that the currently funded projects mainly relate to the sectoral and technology-oriented federal clusters such as health, new materials and production technologies as well as transport and logistics (MR, 2008).

#### *(vi) Social inclusion*

The ERDF funding of measures for social inclusion has been primarily relevant in the context of the integrated development of deprived urban areas that was part of the 2000-06 and 2007-13 programmes. On the basis of experience with the URBAN Community Initiatives I and II (which had been implemented in Duisburg and Dortmund), as well as federal and national programmes (*NRW-Handlungsprogramm für Stadtteile mit besonderem Erneuerungsbedarf*, *Bund-Länder-Programm Soziale Stadt*), the funding of deprived urban areas has been included in the programmes. On the basis of the interviews, programme reports and evaluations, the following achievements can be described.

- Between 2000 and 2006, 30 integrated urban development projects were implemented. The main emphases of the projects were the improvement of the urban environment (19), the support of local associations (18), the improvement of social infrastructure (17) and the integration of migrants (16). Furthermore, 61 start-ups and 71 enterprises were supported. The projects were supported by ESF-funded qualification measures (MWEBWV, 2010). As described in the mid-term evaluation update, the funding resulted in an improvement of the local conditions in deprived urban areas, but there were no impacts on wider economic development (MR, 2005).
- In the 2007-13 ERDF programme, the funding of integrated development of deprived urban areas has been enhanced. It is part of the ‘sustainable urban and regional development’ priority. By 2011, 120 projects for integrated urban development had been implemented (MWEBWV, 2012). An important element of the current funding is the support for the local economy in deprived urban areas which has been developed by the Ministry of Economics. No reported data has yet been made available with regard to results or impacts.

The expert interviews also described how very difficult it was to quantify the achievements of integrated urban development measures. Furthermore, it must be taken into consideration that global economic and social problems cannot be solved by small local measures. But there were some improvements in the funded districts concerning the physical and social infrastructure, the community capacity-building and the living situation of the residents. Besides improvements for the residents in the deprived urban areas, the main achievement was judged to be a new culture of cooperation and networking in the cities and districts involved between municipal government, different departments, local associations, residents and enterprises. It is not possible to separate the effects of ERDF funding from national funding, because the funds were combined in an integrated funding approach. But one characteristic of ERDF funding was that it included measures for local economic development. This funding approach that started under URBAN had been transferred by the federal state as an own approach in the 2007-13 programme. There are no results yet, because the implementation has only started. However, as the example of Dortmund Nordstadt shows, the city can now continue the funding process that started under URBAN II. In the city of Dortmund, ERDF and national funding have been combined to support a deprived urban district in the northern part of the city (see Annex I). The project has been successful in initiating new forms of cooperation and activating local groups, associations, enterprises and residents. Furthermore, the funding resulted in a wide range of improvements for the residents with regard to social infrastructure, facilities and services as well as public places and green spaces. Nevertheless, the example also shows that even though a range of improvements have been made, the district still has to cope with special challenges, such as high population turnover rates, replacing the more successful residents who decided to leave with more disadvantaged groups, so that the district has to act as a place of integration for the whole city.

#### *(vii) Labour market and enhancement of human capital*

Labour-market-related measures and the enhancement of human capital did not play any significant role in the ERDF programmes. Nevertheless, some instruments were connected with qualification or labour market measures.

- In this respect, the main funding area was the creation and extension of education and training centres that was included in all programmes. Altogether, 232 further education or training centres have been created or modernised (with ERDF and co-financing). Therefore, the ERDF funding created the infrastructural and material preconditions for ESF-supported training and further qualifications. With regard to the capacities created for courses and training places, the following results have been reported: 2,500 courses with 44,000 participants between 1989 and 1992; 12,617 training places and 58,093 participants in training courses between 1997 and 1999; 9,439 created or modernised training places between 2000 and 2006; and capacities for 49,113 training places between 2007 and 2011.
- Another labour-market-related funding approach was the support of regional agencies for ‘women and work’. Overall, there was support for 46 regional agencies between 1989 and 1999. As detailed in the reports and evaluations of the 1994-99 period, the regional agencies were active in different fields: consultation for women who needed support with (re-entry) into work, business start-ups, further education or choice of career; initiation and preparation of qualification projects; networking; and the organisation of workshops. According to the 1994-99 programme evaluation, the outputs of the agencies considerably exceeded the values. The only unsuccessful activity was the individual consultation of businesses (MR/InWIS/NEI, 2000: 102). The funding ended in 2000 but has been re-started with a similar approach in the current period. In 2012, eleven ‘women and work’ competence centres have been implemented.

*(viii) Spatial distribution of economic activity within the region*

As already described, NRW is a large federal state that includes sub-regions with different social, economic and environmental conditions. Until 2006, the Objective 2 ERDF funding was mainly concentrated on the Ruhrgebiet and the Heinsberg region near the city of Aachen. Therefore, most of the funding activities and achievements concern only this part of the *Land*. The main objective was to strengthen social and economic cohesion in the region on the basis of a mainly compensation-oriented funding approach. There are no data available on the impact of ERDF funding concerning the reduction of regional disparities within the state. According to evaluations and experts, the funding budget is not large enough to have had a significant contribution that could be measured. Nevertheless, on the basis of the programme results, it could be said that the funding made a contribution towards improving the competitive position of structurally disadvantaged sub-regions in NRW (GEFRA/MR, 2010). Some interviewed experts also raised the question of what would have happened without the funding - the Ruhrgebiet would probably have fallen even further behind.

In the first programme periods (1989-1999), there were complementarities with the Community Initiatives RESIDER (programme for the restructuring of steel regions) and RECHAR (programme for the restructuring of coal regions). These programmes had a large degree of spatial overlap with the funding area of the Objective 2 programme as well as similar contents. As described in an interim evaluation of the 1994-96 programme, the Managing Authority used the same funding strategy for RESIDER and RECHAR as for the Objective 2 programme to simplify the implementation of the programmes (InWIS/MR/NEI/IAT, 1997). Therefore, the programmes funded the same kinds of measures and can be considered to have reinforced the impact of the Objective 2 programme in the Ruhrgebiet and the Heinsberg region (Friedrich-Ebert Stiftung, 1994). The main outputs and

results of RECHAR II (1994-99) (Ministerium für Wirtschaft und Arbeit des Landes NRW, 2003) are as follows:

- 199 investment projects, which resulted in 1,405 new jobs (including 436 jobs for women),
- 14 environmental investment projects,
- 21 innovation and technology projects,
- 7 new or modernised technology or start-up centres,
- 16 new or modernised education and training centres,
- 99 hectares of wasteland redeveloped for economic purposes.

In 2007, the territorial focus on a pre-defined eligible area was discontinued, and all cities and sub-regions were able to participate. However, as determined in the 2007-2013 ERDF programme, around 50 percent of the ERDF funding must be spent on measures in structurally weak sub-regions, including the funding for disadvantaged urban areas. By 2001, 41 percent of the overall subsidisable investment costs were invested in structurally weak areas and 37.8 percent in other areas of the region. 20.8 percent of the subsidisable investment costs were used for measures of a comprehensive character (MWEBWV, 2012).

Furthermore there was funding of regional projects (such as the development of regional strategies, cooperation and organisation of workshops) and cross-border measures that were also part of INTERREG programmes in the region. Different activities over the periods include cross-border projects in the Maas-Rhein region (EUREGIO), regional projects in the Emscher-Lippe region, and the current Innovationsregion Rheinisches Revier project. The heterogeneity of the activities means that no comprehensive data on achievements are available in the reports.

### **Institutional factors affecting achievements**

This sub-section describes organisational and administrative factors that have influenced programme implementation and achievements over time. As already described in Chapter 3, the ERDF programmes in the first periods were implemented in the context of the Regionalised Structural Policy approach developed in NRW in the 1980s. In the frame of the *Zukunftsinitiative Montanregion (ZIM)*, regionalised structures and committees had been established on sub-regional level with the aims of bringing all relevant regional actors together and coordinating the main regional funding programmes (Forschungsinstitut der Friedrich-Ebert-Stiftung, 1992). The idea of Regionalised Structural Policy was that regional stakeholders should develop regional development concepts and decide about suitable funding projects on the basis of regional strengths and needs. Therefore, the ERDF programmes provided the strategic framework in the form of a supply-oriented programme that needed to be concretised on regional level.

According to the programme evaluations of the 1994-99 period and the expert interviews, the idea of Regionalised Structural Policy did not work as planned. One problem was the mainly political officials participating in the sub-regional committees, who wanted to demonstrate their own power over funding decisions. Accordingly, not only regional needs and strengths but also local political

interests were decisive in the selection of a project. A result of this procedure was the funding of many different technology centres disregarding the respective technological environment, because every city wanted to have its own technology centre. Another difficulty was a lack of transparency concerning the selection process, because not all funding decisions had been made on the basis of the committee's decisions. The funding of larger projects was generally decided on the basis of expert advice or reports, though in some individual cases approvals were granted to projects that had previously been rejected in a sub-regional committee (MR/InWIS/NEI, 2000: 255). According to the interviews, the involvement of expert's reports was essential for the implementation of larger projects but the lack of information policy and transparency in the selection process was criticised (MR/InWIS/NEI, 2000: 255).

In the 2000-2006 funding period, most ERDF funding decisions were already made outside of the regional committees (by departments, committees of experts or competitions) (IAT/ÖIR/EPRC, 2003), and accordingly it was the Managing authority's task to implement new selection processes in the actual funding period. The main new implementation instrument is the competition procedure, which was already tested between 2000 and 2006 but which has been clearly widened since 2007. The competition procedures can be implemented in all priorities. Only some parts are excluded such as the industrial funding, compensatory-oriented measures or measures of main significance for federal state policy (MWME NRW, 2006). Measures in public maintenance must be coordinated with relevant regional actors and specialists before the registration for a competition. According to the interviews, the competition procedures have increased transparency and helped to improve the quality of the projects. Furthermore, new applicants could be activated through the competition procedures. However, the interviewed experts also expressed criticisms. One critical factor was that the procedures were very complex and the managing authority did not disseminate information adequately at the outset. Therefore, applicants were annoyed at the start of the funding period when they became aware that they still had to go through a longer approval process after being endorsed by the jury. Another more important critique concerns the fact that overall interdisciplinary coordination with comprehensive objectives with regard to regional strengths and needs was missing. As a result, there was an excess of individual competitions - sometimes two or more competitions in similar subjects from different departments - instead of a common approach to take up a specific challenge on the basis of regional strengths and needs.

Another implementation factor that influenced the achievements related to changes in the approval and controlling systems. The main changes came under the CDU and FDP government between 2005 and 2010, which decided to transfer the whole approval and controlling process to the regional bank (NRW Bank). According to the interviewed experts, the NRW Bank lacked capacity and capability. Furthermore, there were many personnel changes which meant constantly changing partners for applicants and administrations. The consequences for the subsequent process included delays in approval and payment and a lower quality of projects. Under the *Rot-Grün* government (after 2010), parts of the approval and controlling tasks were transferred back to the district authorities, a change that improved the process, according to expert interviewees.

With regard to the competitive tendering procedures used in earlier periods and introduced on a broad basis in the current one, there is no clear final assessment so far. Whilst nobody doubts the effectiveness of competitive tendering, some actors interviewed criticised the major effort required. Furthermore, there was obviously confusion about the procedures. In practice, the competitive part of the procedure still had to be followed, with the need to submit a formal

application and obtain approval. This was not clear to the applicants at the beginning. With regard to the effects on the quality of projects, there are no clear conclusions. It seems that this depends on the type of the competition. Lastly, a competitive procedure was not seen as appropriate for every case.

## **5.2 Complementarities and synergies**

### **5.2.1 Complementarity with other EU-funded programmes (ESF and EAFRD)**

In addition to the ERDF Objective 2 programmes (later growth and employment) and other ERDF programmes or initiatives (RECHAR, RESIDER, INTERREG and URBAN), there have been a number of further EU-funded structural programmes and initiatives in NRW that could be used to create synergies. This sub-section deals with complementarities and synergies with the European Social Fund (ESF) and the European Agriculture Fund for Rural Development (EAFRD).

With regard to complementarities or synergies with ESF funding, the experiences of NRW have been disappointing. On the basis of the interviews, it became clear that different implementation structures and different ways of thinking still dominate the planning and implementation process of the two programmes. Only in individual cases or single regions has a connection between the two funds and the creation of synergies been successful. Common funding approaches have been attempted, for example, with regard to education and training measures (ERDF-funded infrastructure and ESF-funded qualification) or in the context of integrated urban development. However, even though most of the actors see the necessity for a common approach and cooperation concerning the main challenges such as the increasing lack of qualified personnel or demographic change, no attempt has yet been made to create a real common strategy and programme implementation. According to the interviews, the separation already starts during the programme development process when the managing authorities are asked to demonstrate the delineation of the funding contents. Another difficulty is that the ERDF focuses primarily on the needs of enterprises, whilst the ESF focuses on the needs of employees. It would be important to consider both together, but this has not worked yet. The separated planning and implementation structures of the two funds also concern the sub-regional level, where separate regional structures and committees have been established for the implementation of the programmes. As described in the evaluation of the 1994-99 programme, the two separated implementation systems also led to coordination problems in areas where close cooperation was needed, such as the funding of education and training infrastructure (MR/InWIS/NEI, 2000).

The situation with the EAFRD is similar. Individual complementarities have occurred at project level, but no overall common funding approaches exist. According to the interviews, it is important to develop integrated strategies to cope with the demographic changes that also affect the rural areas. But there are also a number of hindrances on the part of the European Commission. For example, as stated by the drafts for EU Regulation 2014-2020, the new instrument for Integrated Territorial Investments (ITI) fails to include the EAFRD.

### **5.2.2 Complementarity with domestic regional policy**

With regard to domestic regional policy, there have been strong complementarities with national or federal funding programmes in all periods. The main significant national funding instrument for structural policy in Germany is the Joint Task for 'Improving the Regional Economic Structure'

(*Verbesserung der regionalen Wirtschaftsstruktur*, GRW formerly GA), which was implemented in NRW within the regional economic development programme (*Regionale Wirtschaftsförderungsprogramm*, RWP). The GRW programme area was almost congruent with the Objective 2 programme area. In the first 1989-93 period, the main part of the ERDF funding was spent on the basis of the RWP (Friedrich-Ebert-Stiftung, 1994). Similarities in terms of funding contents existed between these two programmes, particularly in the field of investment funding. However, in contrast to other German federal states, NRW started very early with a broader funding approach and also used ERDF funding for instruments that were not subsidisable under the GRW, such as the funding of technology and innovation, consultation for businesses and start-ups, or (later) the funding of equity capital finance. According to some expert interviews, the broad ERDF funding approach led to a widening of the GRW funding over time.

Another important programme was the *Internationale Bauausstellung* (International Building Exhibition) *Emscher Park* (IBA) which was implemented in the Ruhrgebiet between 1989 and 1999. The IBA's aim was to improve living space in the Emscher region through high-quality ecological and cultural design. In total, 120 projects were implemented with an investment volume of DM 5 billion including around 1 billion in ERDF funding (Objective 2 funding and RECHAR and RESIDER) (EPPD des Landes Nordrhein-Westfalen, 2004). With regard to environmental measures, another significant federal programme was the *Ökologieprogramm Emscher Lippe-Raum* (ÖPEL) developed in 1991. There have been a lot of complementarities between the ERDF and ÖPEL programmes in the redevelopment of wasteland for environmental sustainability.

With regard to the funding of innovation-oriented measures at the beginning of the ERDF funding, important federal programmes were the *Technologieprogramm Wirtschaft des Landes Nordrhein-Westfalen* (TPW), which was developed as early as 1978, and the *Technologieprogramm Zukunftstechnologien des Landes Nordrhein-Westfalen* (TPZ), which started in 1985. These programmes were particularly relevant in the context of the funding of technology transfer and technology-oriented consultation (Friedrich-Ebert-Stiftung, 1992). In the 1990s, different federal initiatives were developed such as '*mediaNRW*', '*Zukunftsenergien*', '*Automobil*' or '*Chemsite*', which brought some complementarities with innovation funding in NRW (EPPD des Landes Nordrhein-Westfalen, 2004). A further major step was the development of a federal innovation strategy in 2006 which served as a basis for planning the current programme.

In the context of funding for integrated urban development, ERDF funding has been combined with national and federal programmes for urban development. The main programmes here are the '*Bund-Länder-Programm Soziale Stadt*', a programme to support deprived urban areas, '*Städtebauliche Sanierungs- und Entwicklungsmaßnahmen*', for urban regeneration, '*Städtebaulicher Denkmalschutz*', protection of historic monuments, '*Stadtumbau West*', a programme to manage demographic change, and '*Aktive Stadt- und Ortsteilzentren*', for the development of town centres. Together with the experience of the Community Initiatives URBAN I and II, the national and federal programmes were used as the basis for developing the urban development funding approach in the 2000-06 and 2007-13 ERDF programmes. Furthermore, the national and federal programmes have been combined with ERDF funding in individual projects. For example, in the case of Zeche Zollverein, funding from the programmes '*Städtebaulicher Denkmalschutz*' and '*Soziale Stadt*' was used as further development funding.

## **6. ASSESSMENT OF ACHIEVEMENTS AGAINST OBJECTIVES AND NEEDS (EFFECTIVENESS AND UTILITY)**

### **6.1 Overall achievements of ERDF programmes measured against programme objectives (effectiveness)**

The way that effectiveness is assessed, i.e. the degree to which ERDF programmes have met the overarching goals, depends on the one hand on the quality of goal definition, and on the other hand on the information on achievements. In the first programmes, there were hardly any quantified goals that would allow a structured discussion of goal achievement rates. Furthermore, goal achievement based on a few selected indicators always requires a certain contextualisation to be meaningful. Accordingly, this section discusses both goal achievement rates where possible and effectiveness in a more qualitative way.

It needs to be borne in mind that the NRW programmes have been drafted under Regionalised Structural Policy deliberately as comparatively open strategic frameworks rather than stringent strategic frameworks governing the whole regional policy process. This factor is taken into account in the discussion of achievements.

Another point is that the explicit goal stated in the programme strategy is not necessarily the exact goal of the programme as it develops during implementation. There might be a shift in focus that is not reflected by an adjustment the strategy. Therefore, it might be necessary to distinguish between explicit objectives and ‘imputed objectives’ identified when implementation is taken into account.

#### ***6.1.1 Effectiveness by period***

Under the main objective of supporting structural adjustment in the Ruhrgebiet, the programmes of the 1989-1993 period addressed a number of different issues: creating jobs, supporting SMEs, developing new products and processes, improving qualifications, providing industrial real estate, modernising infrastructure, and protecting the environment. While the definition of these issues is quite clear, there are hardly any objectives that are suitably concrete to allow a direct comparison with achievements. Typically, the formulations take the form of ‘to strengthen SMEs’ or ‘measures are required’. The formulation of these objectives varies between the two programmes of this period, but the main orientation remains the same.

The reported achievements in the evaluation indicate that most of these objectives were addressed by the actual funding, e.g. more than 2,000 investment projects, several regional development agencies, and 21 new technology and start-up centres were financed. The evaluation states that the effects were predominantly positive (Friedrich-Ebert-Stiftung, 1994: 20). The link between interventions and objectives in the evaluation is very weak. A table indicates whether the different instruments used ‘contribute’ to the different objectives defined.

This assessment along the different functional chains has its limits, because it evaluates the effectiveness of the different types of interventions separately. It does not answer the question of how far the policy mix and relative weight was appropriate. Although it discusses the different types of instruments, the evaluation does not provide much information on the effects of the programme as a whole. There is no indication of the extent to which the intervention could have



been more effective with a different mix of instruments (this point is discussed in the next section). There was no fundamental change to the programme objectives in the 1994-1999 period. In the first half, the objectives from the previous period were continued, whereas the second programme of this period introduced some changes to the programme objectives. Accordingly, both programmes of this period are considered separately.

For the first half of this period (1994-1996), the same set of objectives as in the previous period was relevant - and therefore the same quality of objectives. As the set of instruments and most of the implementation procedures remained the same, the conclusions on effectiveness remain valid: significant contributions to the separate sub-objectives but no clear answer to the question of the policy mix.

The 1997-1999 programme introduced some modifications to the objectives: start-ups gained importance, sectoral objectives (media, services) became part of the strategy, and the objective of equal opportunities ranked higher. The way objectives have been defined did not change: there was no quantification, and objectives were defined along the lines of 'the programme aims at supporting enterprises'. In the evaluation, a self-assessment of the projects' contribution to the objectives had the following results (MR, INwis, NEI, 2000: 68): the projects perceived their greatest contribution by far to be to the objective of upgrading skills and employment. On the other hand, more than 57 percent of the projects saw no contribution at all to the objective of developing the media sector. Nearly 40 percent saw no contribution to the support of start-ups. These figures partly result from the narrower focus of the latter objectives. Based principally on an analysis of data from the monitoring system, the evaluation states that the objectives that have been broken down to the level of measures have been achieved. The conclusion of the evaluation is that the programme 'is suitable to contribute significantly to structural change' in the region (MR, INwis, NEI, 2000: 138).

The 2000-2006 programme also slightly changed the structure of objectives. The specific objectives were regrouped and arranged under three headings: supporting investment and start-ups, developing regional competencies and improving infrastructure. In this period, the objectives were quantified for the first time: more than 20 indicators had quantified targets, but a considerable number of them related to implementation rather than results.

The evaluation (MR, 2005) discussed each of the most important sub-objectives in turn: creating new jobs, improving investment, developing regional competences, improving infrastructure, sustainable development, equal opportunities, and including disadvantaged groups. In general, the achievement of objectives was assessed as good, but some criticism was expressed: investment by the private sector was 'insufficient' (p. 126). This is crucial, as the jobs the programme was aiming at would mostly be created in the private sector. This specific target was missed. The effect of the financial support to start-ups was 'limited' (p. 133). For infrastructure such as innovation centres, the evaluation emphasised that their impact on the economic structure was limited, given the path-dependent development logic of old industrialised regions, i.e. infrastructural conditions simply have limited effect on the economic structure.

In the Commission's ex post-evaluation of the 2000-2006 period, Nordrhein-Westfalen was a case study in Work package 4 "Structural Change and Globalisation". The Case study (Hartmann 2009) focusses on selected measures of the programme: "Future technologies in the energy sector" and

“technology and qualification infrastructure”. Due to this selection, the evaluation only covers some 20 percent of the OP budget. The overall assessment is that the focus on clusters and fields of competences is a promising approach, also supported by investment in infrastructure. But “development will need a lot of time” (p.46).

The strategy of the 2007-2013 programme differs from the previous periods. There is no longer a pre-defined eligible area, and the strategy is more cluster-oriented (see Chapter 3). No comprehensive evaluations are available, but the monitoring data and results reported in the annual implementation reports show significant output in most of the relevant areas.

For the earlier periods, there are no clear statements either in the evaluations or the reports on achievements compared to objectives. There are two reasons for this. First, the programmes define their objectives comparatively vaguely. As explained above, this reflects the position of ERDF programmes in the concept of Regionalised Structural Policy, leaving strategic scope for regional actors (below *Land* level) to fill. The second reason is that evaluations hardly undertake any effort to substantiate objectives to analyse achievement. Thus, the usual formulation might be ‘there is a significant contribution’. This does not comprise a statement on target achievement.

The available evidence, including evaluations, is focused on a more-or-less separate discussion of the different specific objectives of the programmes. In the evaluation, as in the programme documents, there is the notion of a ‘complex and interwoven’ relationship between the different specific objectives. Mutually reinforcing, the specific objectives should lead to target achievement at programme level. The evaluations are limited in their analysis insofar as they mostly rely either on self-assessment of the beneficiaries or on data on output level. Another point is that monitoring data are often measured at project selection and not at project completion. The update of the 2000-2006 mid-term evaluation (MR, 2005), for instance, argues on the basis of data on planned effect, not on actual outcome. Nonetheless, the general message is that there is a significant contribution to most of the specific objectives in the different programmes, but with two main reservations: firstly, there is, at least in the 2000-2006 period, the evaluation’s finding of a lack of private investment. This is crucial, as private investment is essential to achieve structural change. Secondly, some very specific targets in the same period seem not to be achieved on a broader basis. In this period, a larger number of objectives were defined, amongst which those that had not been achieved had very detailed definitions and narrow scope. But all in all, the funding produces visible effects - at least on output level - in the dimensions described by the targets. When objectives have been quantified, the achievement rates are normally good.

The interviewees could not really fill the gap, i.e. they were unable to isolate effects of the individual programmes, and they also had to contend with the problem of the missing definition of objectives. The general assessment is that the ERDF intervention has been successful, as it helped to ease the consequences of the profound structural change. The interviewees highlighted project examples or emphasised good development in specific sectors; and they were almost unanimous in their positive assessment of the environmental effects. Other important achievements occurred when particularly good, often larger, projects were developed. The interviewees confirmed the idea of involving local actors in regional policy as very good.

### **6.1.2 Overall effectiveness**

Moving on from the explicit programme objectives, this sub-section presents an analysis along the thematic axis defined for the cross-regional analysis and the ‘imputed objectives’, i.e. an assessment of the actual relative importance of the different objectives.

- In the first two periods, target achievement was best in the fields of infrastructure and environment. Both result from the heavy investment in the rehabilitation of industrial brownfield sites. Later on, this type of intervention declines in importance, so the achievements are closer to average.
- Although emphasised strongly as an objective, the results in terms of structural adjustment and spatial cohesion remained limited in the first two periods. Target achievement was better in the later periods. It is very likely that effects in structural adjustment simply cannot be achieved within only a few years.
- For innovation, target achievement improved over time. This is a field where the approach was progressively developed over consecutive periods. An important external factor contributing to the positive assessment in the later periods was the establishment of a number of universities in the region.

**Table 11: Achievements compared with imputed objectives for eight thematic axes**

		1989-93		1994-99		2000-06		2007-13	
Thematic axis		Imputed objectives	Achievements	Imputed objectives	Achievements	Imputed objectives	Achievements	Imputed objectives	Achievements
Enterprise		=	3	=	3	+	4	+	3
Structural adjustment		++	3	++	3	++	4	++	4
Innovation		=	3	=	4	+	4	++	4
Environmental sustainability		=	4	=	4	=	4	=	4
Labour market		-	3	-	3	=	3	-	3
Social cohesion		-	2	-	2	=	3	+	3
Spatial cohesion	Regional	++	3	++	3	++	3	+	3
	Within Subregion /city	-	2	-	2	=	4	+	3
Infrastructure		++	4	++	4	=	3	-	3

**Imputed objectives**

- ++ Very high effort, this axis is a central aspect of the regional development strategy
- + High effort, this axis is an important element in the regional development strategy
- = Average effort, this axis is included in the regional development strategy but is not particularly important
- Low effort: this axis is only marginally considered in the regional development strategy
- No effort at all on this axis

Achievements scale, end of period with respect to beginning of period

- 5 Very high achievement, the results for this axis are considerably above expectations given the effort put in it and ex-ante conditions
- 4 High achievement, the results for this axis are above expectations given the effort put in it and ex-ante conditions
- 3 Average achievement, the results for this axis are those which could be expected given the effort put in it and ex-ante conditions
- 2 Negative achievement, the results for this axis are below expectations given the effort put in it and ex-ante conditions
- 1 Very negative achievement, the results for this axis are considerably below expectations or even nil

The striking point from the assessment of effectiveness is that, based on good evidence, it allows the insight that the ERDF intervention produced good results for most of the specific objectives (see Chapter 5). At the same time, one of the most prominent objectives was continually missed: unemployment rates remain high in the Ruhrgebiet. Thus, the main objective was missed over the 23 years of ERDF intervention.

A first issue is that the second main objective of the programme - structural adjustment and change - was more successfully achieved. A good indication for this is that productivity in the Ruhrgebiet has become higher than the average of Nordrhein-Westfalen.

Obviously, the objectives of structural adjustment and employment have not been achieved simultaneously. An interesting question is how far this would be possible theoretically. To start with, structural change is immediately linked with a loss of employment. To compensate for this loss is - at least if increases in productivity and thus competitiveness are pursued - impossible in the short term. Either it requires growth in more productive sectors of the economy or additional

investment to modernise capital in the existing structure. Both require time. It is at least doubtful whether the two objectives of competitiveness and employment could be achieved within the same time horizon; therefore it is unsurprising to find one objective was better fulfilled than the other.

Against this background, some question concerning the strategy arise:

- Was there an implicit conflict of objectives in the programmes? For most of the time, the programmes gave the employment objective the highest ranking (e.g. OP 1996-1999: 42): 'Unemployment is the most important problem'. This goes hand in hand with the risk of overemphasising a short-term employment objective at the expense of the mid-to-long-term development of competitive structures. The interesting question is whether a strategy specifically aimed at developing competitive structures could have been more successful.
- There was an underlying tendency, mostly in the first programmes, to stick with the old structures and expect a solution by readjusting existing structures - instead of developing new ones. The 1992-1993 programme, for instance, aimed at 'diversification and access to new markets [...] for the former supplier and contractors of the coal and steel industry'. The same idea appeared in the 1989-1992 programme.
- Finally, the question of how far the policy mix could be more and better focused is relevant. As mentioned above, the programme structure and strategic approach needs to be seen in the context of regionalised policy. However, as these structures were unsuccessful from the mid-1990s onwards, the question remains whether a stronger focus of the strategy at programme level could have led to more targeted funding and perhaps better effects.

The overall résumé concerning effectiveness is ambivalent. Significant effects at the level of specific objectives and visible deficits in one of the two dimensions of the main objective (structural adjustment) go hand in hand. On the other hand, significant problems remain - as indicated by the problematic development of the second dimension of the region's main objective (employment). Based on the deliberation presented above, the reason for this relates to an incomplete conception of the processes of profound structural change. Those processes involve a complex interplay between the breakdown of existing structures, reduction of employment, and the subsequent creation of new, competitive structures and employment. If the restructuring is as drastic as experienced in the Ruhrgebiet, the process also encompassed cultural and societal factors. The point is that adjustment processes of this quality need much longer than one programme period. Although structural adjustment and creating employment are meaningful final objectives, they cannot be achieved within a few years' time - at least not in a situation such as the Ruhrgebiet.

## **6.2 Overall contribution of ERDF programmes to regional development (utility)**

Whereas achievements were related to the programmes' objectives in the previous section, this section discusses the extent to which the achievements met regional needs and helped to overcome regional problems.

First of all, the territorial focus on the Ruhrgebiet reflected the high concentration of problems in this part of the state. Insofar, the decision to focus interventions on the Ruhrgebiet as eligible area

have been well justified. Indeed, the Ruhrgebiet was hit very hard by the breakdown of structures in coal and steel industries. There was no doubt that it needed support to manage the adjustment. Accordingly, focusing the support strongly on this area (and the mining region of Heinsberg) was justified. In retrospect, it could have been worth thinking earlier about strengthening growth factors in other parts of the state.

In the Ruhrgebiet, the ERDF intervention influenced a number of factors relevant for development:

- For many cities, the problem of industrial wasteland was pressing. Extensive areas were derelict, often located in the middle of cities and contaminated after decades of heavy industrial use. This caused environmental problems and blocked development potential. ERDF programmes invested substantially to make this land usable, either for economic use, housing or open space. The project example of Zeche Zollverein in Essen (see Annex) illustrates this type of intervention and the effects. Even if the land was not used for economic purposes in the end, resolving this problem helped to make the cities liveable.
- There is another aspect linked to the re-use of industrial wasteland: the industrial sites often have a symbolic, cultural relevance for the city or the region. The mines or larger steel sites often formed the regional identity for a century or so. They were not only important employers, but also provided cultural and sporting opportunities. Thus the conservation of industrial monuments can also contribute to the creation and stabilisation of a regional identity. The interviews made clear that this symbolic component of the re-use of industrial sites should not be underrated. This aspect has been underestimated by the ERDF programmes. Creating entrepreneurial spirit, for instance, will meet specific obstacles in a cultural context such as the Ruhrgebiet. When change is as drastic as in the Ruhrgebiet, the policy answers will most likely require a very broad approach and decades of time.
- Environmental conditions are another field where ERDF helped to improve the situation. Generally, the wastelands often threatened the environment due to contamination. It was mainly soil and water that were affected. Considerable work has been undertaken to deal with the old contaminations and make land and water useable. An outstanding example for this type of project is the project bundle grouped around the Emscher region, where an international building exhibition was organised. The river Emscher was actually an open sewage drain, and the landscape of the region was disjointed. The projects helped to improve the situation significantly.<sup>18</sup> On a smaller scale, a number of projects had similar effects.
- Over time, ERDF intervention supported a large number of investments in enterprises and start-ups. The need to readjust the economic structure is obvious after old industries have broken down. Both investment and support for start-ups contributed to this. The ERDF has definitely contributed to the comparatively good development of productivity and thus competitiveness. At the same time, the interventions in this field could have been more efficient. On the one hand, the strategies stuck with the old structures for too long (e.g. by focusing support for innovation on the supplier of the former coal and mining industries).

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<sup>18</sup> <http://www.iba.nrw.de/main.htm> (accessed 27 September 2012).

On the other hand, evaluations criticised the lack of private investment. In any case, this kind of support is mainly demand-driven and essential to improve the economic performance of the region.

- The assessment of the activities to support innovation is closely linked and very similar. Again, the intervention by ERDF programmes helped to develop new products and services in the region, which in turn contributed to productivity development. In any case, when looking at the development of the innovation system, the most important impulse was to establish the universities in the region during the 1960s. It is exactly these universities that nowadays are often important partners in regional network and cluster activities. For the field of innovation, there are also deficiencies in concrete instruments. In early phases, the main approach was to finance technology centres. When trying to address the enterprises directly, the first instruments offered extremely high rates of assistance (up to 80 percent). This removes so much risk from the enterprises that it can affect efficiency.
- The infrastructure in the region was upgraded. The ERDF contributed by supporting R&D and education infrastructure. Capacities for research and training were created. Under the earlier programmes, a system of technology centres was developed, but, typically for this type of infrastructure, not all of the centres developed a sufficiently innovative profile or became sufficiently connected to regional actors (see EPPD 2000-2006: 312). In addition to the technology centres, a number of application-oriented research institutes were financed (e.g. Fraunhofer institutes). In the field of education, the main investment went into centres for vocational education, for both basic and advanced training. Infrastructure in tourism and transport complemented this type of intervention.
- From the 2000-2006 programme onwards, integrated urban development became part of the ERDF programmes. This was a reaction to the trend that problems tend to concentrate in certain parts of cities and need to be tackled with a complex strategy.

The ERDF intervention helped to counteract a number of problems of the Ruhrgebiet and met a number of crucial needs. The interviews repeatedly highlighted that developments under such a profound structural change could have been much worse.

**Table 12: Needs compared with achievements for eight thematic axes**

Thematic axis		1989-93		1994-99		2000-06		2007-13	
		Needs	Achievements	Needs	Achievements	Needs	Achievements	Needs	Achievements
Enterprise		+	3	+	3	+	4	+	3
Structural adjustment		++	3	++	3	++	4	++	4
Innovation		+ / ++	3	+	4	+	4	++	4
Environmental sustainability		++ / +	4	++	4	++	4	+	4
Labour market		++	3	++	3	++	3	++	3
Social cohesion		= / +	2	=	2	=	3	+	3
Spatial cohesion	Regional	++	3	++	3	++	3	++	3
	Within Subregion /city	+	2	+	2	+	4	+	3
Infrastructure		+	4	++	4	++	3	+	3

Needs Scale (evaluation of the region at the start of the period)

- ++ Very high need: the region is highly deprived in this thematic axis
- + High need: the region is somewhat deprived in this axis
- = Average need: the region is an average one in this axis, whose values are around the national mean so that there is not the need for a strategy specific for this region
- Low need: the region is better than the average in this axis, or above the national mean
- Very low need: the region is already a front-runner in this axis, not only at national level but also at European level

Achievements scale (end of period with respect to beginning of period)

- 5 Very high achievement: the results in this axis are much above expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 4 High achievement: the results in this axis are above expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 3 Average achievement: the results in this axis are those which could be expected given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 2 Low achievement: the results in this axis are below expectations given the effort put in it, the ex-ante conditions and the other concurring policies and events
- 1 Very low achievement: the results in this axis are considerably below expectations, or even nil

### 6.3 Good and bad practices (key elements of success and failure)

In this section, different aspects are discussed. On the one hand, there are the good and bad practices identified in this case study. In some cases, earlier choices and decisions look not optimal from today's perspective. But this does not mean in every case that it was possible to make a better decision at that time. What is identified as "bad" practice partly reflects learning processes (e.g. on how to design efficient regional policies): some things look different from today's perspective. However, practices linked to the development and implementation of the ERDF programmes are not the only factors determining success and failure. Accordingly, the most important external factors that contribute to success and failure are also highlighted.

#### Good practices



In the field of economic cohesion, the strategy chosen and the instruments applied to develop the SMEs in the region and adjust the sectoral structure comply with the good practice approaches. The early programmes already offered a mix of support for investment and R&D flanked by infrastructural measures and training. These main components would surely have built the core elements of a strategy for structural adaptation. Compared to national regional policy, the ERDF started taking cooperation and networking into account from an early stage. Simultaneously, support for investment in enterprises is basically demand-driven, so there are external limits to the effects of this type of intervention. The early emphasis on support for start-ups is also good practice.

For territorial cohesion, the strong emphasis on re-use of wasteland and dealing with the environmental effects of contamination was a good practice. Even if it does not always lead to direct economic impulses, it is essential to keep the region liveable and create the preconditions for future development. A good practice is the integration of the rehabilitation of wasteland with social and economic development in the cities. In most cases, the infrastructural activities have been combined with softer measures of integrated urban development.

It is good practice to include integrated urban development strategies in the programme. The integrated approach and the mobilisation of local actors can help to tackle the problems clustering in certain parts of the cities. And simultaneously, it's the suitable answer the ERDF can offer to improve opportunities for participation - mainly for those suffering most from structural change.

Besides this profile of thematic strengths and weaknesses, there are a number of procedural or more strategic aspects of good and bad practice. The strategy mix of the first programmes proved to be very stable and appropriate. It combined all the elements that a comprehensive development strategy needs - from infrastructure to innovation and investment and qualification. Some aspects, such as the focus on innovation, appear remarkably early in the strategies. Recently, the focus on fields of competence and development of clusters is basically positive. To build on the strengths and develop existing cooperation structures is a promising choice. Simultaneously, the strategy needs to be balanced to avoid exclusion and offer opportunities. So the combination of cluster approaches with integrated local development strategies seems to be the right choice to deal with current tasks.

### **Bad practices**

There is a lack of entrepreneurial spirit in the region as a consequence of the culture and tradition of a region dominated by large industrial enterprises. This could have been taken into account earlier. For innovation, the approach was a bit fragmented from a contemporary perspective. There was an emphasis on infrastructure in the early programmes, but the targeted development of R&D in enterprises was given insufficient weight.

Although the overall strategic design is quite convincing, not all instruments to implement the strategy look very efficient, at least from a current perspective. In some cases, as for the support R&D in enterprises, it looks as if only a certain experience allowed developing and adopting the instruments chosen. However, the choice and design of specific instruments is certainly context-dependent, and over the time regional development policy has seen different fashions, so that a certain development can be expected.

In the field social cohesion, the labour market problems have been understood for too long as a problem of adjusting skills. In retrospect, the focus on infrastructure for vocational and advanced training looks like failure rather than success. In fact, it seems to be a problem of basic education deeply rooted in the schools system and even in regional culture.

Finally, and rather technically, arguments were repeatedly expressed in the interviews about the stability of the implementation structure. Indeed, the programme implementation was obviously partly affected by a lack of implementation capacities. Two examples have been mentioned. The first is that in the early 2000s the district administration was reduced, leading to a loss of competencies for programme selection and management, which in turn affected implementation. The second example was the attempt to let the investment bank implement R&D programmes. However, a lack of technological competencies meant that the proposals could not be assessed properly. Both examples make clear how important a powerful and stable implementation structure is and how carefully it needs to be managed.

### External Factors

The general setting of the first programmes was to establish a rather broadly defined strategic framework and to allow the bodies acting under the Regionalised Structural Policy to complete it according to their own preferences. In fact, this concept leaves it to the regional actors to choose the concrete instruments and use them to tackle the specific regional problems. This conceptualisation links ERDF success to the performance of Regionalised Structural Policy; and this makes considerable sense in a *Land* with 17 million inhabitants (5.5 million in the Ruhrgebiet). Unfortunately, the cooperation at regional level did not develop as expected: the participation of non-administrative actors was weak, and the structures became inflexible and lost importance. This is a crucial aspect for the overall assessment of ERDF success in NRW: an essential element of the original concept, the Regionalised Structural Policy, more or less disappeared over time - at least, it could not fulfil its important strategic function from the late 1990s onwards. This strategic gap remained empty. No functional equivalent for the idea to substantiate the strategic framework at regional level was developed; and there were no other comprehensive strategic efforts at a lower level, and the *Land* did not fill this gap with its own vision. As far as technical implementation (project selection and financing) is concerned, ERDF was not affected as the implementation structures existed independently from Regionalised Structural Policy. The question of how far the effects of the intervention could have profited from additional synergies cannot be answered, as there is insufficient evidence in this area. But it is clear that the overall strategy of the first years was missing an important element after the decline of Regionalised Structural Policy; without the Regionalised Structural Policy fully implemented, it did not make as much sense to draft ERDF strategy as a rather broad and unspecific framework. Only in the 2007-2013 period could the concept of cluster policy partially act as a strategic orientation for the different policies brought together in the programmes. In a way, the cluster approach shifts the responsibility of substantiating the strategic framework from a territorial logic to a functional logic. Now it no longer relates to the regions below the *Land* level, but rather to functionally defined clusters that are mobilised to support development.

Concerning the capacity to learn, the conclusion is heterogeneous: on the one hand, the set of instruments and the details of the programme have been changed constantly without affecting the

overall stability and reliability of the strategy; on the other hand, the programmes perhaps retained the chosen overall strategic framework for too long.

A factor negatively influencing development is the specific spatial situation in the Ruhrgebiet, together with the attitude of the responsible actors. The Ruhrgebiet is a highly urbanised region, characterised by one city actually immediately bordering the next. The Ruhrgebiet cities simply do not have the usual urban hinterland. To deal with this requires coordination in nearly all fields: allocation of public services, development of profiles of business locations, provision of infrastructure, etc. However, the willingness to cooperate with neighbours is not very pronounced in many of the cities, where the dominant logic seems to be to take care of oneself.

In retrospect, the understanding of the process of structural change may have been too narrow. The problem of the Ruhrgebiet was seen as a problem of adjusting the existing economic structure. The focus in the early programmes was on the sectors (suppliers of coal and mining) and the people immediately affected. The problem was perceived mainly a problem of helping them to readjust. Over time, the perception developed further, and target groups not immediately affected were addressed. This can be illustrated by the growing importance of support for start-ups. But the problem was still defined as one of economic structure. Meanwhile - and this is supported by several interviews - it became clear that there substantial issues of culture and tradition were playing an important role. Not only infrastructure and economic structure, but also regional identities and self-perception, needed to change. In a way, the Ruhrgebiet needs to reinvent itself and find a new identity. Current assessments of the Ruhrgebiet's situation criticise the absence of this new identity and vision. A more comprehensive view of the change process would perhaps make the intervention more effective. Linked to this aspect is the fact that readjustment is a fundamental change that requires a much longer time than only one programme period, and it may potentially require one generation. If strategy development is limited to a time span of a few years, this could hinder the ability to adopt the right perspective for the management of radical change.

## 7. CONCLUSIONS

### 7.1 EQ1: To what extent did the programmes address regional needs and problems over time?

*EQ1a: What were the initial regional needs and problems and what has been their evolution?*

ERDF interventions have been concentrated on the Ruhrgebiet for most of the period since 1989. Strongly dominated by coal and steel industries, the Ruhrgebiet suffered from the acceleration in the decline of these industries in the 1970s. One of the main consequences was rising unemployment rates, but the legacy of the old industries included large areas of derelict land in cities and associated environmental risks. Today, the Ruhrgebiet has undergone fundamental structural change, but the old industries have not only become much smaller, but also competitive again. SMEs and business-oriented services have developed dynamically, and the structure has shifted towards more innovative and technology-intensive sectors. Productivity has developed well, but unemployment rates remain high. R&D performance is improving, the environmental situation has improved, and the problem of wasteland has been significantly reduced. However, the educational endowment is below national levels, and the concentration of several overlapping problems in specific parts of the cities has increasingly become a problem. Unemployment and specifically long-term unemployment remain problematic.

*EQ1b: What was the strategy of ERDF programmes of each programming period? What has been their evolution?*

Some basic features of the ERDF strategy chosen to tackle the region's problems have remained comparatively stable over the period from 1989 to the present. The first is the focus on the Ruhrgebiet. The comparatively small former mining region of Heinsberg (near Aachen) was also an eligible area for the entire period.

Given the situation in the old-industrialised eligible area, the strategy focused on structural re-adjustment. The main aim remained stable for most of the time: to create competitive economic structures and support the creation of new jobs. Although the detailed setting and the mix of instruments has varied, the main strategic elements also remained stable for a considerable time: support for investment in enterprises, innovation, re-use of wasteland, human resources qualifications and infrastructure.

A radical change in the approach occurred only in the 2007-2013 programme. In parallel with the discontinuation of the territorial focus, cluster policy gained strategic importance and competitive tendering procedures were introduced.

*EQ1c: What were the priorities and objectives of ERDF programmes of each programming period? What has been their evolution? Were the objectives SMART?*

The main objective of the first programmes was to create jobs by diversifying the economic structure. The element of strengthening competitiveness gained importance over time to become the main objective in the current period. The programme structure in terms of priority axes has remained more or less stable over time. When changes have occurred, they have rarely affected the content. The only completely new element has been integrated urban development, introduced

in the 2000-2006 period. The instruments used have changed significantly over time; NRW's programmes started using revolving instruments from an early stage.

The context of the first programmes is important to understand the role of ERDF in NRW. In the late 1980s, the so-called Regionalised Structural Policy approach was developed. Through 'regional conferences', the regional actors discussed and decided regional development concepts. ERDF implementation was meant to form a strategic framework and toolbox for the regional strategies. Regionalised Structural Policy faltered in the second half of the 1990s, as meetings and coordination structures lost relevance. This important element for the implementation of the ERDF programmes, which was planned to substantiate the strategic framework, essentially collapsed.

The objectives defined in the programmes became more and more **specific** over time. In the very first programmes until 1993, objectives have been formulated in a rather general way. They became more concrete and detailed in later programmes. Mainly in the 2000-2006 programme, definition of objectives changed and became much more detailed than in previous ones. While becoming more specific, the objectives also became more **measurable** over time. Quantified objectives have been introduced from the programme 2000-2006 onwards. A side effect of introducing more quantified objectives was that objectives have been much more differentiated and have been defined on the level of single actions rather than the overall programme objectives. By doing so, the objectives became easier **achievable**, but this was achieved at the expense of shifting the focus of objectives from the more strategic level to the level of single activities. The earlier programmes had explicitly argued that the overall objectives (e.g. rate of investment) cannot be easily quantified, as they cannot be directly achieved. So in a way the progress in quantifying the more specific, but simultaneously more detailed objectives in later programmes led to a decrease in **relevance**: The focus of objectives shifted from the overall objectives on programme level to more detailed objectives covering only small parts of the programme. So the development over time led to a huge number of specific and measurable objectives, where every single one is of limited relevance for the programme as a whole. On the other hand, the shift to more detailed objectives improved **timeliness**. On the level of single actions, result can be measured timely.

So, the quality of objectives in technical terms developed over time. The system of objectives became more differentiated, and the definition of quantified objectives was introduced systematically from the 2000-2006 programme onwards. The definition of objectives became more SMART over time. But this is only a rather technical aspect: In parallel, the strategy became more complex, as more cross-cutting issues were integrated. Although progress was made from a technical perspective, the strategic focus may have been better in earlier programmes. The progress in quality of objectives was achieved by gradually shifting the emphasis from more strategic objectives to more concrete output level objectives; and to a differentiated system with specific objectives for single actions rather than a focus on a few more general overall objectives for the programme as a whole. Generally, it is questionable whether the quantification of objectives is appropriate for programmes that are intended to act as strategic frameworks.

***EQ1d: What has ERDF support been spent on in each programming period? Have there been significant transfers from initial allocations of ERDF resources to other priorities in any period?***

From 1989 to 2011, a total expenditure of €6.39 billion (2000 constant prices) was spent under ERDF programmes. Expenditure increased over time from some €1 billion in the first funding period from 1989 to 1993 to more than €2 billion in the 2000-2007 period. There were no fundamental changes to the initial allocation within any of the funding periods.

Over the whole time from 1989 to 2012, expenditure has been concentrated on enterprise support (31 percent), innovation support (26 percent) and on measures to influence the spatial distribution of economic activities (13 percent). The share of funds spent on innovation increased significantly over time, compensated by reducing the share of funds spent on enterprises and infrastructure. Whereas the first funding period was predominantly enterprise-oriented (with more than 50 percent of the total expenditure on investment in enterprises), the current one can be described as innovation-dominated:

- The 1989-1993 programmes spent more than 60 percent of the budget for enterprise support. Among the remaining themes, spatial distribution of economic activities had the highest share (some 13 percent). The rest goes to Innovation, Environmental sustainability, and the labour market.
- The second period (1994-1999) showed a significant increase of the share spent for influencing the spatial distribution of economic activities (37 per cent), investment in enterprises is now only the second important thematic axis with a share of 21 percent)
- The 2000-2006 period shows the beginning of a trend that continued in the following period: innovation becomes more and more important. In this period, the share of investment in innovation reaches 28 percent. Together with enterprise support (33 percent) and structural (15 percent), these three axis amount to nearly 80 percent of the funds spent.
- Finally in the 2007-2013 period, the support for innovation amounts to 56 percent of the budget. Enterprise support has only a share of 10 percent, but social cohesion measures gain importance and make 32 percent of the budget.

**7.2 EQ2: To what extent do ERDF achievements meet regional objectives and needs in each programming period and across all periods?**

Although ERDF intervention led to significant and visible effects, it cannot be expected to influence macro-variables such as GDP or unemployment directly: the intervention is too small in relation to GDP, and there are other interventions that outweigh ERDF.

Nonetheless, the ERDF funding has been targeted at some of the most important needs of the region and achieved - generally speaking - significant effects as summarised above. Nevertheless, the Ruhrgebiet still suffers from high employment rates, even though the funding was targeted at this objective from the outset. Structural change was inaccurately conceptualised from the beginning: the approach was too dominated by perceiving the problem only as an economic one and failed to take into account the very long timeframe that would be necessary to achieve it.

***EQ2a: What are the reported achievements of each programming period?***

For the first programme (1989-1994), the main achievements as identified by the evaluation were in the fields of redevelopment of wasteland, improving infrastructure for economic purposes and technology transfer, start-ups and further education, and support for private investment. In the 1994-1999 period, achievements were focused on the same areas as before, but with an increased financial volume, so that the figures for the actual achievements are higher. For the 2000-2006 period, the programme was strongly oriented to job creation: the objective of creating jobs was met for safeguarding jobs, but missed for job creation. The achievements of ERDF over time can be summarised by policy axis:

- **Infrastructure:** In the 1989-1999 period, more than 3,000 hectares of industrial wasteland were redeveloped, plus more than 24,000 square metres of former factory buildings. Forty-three technology and innovation centres had been funded by 1999. Between 1989 and 2011, more than 232 training and qualification centres were modernised and capacities for more than 70,000 training places were created.
- **Enterprise:** Over the whole period, more than 4,700 investment projects in enterprises have been supported, leading to 23,000 new jobs and safeguarding 27,500 existing ones. More than 108,000 consultations for start-ups and enterprises have been conducted. Since 2000, this has led to more than 23,000 actual start-ups. Between 1989 and 1999, 246 technology transfer projects were implemented. Evaluations conclude that ERDF contributed significantly to investment in enterprises.
- **Innovation:** In the first two programme periods, the programmes mostly supported technology centres. Since 2000, the funding has focused on competence fields or clusters. In the current period, where concrete figures are available, the main outputs have been 43 supported networks and clusters, 266 projects for energy and resource efficiency and the development of environmentally friendly energy, 183 projects in the field of innovative services, and 21 intra- or interregional pilot projects.
- **Environment:** Across the entire study period, more than 1,000 hectares of contaminated wasteland were redeveloped, and much more industrial wasteland was rehabilitated.
- **Structural adjustment:** Support for start-ups, investment in enterprises and, finally, in the current period, support for cluster policy have all led to significant effects: Economic and technology oriented infrastructure has been significantly improved, support of start-ups and SMEs lead to diversification of the economic structure, mainly by supporting innovative and service sectors, as well as creative industries and tourism. The latest programmes also contributed to strengthening the knowledge-based economy.
- **Social inclusion:** In the 2000-2006 period, 30 integrated urban development projects were supported.

***EQ2b: To what extent were objectives achieved in each programming period?***

As ERDF strategy was designed as a framework to be filled on lower level by the Regionalised Structural Policy, the objectives of the first two periods have been defined in a rather general way, which makes it difficult to arrive at a clear conclusion on effectiveness. More specifically, no quantified targets have been defined. The most important objectives for the programmes until 1999 are creating jobs, supporting SMEs, modernising infrastructure and protecting the environment. There is no doubt that funding addressed relevant fields. Evaluations assess funding

as effective. For the 2000-2006 period, the evaluation also finds an overall good effectiveness of the programme, but also some criticism is expressed: For instance, investment in the private sector is seen as “insufficient”, also the effect of support for start-ups and for innovation centres is seen as rather limited. Nonetheless, the overall message is that the intervention shows a significant effect in relation to the objectives set.

***EQ2c: To what extent were needs met in each programming period? To what extent can observed changes in regional needs and problems be imputed to ERDF programmes over time?***

While the underlying problems mostly remained the same over time, the ERDF programme targeted some of the most important needs of the Ruhrgebiet:

- Re-use of industrial wasteland
- Investment and start-ups
- Environmental problems
- Innovation
- Infrastructure
- Urban development

In all these areas, the funding produced significant achievements. However, although significant achievements can be identified in nearly all of the relevant fields, they cannot simply be attributed to the ERDF intervention. On the one hand, the amount of money spent by ERDF programmes is too small to identify effects based on macro-economic models. On the other hand, for most of the fields targeted by ERDF there are additional complementary instruments financed by national or state sources. Their effects overlap and prevent any isolation of the achievements solely attributable to the ERDF programmes. In some cases, important influences from completely separate policy decisions have influenced ERDF performance: for instance, cluster policy in the current period profits considerably from the establishment of several universities in the 1960s and 1970s.

Nevertheless, the ERDF has certainly been one of the contributing factors to the following developments: the problem of industrial wasteland was markedly reduced, development of innovation in enterprises and the regional innovation system has been supported, and urban development problems have been eased.

***EQ2d: What have been complementarities and synergies of ERDF interventions with ESF; EAGGF/EAFRD; and with domestic regional policy interventions?***

The ERDF Operational Programmes were accompanied by complementary programmes. The RECHAR and RESIDER Community Initiatives, also funded by the ERDF, in the first periods actually overlapped with the ERDF OPs and funded some of the same themes. On project level, the programmes were strictly separated, but the fields of intervention were partly the same. With regard to coordination with ESF, the overall conclusion was disappointing: ERDF and ESF instruments have followed over time separate logics and have proven hardly compatible in practice. There have been some efforts to achieve synergies, like in the field of training and education or urban development. But in praxis, and according to the interviews, the factors leading to separation instead of integration and synergies have been stronger: ERDF and ESF follow



different rationale. ERDF is enterprise-focused, ESF is employee-oriented. And both are implemented in separated structures, each with its own logic. Also on regional level, ERDF and ESF both have been delivered in separate structures, so that actual synergies have been difficult to achieve. The situation between ERDF and EAGGF is similar: both are already separated on the strategic level and implemented in completely separate structures. Thus synergies are limited.

With regard to domestic policy, a number of strong complementarities and synergies can be identified:

- ERDF and the domestic Joint Task for 'Improving the Regional Economic Structure' have actually been kind of merged in the first years. Later on, ERDF was used to complement the Joint Task by supporting activities that could not be funded from the national programme (innovation, support for start-ups, equity capital finance).
- ERDF was an important instrument to implement NRW's *technologieprogramme* and later then the Cluster policy. In this fields ERDF had synergies with different domestic programmes. The situation is similar in the field of urban development, where ERDF is combined with several federal programmes.

Generally speaking, nearly all the fields of ERDF interventions are also to some degree subject of domestic programmes - may it be federal or Land policy. So in most cases there is a certain mutual reinforcement of effects.

#### ***EQ2e: What has been the overall contribution of ERDF programmes to regional development?***

In summarising the overall contribution of ERDF programmes, it is evident that the intervention helped to generate a positive influence on a number of important development factors: principally investment in enterprises, innovation, re-use of wasteland, and environmental issues, where the contribution is significant and visible. Simultaneously, ERDF interacted with a number of other programmes to lead to the situation as currently perceived: 'a lot achieved - little gained'. Progress has been made in structural adjustment and the environmental situation, but the unemployment rate remains high and problems have tended to concentrate in selected urban districts.

### **7.3 EQ3: What are the main lessons learnt on the effectiveness and utility of ERDF interventions?**

The main lessons to be learnt from the NRW case study for the effectiveness and utility of ERDF interventions are as follows.

**Carefully verify the underlying development model:** One of the most important lessons is that fundamental structural adjustment is not only an economic, but also a societal process. Those factors affecting success and failure might well lie beyond the usual economic factors and relate to culture and tradition. Furthermore, it is important to be aware of how long the aspired change might take, as certain processes might take much longer than one funding period. Depending on the specific problems, strategies need to cover time-spans of not only a few years, but decades.

**Sound preparation and careful design allows for a surprisingly stable strategic orientation:** For NRW, the basic strategic elements have hardly been changed over 20 years - and there was no need

for such change. Very modern elements (emphasis on innovation, revolving instruments) were introduced at an early stage. A very intensive and rigorous strategy development process prepared the drafting of the first OP. Significantly, this was only possible because the ERDF programmes were formulated as a strategic framework and not as a self-contained strategy and thus allowed for continuous adoption to specific local needs and the evolving situation.

**Learn constantly:** Some instruments may have been retained in use without a rigorous appraisal of their effectiveness. For example, there were some misconceptions in the field of support for innovation. It is important to be open to learning and adapting instruments as necessary (but most of the evaluations offered only a limited basis for drawing concrete conclusions).

**Concentrate efforts:** To achieve visible and relevant output - as well as impacts - it is important to concentrate efforts. Ultimately, the main achievements of the ERDF programmes in NRW were generated by only three or four types of interventions.

**Tackle the most obvious problems and think about the hidden opportunities:** For the strategy and the achievements, the focus on the re-use of wasteland was essential for the success story. Although neither innovative nor immediately linked to economic effects in every case, the issue was extremely important for the Ruhrgebiet. On the other hand, systematic investment in the education system would have been advisable - as human capital is one of the most important factors determining mid- to long-term development: Usually, the main focus of regional development strategies is on enterprises and innovation. But in the long term processes of structural change, the development of human capital, the skills available in the region influence the potential development strongly. So it would have made sense, to focus this aspect earlier.

**A clear strategy is more important than a technically advanced strategy:** The first programmes described a comparatively spare and only discursive strategy. They had no sophisticated system of objectives and no quantified indicators and targets. However, they had a clear objective and a straightforward selection of priorities and measures. Subsequent strategies were much more complex and technically more advanced (with quantified baselines and targets, and articulated hierarchies of objectives). But simultaneously the focus of the strategies was shifted more and more to the level of single instruments and actions. The development of the region as a whole was a bit lost out of sight. Above the larger number of quantified objectives on the level of single instruments, the overall coherence of the interventions became less visible than in earlier programmes. This highlights that the content of the strategy is more important than the form. Thus the technical quality does not tell the whole story about a strategies quality.

**The wider policy context matters:** If ERDF is implemented in a crowded policy context as in Germany, with complementary domestic programmes in different fields both from national and state level, ERDF interventions become part of a broader context of intervention. It is important to monitor this scenario. For the Ruhrgebiet case, both sets of programmes and evaluations have failed to address how the ERDF programmes, with their aim of speeding up structural change, related to the wider domestic policy of providing sectoral subsidies, which aimed to buffer the decline of coal and steel industry, related to each other.

**Institutions and processes matter:** Lastly, and related to the previous point, it is misleading to act as if the ERDF strategy was the only and complete regional development strategy. The importance

of the approach of the domestic Regionalised Structural Policy highlights the need to take other elements into account.

***EQ3a: What are the main good/bad practices?***

There are some **good practices** (key success elements). The first was the strategy. When looking at the whole period from 1989, a good basic strategy laid the ground for continuous work in fields that generated the most significant effects: rehabilitation of wasteland, investment, and innovation. The most important weaknesses of the regions and the essential fields of activity have already been identified in the first programme's strategy.

Although it might appear old-fashioned, the emphasis on industrial wasteland was the correct choice for the Ruhrgebiet. This relates to the fact that parts of the area were heavily contaminated, and the wasteland often comprised important parts of the inner city. Accordingly, for both environmental and economic reasons, this field was important to deal with. From the beginning, the strategy incorporated a good mix of elements. Start-ups and innovation were already present in the earliest programmes and integrated urban development tackled one of the most pressing problems.

ERDF helped to meet the needs and develop the instruments of regional policy. ERDF programmes allowed developing approaches to complement the existing domestic policy, mainly the Joint Task.

Another element of good practice was the effective implementation structure. All in all, programme implementation was no efficient. In some periods, certain smaller parts of the programmes were delayed due to efforts to modernise public administration, but the implementation went smoothly overall.

However, while there are a number of positive aspects, there are also features that limited effectiveness (**bad practice**). The most important point in this respect is that after the slow decline of the domestic Regionalised Structural Policy, the growing gap in the strategic framework was not filled for some time. The ERDF strategy has been developed as a framework to be field by local and regional strategies to be developed under the Regionalised Structural Policy. So for a while the ERDF-strategy was missing an important element. It was not until the current period that cluster policy could partly replace the older concept.

Without the domestic Regionalised Structural Policy, there was no instrument dealing with one of the most pressing problems of the Ruhrgebiet. In an urban agglomeration consisting of different and formally independent cities, a minimum of coordination is important to avoid ineffective strategies to be pursued by the different actors. In fields like infrastructure development or specialisation, a better coordination would improve efficiency.

Further, given the complex conditions of radical structural adjustment, the crucial aspect of labour force skills should have been given more weight in the earlier periods. Instead of focusing on adapting the skills of former steel and coal workers, a broader approach to improve the skills in the region would have been more appropriate.

In some fields, such as support for innovation, the strategy perhaps focused on infrastructural instruments for too long, and it was too slow in learning to address private actors directly.

***EQ3b: What conclusions can be drawn for improving ERDF programme design, implementation, results-based management, achievements?***

The case of NRW demonstrates that ERDF programme design cannot be understood in isolation from the domestic context. A good programme design must fit with existing strategies and implementation structures. This also means that factors affecting ERDF programmes may originate in the domestic realm and not in the ERDF programme in a narrow sense. For instance, the ERDF was designed in the beginning as a strategic framework based on the system of Regionalised Structural Policy. After the decline of Regionalised Structural Policy, it took some time until a new guiding strategic idea for the whole ERDF intervention had been found (Cluster Policy). A second example of domestic factors affecting the ERDF was the delay in implementation caused by restructuring the implementation system in the context of public sector reform. So, ERDF programmes need to fit strategically and institutionally with the domestic context - which means that a minimum of knowledge about this context is required to be able to assess how well the programme 'fits'.

If a programme is aiming to facilitate or enable a long and complex process of profound structural change, it is important to develop an understanding of underlying changes and relevant factors as early as possible and in as sophisticated a manner as possible. Although strategies were well defined in the first programmes and probably included all components which could be identified at that particular time, in retrospect the impression is that it has been underestimated how long and comprehensive the required change is. A long term perspective is crucial for a strategy to tackle structural adjustment. The objective is not to create jobs in a short time, but to create structures providing jobs in a sustainable manner. From this perspective, fields such as basic education gain importance which is normally not at the fore of regional development policies.

Given the long-term character of structural adjustment, it is important to foresee opportunities for learning. In the ERDF system, every new funding period offers the opportunity to step back and reflect upon lessons learned. It is important not only to ask the question of what degree actions undertaken have proven to be of value. It is equally important to ask if there are things which have been neglected or ignored and need to be taken into account. This is demanding, as much more information and evidence relating to the former tends to be available. But it is important to periodically question the whole strategy to avoid being trapped in path-dependent policy design.

Results-based management in a strict sense is overambitious for ERDF strategy and implementation. This would require:

1. Timely and valid knowledge about the results of intervention. Even if evaluation was able to identify the results, this is usually only possible with a time lag of several years. As such, information tends to arrive too late for day to day management - if it is available at all.
2. There are simply no management structures available to implement a consistent system of results-based management. There are different ministries involved at *Länder* level - and the MA does not have the formal competence to manage units in other ministries. The actual selection of projects is in most cases delegated to professional units somewhere outside the ministry - which again limits the direct influence. So results-based management cannot realistically be expected.

What is feasible and should be strengthened is a clear statement of objectives (expected results) and an ongoing comparison between those objectives and the output generated during implementation - which is management by objective, rather than management by results. The new funding period represents an important step forward in this direction.

With regard to the achievements, good results and a significant contribution are generally evident. The visibility of achievements is limited to a certain degree by the fact that ERDF programmes have a broad scope and it is difficult to establish a picture of what has been achieved over the large number of instruments applied. ERDF contribution could possibly be more strongly focused on selected key elements - leaving the rest for domestic policies. For instance, ERDF interventions in NRW might focus on redevelopment of industrial wasteland, innovation, and urban development and thus target a selection of the most important fields of activity.

## **8. ANNEX I - ANALYSIS OF PROJECT SAMPLES**

### **8.1 Project: Logport Logistics Centre in Duisburg (Logport I and II)**

#### *Summary description*

Logport I started in 1998. The aim of the project was to redevelop and market the area of a former steel mill and to establish a tri-modal logistics centre in Duisburg-Rheinhausen with the integration of water, rail and road transportation systems. The project was implemented over two periods (1999-2001 and 2002-2005). Overall, the project received €43,892 million in ERDF funding. The results of the project exceeded expectations. By 2011, over 90 percent of the newly developed area with a size of 265 hectares had been marketed and 49 companies with a total of 3,300 employees had been established. The port of Duisburg is now one of Europe's leading logistics locations and the world's largest inland port.

Following the successful example set by Logport, I another area of fallow land in Duisburg port was cleaned up and redeveloped from 2006 until 2008 by Logport GmbH (Logport II). This former zinc and lead production site with a size of 33 hectares was in a very bad environmental condition. Redevelopments of the area and the tri-modal transport connection were supported with €21,186 million of ERDF funding.

#### *Underlying problem and context*

As one of the main steel industry sites in Germany and Central Europe, Duisburg suffered considerably from the structural changes that started at the beginning of the 1970s. During the decline of the coal and steel industries, the number of employees in steel mills fell from 70,000 to 16,000. One important location of steel production was the site of the former 'Hütten- und Bergwerke Rheinhausen AG', later 'Krupp-Hoesch Stahl AG', with around 16,000 employees in the 1960s. After the structural changes the site was closed in 1993 and there was a large area of derelict land with a size of 265 hectares near the port that needed to be cleaned up and redeveloped to become marketable.

In 2006, another area near Duisburg port - a former zinc and lead production site with a size of 33 hectares - needed to be redeveloped. The area was in a very bad environmental condition.

#### *Detailed description*

Logport I was planned and supported by the federal state of Nordrhein-Westfalen, Duisburg Port (duisport AG) and the European Commission. The total costs for investment were over €200 million including €43,892 million of ERDF funding. The company Logport Logistic-Center Duisburg GmbH (Logport GmbH) was founded for the development and marketing of the area. The aim of the project was to develop a tri-modal logistics centre and to establish an international logistics service provider. The first tasks were therefore to clean up the area and create access to public supply systems and infrastructure. Further parts of the project were the modernisation of port and rail facilities, the construction of a tri-modal container terminal and the development of a marketing concept. One feature of the project was that the development and marketing of the area were performed at the same time. In 1999, a first world-leading logistics enterprise - New Wave Logistics (today NYK Logistics Germany) - set up business in the area of Logport I. An advantage of this

process was that the special needs and requirements of the companies could be taken into account during further development. The demand for further expansion of the Logport project increased very fast. In this context, Logport GmbH attached great importance to the fact that only companies with their own processing could be established in the area, which should guarantee a contribution to job creation or safeguarding.

Logport II was implemented in a similar way. A main part of the project was the redevelopment of a heavily polluted area of fallow land on the site of former zinc and lead production facilities with a size of 33 hectares. The project started in 2005. Besides cleaning up the area, tri-modal transport connections were created including a quay and port cranes. Overall, over €50 million were invested, including €21.186 million of ERDF funding. The development of Logport II was completed in 2008.

#### *Outputs and achievements*

As far as Logport GmbH is concerned the results of Logport I exceeded expectations. By 2011, over 90 percent of the newly developed area with a size of 265 hectares had been marketed and 49 companies with a total of 3,300 employees had been established (GEFRA/MR, 2010). The development of the area was completed quicker than initially planned. The logistics enterprises that set up business in the area of Logport I came from all over the world and started their own production in Duisburg port.

The redevelopment of Logport II was finished in 2008. The area has benefited from Logport I's positive image. By 2011, three companies with 43 employees had been established on the Logport II site. Logport GmbH has created another tri-modal logistics centre on the site. In order to optimise the railway link and to expand the terminal, Logport GmbH has proposed another funding phase for Logport II.

The port of Duisburg is now one of Europe's leading logistics locations and the world's largest inland port, which also has regional impacts. In 2006 and 2010, the consultancy Regionomica GmbH analysed the regional impacts of Duisburg port on behalf of the Duisburg Port AG. The final analysis attests that the port has become increasingly important for the city of Duisburg: in 2010, a total of 40,600 jobs were directly or indirectly dependent on Duisburg Port (36,240 in 2006), including 21,660 in the city of Duisburg (16,800 in 2006). The added value of the employment in Duisburg port is about €2.7 billion overall, including €1.5 billion for the city of Duisburg (Regionomica, 2011).

#### *Value-added*

With its main emphasis on the logistics economy, the project has chosen a strategy that is suited to the strengths of the region and to the available sector-specific development opportunities (GEFRA/MR, 2010). Another added value of the project was the tri-modal logistic concept, which made the area more attractive for enterprises and which shifted traffic from the road to rail and ships. Furthermore, it was also very important that Logport GmbH only allowed companies to settle if they could guarantee a contribution to job creation or safeguarding.

### *Management and monitoring issues*

An advisory board, which included representatives of the city of Duisburg, the federal state NRW and the port, planned and monitored the project implementation. The project manager organised an open day at the beginning of the process to involve the local community and associations, enabling interested organisations and residents to access information about the project and enter the area. Former employees of the steel mill used the opening of the area to visit the location with their families.

A problem for Logport GmbH was that it had to manage the advance payment on its own. A high number of investments had to be made over a very short time to allow significant progress to be made.

### *Conclusions*

The projects Logport I and II illustrate how ERDF funding can be used for the development of an area of industrial fallow land based on regional and economic strengths. The development process was oriented towards the needs and requirements of the beneficiaries (the logistics enterprises) and was carried out in cooperation with the federal state and the city. A main component of the projects was the implementation of a tri-modal logistics concept.

## **8.2 Project: Zollverein Essen**

### *Summary description*

Between 2002 and 2010, the large-scale project Zollverein received a total of €165 million in funding from the European Commission, the federal state of Nordrhein-Westfalen and the city of Essen. The aim of the project was the expansion of the *Zeche Zollverein area* (the disused site of a former coal mine) into an integrated design and culture centre of national and international significance. The project included four core elements: (i) the establishment of a training and research facility for design (Platform Design), (ii) the organisation of a regular design and industry exhibition (Metaform, later ENTRY2006), (iii) the development of an industrial design park and (iv) the establishment of a museum about the region (Ruhr Museum).

### *Underlying problem and context*

In 1986, the coal mine *Zollverein* was closed as the last colliery in Essen - formerly Europe's largest mining town. The closure of Zollverein meant not only the loss of one of the most significant employers and a driving force for the northern city districts, but also the end of an identity-generating era for Essen (Entwicklungsgesellschaft Zollverein MBH, 2008). After a ministerial decree from 1986, the coal mine Zollverein and all its existing buildings were declared a monument. Therefore, the building complex and its basic equipment had to be maintained and made publicly accessible for sightseeing purposes. As the new proprietor, the State Development Company of North-Rhine-Westphalia (LEG) commissioned a task force to develop a concept for the future utilisation. In the 1990s, rebuilding and redevelopment measures started to transform the former coal mine into a site of cultural interest. In 2001, the coal mine Zollverein was listed as a World Heritage site. At that time, the federal state NRW and the city of Essen were planning a



large-scale ERDF project with the aim of developing the Zollverein site not only as a cultural but also as a new economic centre and a driving force for structural change in the region.

#### *Detailed description*

The aim of the large-scale project was to develop a design and culture location with relevant economic significance for the Ruhrgebiet. Therefore, the project was supported with a total of €165 million including €61.3 million of ERDF funding in the 2000-2006 period. Most of the other funds came from the NRW town planning development programme and from the Emscher-Lippe ecology programme. Beyond that, there have been some supplementary projects at the mine location. The large-scale project was planned and implemented by the Development Company Zollverein (*Entwicklungsgesellschaft Zollverein, EGZ*) in cooperation with the city of Essen, the federal departments for economics and urban development, an organisation with gender-specific competences and local associations and enterprises. During the project implementation, there were a number of unexpected developments that resulted in modifications. Overall, there were four core elements that were partly further developed during the implementation:

- 1) One component was the establishment of a training and research facility for design (Platform Design). The idea was to have a private further education design school on the area that could act as a catalyst for the industrial design park. In 2004, the School of Management and Design was founded. For the accommodation, an architecturally innovative building (the SAANA-building or Zollverein cube) was constructed and finished in 2006. Two years later, in 2008, the School of Management and Design became insolvent, because it was not yet able to exist independently. After this unexpected development, a new solution had to be found. In 2010, the Folkwang University of the Arts (Folkwang Universität der Künste) was acquired as a new tenant of the SAANA-building. Furthermore, an additional building is currently being built for the Design faculty on the grounds of the former mine.
- 2) Another element of the concept was the organisation of a regular design and industry exhibition (Metaform), which was realised for the first time as ENTRY2006. From 26 August to 3 December 2006, different cultural events, expert forums, exhibitions, trade fairs and congresses took place with 218,000 visitors overall from the region and from abroad.
- 3) The third component was the development of an industrial design park. To this end, two industrial estates are being constructed on the periphery of the Zollverein, which will comprise a gross floor area of 117,380 square metres. In 2006, a first investor started construction work on a new building known as 'designstadt N°1'. At the end of 2007, there was a 100 percent occupancy rate. Seventeen companies with a total of 80 jobs settled there. The development of the industrial estate is still in progress. During the implementation, it became clear that a broader approach would be more successful. The new aim is to develop Zollverein into a location of cultural and creative economy and not only of design.
- 4) Finally, the establishment of a museum about the history and present of the region (Ruhr Museum) is also part of the project. The museum was opened in 2010 and had over 500,000 visitors in the first year. The museum is connected with the visitor centre of the 'Portal of

Industrial Heritage’, including comprehensive information on the attractions in the region and insights into the industrial heritage of the region.

### Outputs and achievements

In 2007, the Development Company Zollverein commissioned the firm ExperConsult to evaluate the employment effects created by the EU large-scale project (e.g. Entwicklungsgesellschaft Zollverein MBH, 2008). The direct, indirect and induced employment effects are described in Table 13. Overall more than 1,688 jobs have been saved or created through the funding of the large-scale project.

**Table 13: Overview of employment effects (at Zollverein and regional)**

	Effects only related to the large-scale project
Number of jobs saved within the EU large-scale project	7
Number of jobs created within the EU large-scale project	31
Number of jobs created through new settlements	81
Indirect via demand building / investment volume	467
Induced via demand building / investment volume	468
Induced via demand material expenses	294
Induced through number of visitors (only EU large-scale project)	340
Total (only EU large-scale project)	1688

Source: Development Company Zollverein/ExperConsult, autumn 2007.

By August 2008, 65,000 square metres had been realised and rented at the Zollverein location (including Shaft XII, Shaft 1/2/8, *designstadt* and the Coking Plant). Over 170 enterprises and institutions are situated at the location, providing 1,000 jobs. The overall size of the area to be developed is over 117,000 square metres, which shows that there is still potential to develop further areas for the settlement of companies (Entwicklungsgesellschaft Zollverein MBH, 2008). Furthermore, another ERDF-funded project (Triple Z) has supported the establishment of a start-up centre on the site of the former coal mine where almost 100 companies with over 600 employees are now located.

Besides the employment and settlement effects, other main impacts concern tourism in the region. The former coal mine has annually-increasing numbers of visitors (800,000 in 2007), which leads to a higher demand for board and lodgings in the region. In this context, there have also been measures to connect the location with the bordering district of *Katernberg*, a deprived urban area. For example, one project encouraged residents to join together in renting rooms and apartments in the district to tourists with the result that the association *Zollverein Touristik* was founded. The location is also open for the neighbourhood conferences from the district.

One difficulty of the project was that it still needed considerable planning and coordination at the beginning of the implementation, and this resulted in some delays and modifications that have been partly described above. Because of the broad approach of the project tackling different topics (such as protection of historic monuments, environmental aspects and economic development), there were also some target conflicts during implementation which led to further delay.

### *Value-added*

The EU large-scale project Zollverein generated a high level of political and public attention concerning the development of the former coal mine and significantly helped to promote its progress. The main added value of the project was the interdisciplinary approach including economic, employment, urban planning and environmental measures. Different funding programmes (ERDF, urban planning, ecology etc.) were combined and a large range of topics have been tackled: economic and structural development, architecture and protection of historic monuments, tourism, culture, employment, gender equity, urban planning etc. Furthermore, the project was of great importance in the context of the year 2010, in which Essen and the Ruhrgebiet were European Capital of Culture and the mine Zollverein became a landmark for the region.

### *Management and monitoring issues*

In 2001, the Development Company Zollverein (*Entwicklungsgesellschaft Zollverein, EGZ*) was founded, which was responsible for controlling and monitoring the project implementation. The development company was a subsidiary firm of the federal state. A supervisory board, consisting of representatives of the stakeholders *Projekt Ruhr GmbH* and the City of Essen, monitored the work of the development company. After the end of the large-scale project, the development company became part of the Foundation Zollverein, which is now responsible for the further development of the location.

### *Conclusions*

The project example Zollverein shows how a former industrial location can be developed in an integrated process into a place with cultural, touristic and economic significance and become a landmark for structural change in the region.

## **8.3 Project: Integrated urban development in Dortmund Nordstadt**

### *Summary description*

The northern part of Dortmund (*Dortmund Nordstadt*) is a densely populated area with above-average concentrations of social, economic and urban problems. A large number of immigrants and socially disadvantaged groups live there. The area is also affected by high population turnover rates, with a large part of the population changing every ten years as more successful residents choose to leave and are replaced by more disadvantaged groups. In 2000, Dortmund Nordstadt became part of the Community Initiative URBAN II. In the 2000-2006 funding period, the programme area received €27.86 million in funding, including €9.75 million from the ERDF. The main priorities of the URBAN II-programme 'Dortmund Nordstadt' were the improvement of urban planning conditions, the strengthening of the local economy, and the construction of facilities and structures managed by residents. Overall, 29 projects were implemented, which resulted in improvements for the residents such as environmental enhancements, the creation of new jobs and businesses, increased participation by residents, and the development of new structures and networks in the areas of schools and business, commercial enterprises, culture, real estate and health. Furthermore, the programme improved the integrated and interdisciplinary cooperation in the municipal authority.

Even though a lot of improvements were achieved by URBAN II, the district still has to deal with many challenges, particularly as new groups of immigrants and socially disadvantaged groups have moved there. Therefore, the integrated urban development process needs to be continued. In the current funding period, the 'Dortmunder Nordstadt' programme receives €2.26 million of ERDF funding under the priority 'Sustainable urban and regional development'. The volume of the total investment costs is €4.86 million. The priorities of the programme are a new sense of urbanity and district image, local economy and employment as well as social and ethnic integration. The project implementation started in 2011.

#### *Underlying problem and context*

The district Dortmund Nordstadt, a former industrial suburb, has been badly affected by deindustrialisation. The availability of cheaper accommodation means that growing numbers of immigrants and socially disadvantaged groups have moved there, with consequences that included above-average concentrations of social, economic and urban problems and a high population density. In the 1990s, the district was characterised by high unemployment, poverty, a low level of qualifications, an unbalanced economy, poor quality of accommodation and an increasingly poor image. Because of high population turnover rates that replaced the departing successful residents with more disadvantaged groups, the district must permanently act as a place of integration for the whole city. After the enlargement of the EU to the East, very poor immigrants from Eastern Europe, particularly from Bulgaria and Romania, including large numbers of Roma, moved to the Nordstadt, resulting in new problems with prostitution, high criminality, rubbish, lack of health insurance etc.

#### *Detailed description*

The community initiative URBAN II and the current ERDF-funded 'Dortmunder Nordstadt' programme have enabled integrated urban development approaches to be implemented in the northern part of Dortmund to improve the living conditions and opportunities for the residents. The URBAN II programme had a financial volume of €27.86 million, including €9.75 million in ERDF funding. The aims of the programme were the creation and preservation of jobs, development of new structures in commerce, culture and housing, promotion of social cohesion and improvement of individual opportunities for advancement. Overall, 29 projects have been developed and implemented. The funding priorities were the improvement of urban planning conditions, the strengthening of the local economy, and the construction of facilities and structures managed by residents. Examples of projects include the improvement of areas for local recreation and leisure activities, the establishment of an office for local economy and employment, the enhancement of consultation and training opportunities for special target groups, support for the ethnic economy, district and neighbourhood management, and the enhancement of meeting facilities for parents and pupils in schools. After the end of the funding, most of the project approaches have been continued by the city or local initiatives and organisations.

In the current funding period, the integrated urban development approach of the Community Initiative URBAN was transferred into the ERDF mainstream funding. In the ERDF programme of the federal state Nordrhein-Westfalen, the urban dimension is integrated into the priority 'Sustainable urban and regional development'. An inter-ministerial working group decides on the funding of disadvantaged urban areas. In 2011, the 'Dortmunder Nordstadt' programme was accepted. The aim of the programme is to continue the development process that started under URBAN II. Funding

priorities are new urbanity and image, local economy and employment, and social and ethnic integration. The planned total investment costs of the programme are around €4.86 million including around €2.26 million in ERDF funding. Different departments are involved in the development and implementation of the programme (urban development, youth welfare service, economic development, education etc.). Furthermore, there is also cooperation between local organisations, institutions, initiatives, networks and residents. In this context, structures and networks developed under URBAN II can be used.

### *Outputs and achievements*

The implementation of URBAN II in Dortmund Nordstadt brought a number of improvements for the residents of the district in terms of the social infrastructure, public spaces, facilities and services, educational opportunities, local networks and economic structures. Table 14 includes an overview of the outputs achieved and the results of the programme. In all three priorities, the targets were achieved or exceeded, which can be evaluated as a success of the programme. It should be borne in mind that the estimate of the targets was undertaken by the city without empirical backing and subject to reservations, particularly with regard to the results of the economic measures. No quantitative data are available regarding the results of social or physical interventions or the longer-term indirect impacts of the programme (ECOTEC, 2010). The final report of the programme describes the stabilisation of the district and the prevention of a further downhill trend as an important achievement (Stadt Dortmund, 2009). However, as a representative of the city described, the programme targets have been defined too globally, making it difficult to measure the achievements.

**Table 14: Outputs and Results of URBAN II**

Main indicators after priority	Target	Actual	Difference between Target and Actual
<b>Priority 1 'Improvement of urban planning conditions'</b>			
Created or improved green space (m <sup>2</sup> )	123.230	157.000	+24.770
Created or improved other public space (m <sup>2</sup> )	40.610	79.147	+38.537
Area of created or improved public buildings (m <sup>2</sup> )	8.050	8.534	+484
<b>Priority 2 'Strengthening of local economy'</b>			
Number of supported SMEs general	4.100	4.418	+318
Number of supported SMEs intensive		1.112	-
Number of created and secured jobs	380	627	+247
Number of business starts	10	148	+138
Number of participants in education and training	400	3.483	+3.083
Area of created or improved public buildings (m <sup>2</sup> )	-	2.470	-
<b>Priority 3 'Construction of facilities and structures managed by residents'</b>			
Area of created or improved public buildings (m <sup>2</sup> )	-	1.735	-

Source: MBV NRW/Stadt Dortmund (2009): URBAN II Dortmund - Nordstadt, Final Report.

Besides the improvements in the district, another (perhaps more important) achievement of URBAN is that the integrated funding philosophy resulted in new forms of cooperation and networking. As a representative of the city describes, URBAN II brought a new 'culture of cooperation' between government, administration, associations and the local community which is marked by interdisciplinary cooperation and an increased sensitivity towards the needs and problems of deprived urban districts. Most of the networks and local structures developed during URBAN II still exist, such as the school and jobs network, the cultural association *Kulturmeile Nordstadt e. V.* with over 50 members, a network of housing associations, a business meeting and a health network.

Even though substantial activities and improvements have been initiated through URBAN, the district still has to cope with special challenges. For example, the northern part of Dortmund still has a bad image in other parts of the city, and in recent years the settlement of very poor immigrants from Eastern European Countries has led to new problems in housing, education and security. Therefore, further funding activities are needed. In 2011, the implementation of the 'Dortmunder Nordstadt' follow-up programme started, with 20 new projects in the fields 'new urbanity and image', 'local economy and employment' and 'social and ethnic integration'.

#### *Value-added*

The main added value of the urban development funding in Dortmund Nordstadt can be seen in the initiation of new forms of interdisciplinary cooperation and the intensification of networking between government, administration, public institutions, associations and local community which still endure. Furthermore, the funding brought an activation of local associations and enterprises and an enhanced participation of the community.

#### *Management and monitoring issues*

URBAN II was planned and implemented by an interdisciplinary working group in the administration under the overall control of the department of urban planning. In the current funding period, different departments are responsible for the implementation of the funding. The department of economic development is responsible for measures in the priority for local economy and employment and has opened a local office in the district. The implementation of other measures and the overall management is carried out by the department of urban planning with the support of the departments for youth welfare and school education.

To content with the difficulties in measuring the achievements from URBAN, the department responsible has developed a new monitoring system for the current funding period including strategic and operational targets for the three priorities as well as main indicators and project indicators. The indicators are differentiated according to output, result and impact. Every project manager has to report regularly about the process and interim results of the project.

#### *Conclusions*

The example of Dortmund Nordstadt shows how ERDF funding can be used for the development and implementation of an integrated urban development approach in deprived urban areas. The project sample has been successful in initiating new forms of cooperation and activating local groups, associations, enterprises and residents. Furthermore, the funding resulted in a wide range of improvements for the residents with regard to the social infrastructure, facilities and services, as

well as public places and green spaces. No quantitative data are available regarding the impact of the funding.

## 9. ANNEX III: REPORTED ACHIEVEMENTS

### *Reported achievements of the ERDF funding in NRW 1989-2011*

Subject area of funding	Programme period	ERDF funding (subsidies)	Outputs	Results
Support for investments in enterprises	1989-1991	26.9 million DM	approx. 1,200 investment projects	above 1 billion DM total amount to be invested approx. 4,000 new jobs approx. 6,300 safeguarded jobs
	1992-1993	51.6 million DM (ERDF and NRW funding)	approx. 960 investment projects	no details
	1994-1996	51.8 million DM	approx. 1,000 investment projects 18 environmental investment projects	above 880 million DM total amount to be invested approx. 2,940 new jobs (including 830 for women) approx. 5,400 safeguarded jobs approx. 300 new places to train 3,200,000 kg/a CO2-reduction
	1997-1999	73.0 million DM	approx. 575 investment projects support for 325 trade businesses 5 environmental investment projects	above 870 million DM total amount to be invested approx. 3,841 new jobs (including 975 for women) approx. 3,630 safeguarded jobs approx. 595 new places to train 200 t/a CO2-reduction
	2000-2006	107.9 million Euro	525 investment projects 113 new business premises 33,288 business and start-up consultations 16,122 supported start-ups	above 682 million Euro total amount to be invested approx. 12,500 new jobs approx. 12,500 safeguarded jobs creation of the preconditions for approx. 17,000 new jobs and 45,000 safeguarded jobs
	2007-2011 (interim results)	107.4 million Euro	540 investment projects 15,890 business and start-up consultations support of Competence centres 'women and profession'	above 250 million Euro total amount to be invested 7,148 start-ups 83 technology-oriented start-ups
Support for innovation, technology transfer and guidance, in particular for SME	1989-1991	35.6 million DM	49 projects of technology transfer and technological guidance approx. 2,000 business and start-up consultations support of 3 regional development agencies support of 12 regional agencies 'women and profession'	above 127 million DM total amount to be invested approx. 650 new jobs approx. 2,000 safeguarded jobs
	1992-1993	90.3 million DM (ERDF and NRW funding)	55 projects of technology transfer and technological guidance approx. 13 business and start-up consultations support of 1 regional development agencies support of 17 regional agencies 'women and profession'	no details
	1994-1996	69.0 million DM	52 projects of technology transfer and technological guidance 5,854 business and start-up consultations 17 regional agencies 'women and profession' events and projects of the regional development agencies 5 touristic marketing projects	above 185 million DM total amount to be invested approx. 280 new jobs approx. 341 safeguarded jobs
	1997-1999	120.5 million DM	90 projects of technology transfer and technological guidance including 18 cooperation projects 11,135 business and start-up consultations	above 247 million DM total amount to be invested approx. 3,527 new jobs (including 486 for women)



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			18 regional agencies 'women and profession' 10 model projects 'new services' 19 touristic marketing projects 24 projects of the regional development agencies	approx. 4,100 safeguarded jobs creation of the preconditions for approx. 23,577 new jobs approx. 114 new places to train
	2000-2006	377.1 million Euro	203 new procedures and product development 40,747 business consultations 113 touristic infrastructure and culture economy projects 33 household and business services projects 57 'future energy' projects 53 projects of regional development agencies 16,385 participants on events of regional development agencies	above 1,074 million Euro total amount to be invested approx. 1,600 new jobs approx. 2,300 safeguarded jobs 144,000 t/a CO2-reduction
	2007-2011 (interim results)	approx. 691 million Euro (incl. innovative infrastructure)	43 supported networks and cluster 266 projects for energy and resource efficiency and for development of environmentally friendly energy 183 projects in the field innovative services 21 intra- or interregional pilot projects	above 1,470 million Euro total amount to be invested 1,932 developments of procedures and products in technology-intensive fields 57,138,000 t/a CO2-reduction
Innovation - oriented infrastructure for SME and for Education and Training (technology centres, start-up centres, education and training centres etc.)	1989-1991	99.8 million DM	13 new or extended technology and start-up centres 78 new or extended education and training centres approx. 2,500 courses with 44.000 participants	approx. 3,000 new jobs approx. 1,200 safeguarded jobs
	1992-1993	222.2 million DM (ERDF and NRW funding)	8 new or extended technology and start-up centres 68 new or extended education and training centres	approx. 1,437 new jobs approx. 4,179 safeguarded jobs
	1994-1996	155.5 million DM	11 new or extended technology and start-up centres with 36,900 square metres new utilisable space of land 31 new or extended education and training centres with 11.1 ha new utilisable space of land 4 transport infrastructure projects touristic infrastructure projects	above 700 new jobs
	1997-1999	190.2 million DM	11 new or extended technology and start-up centres with 42,638 square metres new utilisable space of land 55 new or extended education and training centres with 58,627 m <sup>2</sup> new and 506.784 m <sup>2</sup> modernised utilisable space of land 128 improvements in furnishing of education and training centres Creation of 12,617 new training places 58,093 participants in training courses 6 transport infrastructure projects (178,000 m <sup>2</sup> developed infrastructure) 13 touristic infrastructure projects	creation of approx. 1,139 new jobs approx. 190 safeguarded jobs creation of the preconditions for approx. 7,133 new jobs
	2000-2006	316.6 million Euro	509 ha net floor space used for a business decontamination of 94 ha fallow land Creation or modernisation of 85,495 m <sup>2</sup> technology infrastructure Creation or modernisation of 103,000 m <sup>2</sup> qualification infrastructure Creation or modernisation of 9,439 new training places	above 1,017 million Euro total amount to be invested creation of the preconditions for approx. 19,000 new jobs and 6,000 safeguarded jobs
	2007-2011 (interim results)	Missing value	Modernisation of 30 technology or education centres Creation of capacities for 49,113 places to train	

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Infrastructure for economic purpose (Re-utilisation of industrial waste land and factory buildings)	1989-1991	70.1 million DM	reutilisation of 116 ha industrial waste land reutilisation of 17,200 square metres utilisable space of land in former factory buildings	above 186 million DM total amount to be invested creation of the preconditions for approx. 5,500 jobs
	1992-1993	270.7 million DM (ERDF and federal state funding)	reutilisation of 504 ha industrial waste land	creation of the preconditions for approx. 10,500 jobs
	1994-1996	163.3 million DM	reutilisation of above 1,400 ha industrial waste land (700 ha usable for businesses)	above 620 million DM total amount to be invested
	1997-1999	194.5 million DM	reutilisation of 1,097 ha industrial waste land (704 ha usable for business) reutilisation of 6,914 square metres utilisable space of land in buildings	above 390 million DM total amount to be invested creation of the preconditions for approx. 16,800 new jobs
	2000-2006	-	-	-
	2007-2011	-	-	-
Infrastructure for environmental sustainability	1989-1991	20.1 million DM	development of 90 ha industrial waste land	above 131 million DM total amount to be invested creation of the preconditions for 1,530 jobs
	1992-1993	3.8 million DM (ERDF and federal state funding)	no details	no details
	1994-1996	17.3 million DM	development of 124 ha industrial waste land (74 ha usable for businesses) eight investment for district heating with a performance of 143,980 kWh	approx. 50 million DM total amount to be invested 2,250,000 kg/a CO2-reduction
	1997-1999	51.3 million DM	development of 281 ha industrial waste land redevelopment of 37 ha hazardous waste from the past greenery of 468 ha space	approx. 104.8 million DM total amount to be invested creation of 171 new jobs 134 safeguarded jobs
	2000-2006	64.7 million Euro	redevelopment of 869 ha green space	
	2007-2011 (interim results)	missing value	120 projects for safeguarding the environmental and cultural heritage development of 309.3 ha fallow land	
Social inclusion (integrated urban development, target-groups oriented funding)	1989-1992	-	-	-
	1991-1993	-	-	-
	1994-1996	-	-	-
	1997-1999	-	-	-
	2000-2006	71.5 million Euro	13,394 business consultations 30 projects for integrated urban development 166 projects for integrated rural development 59 projects for employment of women with 39,863 consultations and 4,452 events	above 160 million Euro total amount to be invested 8,958 acquired/new places to train
	2007-2011 (interim results)	approx. 260 million Euro (incl. Infrastr. for environm. sustain.)	120 projects for integrated urban development	1.8 million Euro induced private amount to be invested

## 10. ANNEX IV: LIST OF INTERVIEWEES

Name	Position (current and former roles where relevant)	Place	Date	Form
Dr. Herbert Jacoby	State chancellery NRW, former NRW Ministry for Economics (involved in programming from the first programmes on)	Düsseldorf	13/6/12	Face to face
Mr. Martin Hennicke	State chancellery NRW, former NRW Ministry for Economics	Düsseldorf	13/6/12	Face to face
Ms. Karin Scheffel	Federal ministry of Economics and Technology	Berlin	4/6/12	Face to face
Ms. Karen M. Costa-Zahn	Federal ministry of Economics and Technology	Berlin	4/6/12	Face to face
Ms. Ulrike Schreckenberger	Federal ministry of Economics and Technology	Berlin	4/6/12	Face to face
Dr. Friedemann Tetsch	Former Federal ministry of Economics and Technology (head of the unit responsible for the Joint Task)	Meckenheim	14/6/12	Face to face
Mr. Eric Dufeil	GD Regio	Brüssel	13/8/12	Telephone
Mr. Karl Jasper	NRW Ministry for Building and Housing	Düsseldorf	25/6/12	Face to face
Dr. Claudia Schulte	Objective 2 Programme Secretariat	Düsseldorf	7/5/12	Face to face
Mr. Tore Sönksen	Objective 2 Programme Secretariat	Düsseldorf	7/5/12	Face to face
Dr. Stefan Röllinghoff	City Dortmund, department for economic development	Dortmund	9/7/12	Face to face
Mr. Ulrich Schirowski	Agency for Innovation and Technology Transfer in the region Aachen (AGIT)	Aachen	7/8/12	Telephone
Dr. Andrea Hoppe	Agency for economic development Metropole Ruhr GmbH	Mühlheim	26/6/12	Face to face
Ms. Bettina Vaupel	Centre 'Women in work and technique'	Castrop-Rauxel	26/6/12	Face to face
Mr. Thomas Messer	Bezirksregierung Arnsberg	Arnsberg	7/8/12	Telephone
Prof. Dr. Rolf Heyer	NRW.Urban	Dortmund	9/6/12	Face to face
Mr. Bernd Steingrobe	ETN Research Centre Jülich	Jülich	15/8/12	Telephone
Ms. Gabriele Heidner	Stiftung Zeche Zollverein	Essen	2/8/12	Face to face
Mr. Phillipp Brüggemann	Stiftung Zeche Zollverein	Essen	2/8/12	Face to face
Ms. Margarete Meyer	City Essen, department for urban development	Essen	21/8/12	Telephone
Ms. Uta Wittig-Flick	City Dortmund, department for urban planning	Dortmund	3/8/12	Face to face
Dr. Ghanem Degheili	Duisport facility logistics GmbH	Duisburg	2/8/12	Face to face
Mr. Peters	Duisport facility logistics GmbH	Duisburg	2/8/12	Face to face
Prof. Dr. Rolf G. Heinze	Ruhr University Bochum	Bochum	9/12	Telephone
Prof. Dr. Dieter Rehfeld	Institute for Work and Technology	Gelsenkirchen	10/7/12	Face to face

## 11. ANNEX V: OVERVIEW OF SOURCES USED FOR THE CASE STUDY

Programme name	OP	AIR	FIR	Spend (by measure & year)	Evaluation reports	Strategic interviews	Operational interviews	External interviews	Stakeholder/ Beneficiary interviews	Workshop
1989-91 NRW Objective 2 Programme	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1992-93 NRW Objective 2 Programme	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1994-96 NRW Objective 2 Programme	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1997-99 NRW Objective 2 Programme	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2000-06 NRW Objective 2 Programme	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007-13 NRW Competitiveness and Employment Programme	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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### 13. ANNEX VII: SUMMARY OF SURVEY RESULTS

A total of 247 contacts were invited to take part in the online survey for Nordrhein-Westfalen. This number includes 37 who were interviewed by the case study team, plus 210 additional invitees. The 210 additional **invitees** were broken down as follows: 28 percent were local authority contacts (selected senior administrators and political leaders in local authorities and bodies representing them); 53 percent were firms (whether beneficiaries or unsuccessful applicants); 11 percent were regional/local level political party representatives; 5 percent were regional/local social partners, third sector organisations and trade unions; and the remaining 2 percent were from other local interest groups.

The overall response rate (i.e. those who started the survey and answered at least one question) was 21.9 percent, though the percentage of invitees who completed the entire survey (i.e. up to and including the final question) was - expectedly - lower at 12.6 percent. For the questions applicable to all, the response rates varied between 5.7 percent and 21.9 percent (there were also questions that related to each specific programme period only and these were accordingly filtered).

Within the above-mentioned categories, the breakdown of **respondents** was as follows (both full and partial responses): 36 percent were local authority contacts; 44 percent were from the sample of firms; 5 percent were regional/local level political party representatives; 10 percent were from the category regional/local social partners, third sector organisations and trade unions; and 5 percent were from 'other local interest groups' category.

Proportionally speaking, regional/local level political party representatives were the least responsive group (of non-interviewees). Amongst those who started the survey, individuals from the sample of firms had the highest completion rate, of 56 percent (i.e. progressing up to and including the final question). Those from the group of regional/local social partners, third sector organisations and trade unions had the lowest completion rate, of 0 percent (though it should be borne in mind that a small number of non-interviewed invitees fell into this category).



1. What type of organisation do you represent? Please tick all that apply, e.g. if you have changed status throughout the period or if more than one condition applies (e.g. beneficiary and unsuccessful applicant, beneficiary and representative of local interest group).

#	Answer	Response	%
1	Central Government Department/Agency	2	4%
2	Central Government Department/Agency	7	13%
3	Local Authority ( <i>Kommunale Behörde</i> )	10	19%
4	Political party or political constituency	2	4%
5	Firm	8	15%
6	Socio-economic organisation	9	17%
7	Interest group (e.g. environmental or social association/citizens' movement)	7	13%
8	None of the above (please describe)	11	20%

6. Was your involvement in the ERDF programmes direct or indirect?

#	Answer	Response	%
1	Direct	25	47%
2	Indirect	13	25%
3	Both direct and indirect	15	28%
	<b>Total</b>	<b>53</b>	<b>100%</b>

7. Please indicate how you were directly involved:

#	Answer	Response	%
1	As a political decision maker	2	5%
2	As an administrator	14	35%
3	As a beneficiary	21	53%
4	Other (please specify)	3	8%
	<b>Total</b>	<b>40</b>	<b>100%</b>

**8. Please indicate how you were indirectly involved:**

#	Answer	Response	%
1	As a politician (not directly involved in the programmes)	1	4%
2	As an indirect recipient of support (not receiving directly resources from the programme)	3	13%
3	As a stakeholder (e.g. member of an organisation representing specific interests)	14	61%
4	As a member of the public	1	4%
5	Other (please specify)	4	17%
	<b>Total</b>	<b>23</b>	<b>100%</b>

**9. Please indicate in which of the following period/s your involvement in ERDF programmes took place (please tick all that apply):**

#	Answer	Response	%
1	1989-93	8	17%
2	1994-99	13	27%
3	2000-06	30	63%
4	2007-13	46	96%

**10. Could you please assess the extent to which the ERDF programmes delivered achievements in the fields outlined below (across the entire period, i.e. 1989 to date)?**

#	Question	Very significant	Significant	Quite significant	Modest	None	Don't know	Responses
1	Increase in numbers of new firms	1	9	12	6	3	5	37
2	Increased growth of existing firms	0	9	14	8	1	3	37
3	Enhanced competitiveness such as increased exports	0	8	16	4	1	6	37
4	Enhanced internationalisation, better marketing	0	7	13	9	2	4	37
5	Attraction of foreign investment	0	2	3	15	9	6	36
6	Site reclamation and premises for industry	11	9	4	2	4	5	37
7	Job creation	7	9	11	6	0	2	37
8	Shift to growth clusters	2	13	11	0	2	6	36

Evaluation of the main achievements of Cohesion policy programmes and projects over the longer term in 15 selected regions: Nordrhein-Westfalen Case Study

9	Growth in manufacturing	0	6	11	9	2	7	35
10	Growth in professional services	1	11	7	8	1	7	36
11	Growth in tourism and creative industries	7	5	8	6	3	6	36
12	Increased R&D and provision of technical support from public and non-profit sector	3	11	11	3	2	5	35
13	Increased R&D and innovation in business	2	11	13	4	0	5	36
14	Enhanced adoption of process technologies	0	6	13	5	2	9	35
15	Adoption of good practices in managerial processes	0	4	13	9	3	6	36
16	Improvement of environmental quality (e.g. waste and water treatment, decontamination of land, enhanced biodiversity.)	2	8	11	3	2	9	36
17	Reduction of energy consumption and Co2 emission in productive processes	0	4	14	6	4	7	36
18	Development of environmental friendly transport systems, sustainable lighting/heating etc.	0	2	8	10	7	8	34
19	Labour market inclusion (e.g. re-integration of long-term unemployed and marginalised groups etc.)	0	8	9	7	5	7	36
20	Provision of community services for disadvantaged areas	3	8	8	3	5	9	36
21	Community development/social enterprise	1	2	11	8	4	8	34
22	Communications and infrastructure to improve accessibility to wider markets (e.g. ports, airports etc.)	1	3	6	8	6	10	34
23	Regional communications infrastructure for improved accessibility within the region	3	3	10	5	8	5	34
24	Overall improvement in image for the region	6	12	11	3	1	1	34
25	Other (please specify)	0	0	1	0	0	3	4

**12. In your view, did the objectives of the ERDF programmes address regional needs?**

#	Period	Yes, very significantly	Yes, significantly	Yes, quite significantly	Yes, but to a limited degree	No, not at all	Don't know	Responses
1	1989-93	1	4	5	3	1	22	36
2	1994-99	2	7	4	2	1	20	36
3	2000-06	6	10	7	2	2	9	36
4	2007-13	8	11	8	7	0	2	36
5	Across the entire period	3	10	5	4	0	14	36

**13. In your view, was there ever a mismatch between regional needs and the ERDF support provided?**

#	Question	Yes, a considerable mismatch	Yes, but not too considerable	No, ERDF programmes met the needs	Don't know	Responses
1	1989-93	2	7	4	23	36
2	1995-99	1	9	5	21	36
3	2000-06	2	11	12	11	36
4	2007-13	3	16	12	5	36
5	Across the entire period	1	11	7	17	36

**15. For the period 1989-93, please rate the following statements. When a statement does not apply, please choose 'N/A' (not applicable)**

#	Question	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	N/A	Responses
1	The programme entailed an appropriate strategy/ies	1	3	1	1	0	0	0	0	6
2	The programme targeted support appropriately (via the selection criteria adopted)	1	2	2	1	0	0	0	0	6
3	The allocation of funding was in line with needs	1	3	1	1	0	0	0	0	6
4	The concentration of funding on selected fields enhanced the programme's effectiveness	0	3	1	2	0	0	0	0	6
5	The concentration of funding on few, large projects enhanced the programme's effectiveness	0	0	1	3	2	0	0	0	6
6	The design of the programme was improved by the involvement of stakeholders	1	1	2	1	0	0	0	1	6
7	The programme's strategy was enhanced by the use of evaluation evidence	0	2	0	2	0	2	0	0	6
8	Implementation was effective	0	3	1	1	0	1	0	0	6
9	The performance of the programme was enhanced by ongoing monitoring of its implementation	0	2	0	3	0	1	0	0	6
10	The implementation of the programme was enhanced by the involvement of partners/stakeholders	1	0	3	1	0	0	0	1	6
11	The programme achieved a fruitful integration with other EU policies	0	1	1	1	2	0	0	1	6
12	The programme achieved a fruitful integration with domestic policies	0	2	2	2	0	0	0	0	6
13	The programme was flexible enough to accommodate changing socio-economic needs	0	3	1	2	0	0	0	0	6
14	The programme was flexible enough to accommodate changing recipients' needs	0	3	1	1	1	0	0	0	6
15	Other (please specify)	0	0	0	1	0	0	0	0	1

**16. For the period 1994-99, please rate the following statements. When a statement does not apply, please choose 'N/A' (not applicable)**

#	Question	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	N/A	Responses
1	The programme entailed an appropriate strategy/ies	0	4	3	1	0	0	0	1	9
2	The programme targeted support appropriately (via the selection criteria adopted)	0	3	3	2	0	0	0	1	9
3	The allocation of funding was in line with needs	0	7	1	0	0	0	0	1	9
4	The concentration of funding on selected fields enhanced the programme's effectiveness	0	4	4	0	0	0	0	1	9
5	The concentration of funding on few, large projects enhanced the programme's effectiveness	0	0	4	3	1	0	0	1	9
6	The design of the programme was improved by the involvement of stakeholders	1	1	1	3	0	0	0	3	9
7	The programme's strategy was enhanced by the use of evaluation evidence	0	2	3	3	0	0	0	1	9
8	Implementation was effective	0	2	4	1	1	0	0	1	9
9	The performance of the programme was enhanced by ongoing monitoring of its implementation	0	1	2	4	1	0	0	1	9
10	The implementation of the programme was enhanced by the involvement of partners/stakeholders	1	0	1	4	0	0	0	3	9
11	The programme achieved a fruitful integration with other EU policies	0	1	2	3	1	1	0	1	9
12	The programme achieved a fruitful integration with domestic policies	0	4	3	0	0	1	0	1	9
13	The programme was flexible enough to accommodate changing socio-economic needs	1	2	3	0	1	1	0	1	9
14	The programme was flexible enough to accommodate changing recipients' needs	0	2	4	0	0	2	0	1	9
15	Other (please specify)	0	0	1	0	0	0	0	2	3

**17. For the period 2000-06, please rate the following statements. When a statement does not apply, please choose 'N/A' (not applicable)**

#	Question	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	N/A	Responses
1	The programme entailed an appropriate strategy/ies	2	13	4	0	0	0	0	1	20
2	The programme targeted support appropriately (via the selection criteria adopted)	1	11	6	0	1	0	0	1	20
3	The allocation of funding was in line with needs	0	15	3	0	1	0	0	1	20
4	The concentration of funding on selected fields enhanced the programme's effectiveness	0	8	8	3	0	0	0	1	20
5	The concentration of funding on few, large projects enhanced the programme's effectiveness	0	7	7	2	1	1	0	2	20
6	The design of the programme was improved by the involvement of stakeholders	2	5	7	3	0	0	0	3	20
7	The programme's strategy was enhanced by the use of evaluation evidence	2	6	8	2	0	0	0	2	20
8	Implementation was effective	2	10	5	1	1	0	0	1	20
9	The performance of the programme was enhanced by ongoing monitoring of its implementation	3	10	4	1	1	0	0	1	20
10	The implementation of the programme was enhanced by the involvement of partners/stakeholders	3	5	7	2	0	0	0	3	20
11	The programme achieved a fruitful integration with other EU policies	0	4	6	2	1	0	0	7	20
12	The programme achieved a fruitful integration with domestic policies	1	8	3	3	0	0	0	5	20
13	The programme was flexible enough to accommodate changing socio-economic needs	1	8	5	2	1	1	0	2	20
14	The programme was flexible enough to accommodate changing recipients' needs	1	7	5	2	1	1	0	3	20
15	Other (please specify)	0	0	1	0	0	0	1	3	5

**18. For the period 2007-13, please rate the following statements. When a statement does not apply, please choose 'N/A' (not applicable)**

#	Question	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	N/A	Responses
1	The programme entailed an appropriate strategy/ies	2	20	6	1	0	0	0	2	31
2	The programme targeted support appropriately (via the selection criteria adopted)	0	19	8	1	0	2	0	1	31
3	The allocation of funding was in line with needs	1	14	9	1	2	3	0	1	31
4	The concentration of funding on selected fields enhanced the programme's effectiveness	1	15	8	2	1	2	1	1	31
5	The concentration of funding on few, large projects enhanced the programme's effectiveness	1	9	6	4	2	4	1	4	31
6	The design of the programme was improved by the involvement of stakeholders	2	3	9	4	2	2	1	8	31
7	The programme's strategy was enhanced by the use of evaluation evidence	3	7	9	5	0	0	2	5	31
8	Implementation was effective	3	9	9	4	1	2	2	1	31
9	The performance of the programme was enhanced by ongoing monitoring of its implementation	1	9	10	3	0	1	3	4	31
10	The implementation of the programme was enhanced by the involvement of partners/stakeholders	2	8	5	7	1	0	1	7	31
11	The programme achieved a fruitful integration with other EU policies	0	9	8	2	0	2	0	10	31
12	The programme achieved a fruitful integration with domestic policies	2	11	8	2	3	0	0	5	31
13	The programme was flexible enough to accommodate changing socio-economic needs	0	10	5	8	2	1	1	4	31
14	The programme was flexible enough to accommodate changing recipients' needs	1	9	6	4	5	1	0	5	31
15	Other (please specify)	1	0	1	0	0	0	0	5	7



**20. On the whole, could you assess the impact of ERDF programmes? For current programmes, please assess the level of impact which you anticipate they will have**

#	Question	Very positive	Positive	Quite positive	None / negligible	Quite negative	Negative	Very negative	Don't know	Responses
1	1989-93	2	4	5	2	0	0	0	18	31
2	1994-99	2	6	7	0	0	0	0	16	31
3	2000-06	3	16	4	0	0	0	0	8	31
4	2007-13	6	14	7	3	1	0	0	0	31
5	Across the entire period	3	11	4	1	0	0	0	12	31

**22. Looking to the future, are there any aspects of ERDF design and implementation that would need to be improved to increase the extent to which support meets regional needs and enhance achievements?**

#	Answer	Response	%
1	Programme design more responsive to regional needs via more use of evaluation evidence	11	35%
2	Programme design more respondent to regional needs via improved involvement of local authorities	12	39%
3	Programme design more respondent to regional needs via improved involvement of socio-economic partners and stakeholders	14	45%
4	Better targeting of interventions	7	23%
5	Increased funding concentration on key priorities	9	29%
6	Increased funding concentration on key target groups	9	29%
7	Increased funding concentration on fewer, bigger projects	4	13%
8	Increased funding of smaller projects	8	26%
9	Increased packaging of smaller projects	7	23%
10	Increased flexibility during the programme period to adapt programmes to changing needs	16	52%
11	Increased flexibility during the programme period to accommodate changing beneficiary needs	14	45%
12	Widening of eligible expenditure categories	16	52%
13	Better integration with other EU funding sources	14	45%
14	Better integration with domestic funding sources	10	32%
15	Simpler administration of the funds for programme authorities	26	84%
16	Simpler administration of the funds for programme beneficiaries	25	81%
17	Increased transparency in project selection	10	32%
18	Increased competitiveness in project selection	4	13%
19	Increased results-orientation in project selection	8	26%
20	Increased upfront funding for project beneficiaries (advances)	14	45%
21	Increased clarity on administrative requirements for project holders	9	29%
22	Other (please specify)	1	3%
23	Don't know	1	3%