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**Work Package 4  
“Structural Change and Globalisation”**

## **CASE STUDY**

### **BRITTANY (FR)**

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## Acronyms

ARC	Help for Recruiting Executives ( <i>Aide au Recrutement de Cadre</i> )
AFPA	French Organisation for Adult Training
AII	Agency for Industrial Innovation
BERD	Business Expenditure on R&D
CNET	National Centre for Electronic and Communications
CPER	State-Regions Plan Contract
CRCI	Regional Chamber of Commerce and Industry
DG REGIO	Directorate General for Regional Policy
DCN	Shipbuilding Directorate ( <i>Direction des Constructions Navales</i> )
EC	European Commission
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
FDI	Foreign Direct Investment
FIFG	Financial Instrument for Fisheries Guidance
FRAC	Regional Funds for Aid to Advice ( <i>Fonds Régional d’Aide au Conseil</i> )
GDP	Gross Domestic Product
GERD	Gross Domestic Expenditure on R&D
ICT	Information and Communication Technology
INSEE	French Office of Statistics
OECD	Organisation for Economic Co-operation and Development
R&D	Research and Development
RTDI	Research, Technological Development and Innovation
SME	Small and Medium Enterprise
SPD	Single Programming Document
WP	Work Package

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## Brittany case study

### Executive summary

#### Scope and research methods

This report has been prepared in the framework of the ex post evaluation of cohesion policy programmes 2000-2006 co-financed by the European Regional Development Fund (Objectives 1 and 2). It is part of the Work Package 4: Structural Change and Globalisation.

This case study focuses on analysing the results and outcomes of a specific measure of the ERDF 2000-2006 Objective 2 Programme implemented in Brittany called “Mobilise companies for employment”, which addressed issues related to structural change and adaptation to globalisation. By measures ‘supporting structural change and enabling adaptation to globalisation’, the study team refers to measures promoting the reallocation of resources (labour and capital) towards more efficient uses, either directly (e.g., promoting start ups, or favouring SMEs’ technological intake) and/or indirectly, by minimising possible adverse effects of structural change (e.g., establishment of a social centre in a declining industrial area).

The study relies on different sources of information: an in-depth analysis of available relevant documents (programming documents, programme complement, annual implementation reports, mid-term and final evaluations, regional studies); monitoring data of the programme; on-site interviews with regional authorities and representatives of the state bodies in the region, and the regional actors explicitly or indirectly targeted by the specific measure under review, including companies; results of surveys carried out by the Regional Chamber of Commerce and Industry for the measures it implemented; as well as data from the French office of statistics (INSEE) and Eurostat.

#### Key research question and hypothesis tested in the case study

The main research question addressed throughout the case study of the region of Brittany in France relates to the relations between the regional specialisation, the traditionally self-contained character of the regional economy and its ability to face international competition. Is the strong historically and geographically driven sectoral specialisation of the region a barrier or a driver in facing the developments on the global market? How well did this traditionally closed and self-contained region adapt to the challenges emerging from the international environment? What role did the ERDF intervention under the Objective 2 programme in the region play in this respect?

The assessment of the effects of the selected ERDF measure is instrumental not only to highlight the contribution of the Objective 2 Programme to structural change in the region, but also to test one of the working hypotheses depicted in the conceptual model of the study. As discussed in the First Intermediate Report, *regional specialisation is based on the endogenous geographical advantage of a region and could be beneficial for regional development, especially in sectors where supply-side and demand-side linkages are important. Industrial agglomeration economies are usually a comparative advantage. However, some Objective 2 regions may be heavily*

*specialised in low-tech industries, which are more vulnerable to international competition. Specialisation in these industries can, therefore, turn from an advantage into a threat for regional development.*

### **Regional context and key findings**

As a result of history and its natural endowments, the peninsular region of Brittany in France has developed its economy around four main pillars (fishing/agro food, shipbuilding, information and communications technologies (ICT), automotive industry) with an important share of SMEs and craft industries. The almost mono-activity nature of some 'employment areas' make the latter particularly sensitive to important restructuring. All these sectors faced difficulties at the beginning of the Objective 2 programming 2000-2006 period, not solely due to the overall economic situation. They were in a period of reorganisation after a strong period of growth (ICT) or redeployment of activities after a period of crisis (agro-industries, defence). In particular, the least innovative domains with a low level of value-added were facing the international competition.

Regional policy of Brittany has traditionally favoured the promotion of a balanced territorial development rather than the emergence of dynamic economic centres. The issues of structural change and adaptation to globalisation were not explicitly amongst the regional priorities at the beginning of the programming period. Though, the analysis identified three main features characterising the way in which the region addressed the issues of structural change and adaptation to globalisation, and the specific contribution of ERDF interventions in this respect.

*The regional strategy has resulted in a reinforcement of the regional specialisation in the face of globalisation with a limited identified impact of ERDF interventions on structural change*

Although not directly addressed by the Objective 2 programme, the analysis shows that at the beginning of the programming period structural change, rather than adaptation to globalisation, was of high relevance in the region. The region has a tradition to work locally and this has not changed much over the programming period. Also, the relative "economic autonomy" of the region seem to have worked as a protection to strong relocations. During the programming period, the region has strengthened its industrial specialisation around the sectors where there is a comparative advantage.

The reinforced specialisation of the region over the period emerged independently and was not a result of the ERDF interventions. The main instrument that has a clear impact on supporting structural change in the region and making the regional fabric more visible internationally is the national policy of Competitiveness Clusters launched in 2006. The rationales behind the development of these clusters depend on the sectors, from consolidating a still fragile sector through investments in innovative projects (agro-industries), to grouping companies around a main manufacturer (automotive). Clearly they all aim to use the regional strengths to turn them into competitive advantages, most notably through investments in research.

*A structural tendency to mono-activity and a skills mismatch not especially addressed by the programme*

In order to boost the cost competitiveness of the agro-food sector in front of stiff international competition, a trend to mergers and concentration has taken place during the period. Allied to a mono-activity of certain

sectors, such as ICT in Lannion and textile in Fougères, these risks becoming a threat in case of important international crises since the decision centres are becoming less regional. At the end of the period there is no clear evidence of a diversification of the economy (or even of a cross-fertilisation between sectors) since the regional economy still relies on the same pillars than at the beginning of the period. In addition, a persistent mismatch between jobs offered and qualification levels of the workforce acts a barrier for going up in the value chain.

The use made of the ESF funds (priority area 1) dedicated to the zones in conversion to improve qualifications of the human resources has been particularly analysed in the final evaluation of the programme in 2006. It showed that no specific strategy was implemented for sectors undergoing changes. Some interesting schemes, such as the ARC supporting the recruitment of executives, seemed to be instrumental and welcomed by SMEs in supporting their access to highly qualified people, but the measure has not been repeated in the new programming period.

*A monitoring system efficient to track the consumption of funds but to a lesser extent the follow-up of the regional ERDF strategy*

Together with good knowledge of European programmes, the partnering and consensual decisions logic in the region of Brittany allowed for rapidly fine-tuning the programme when needed, most notably in 2003, in order to avoid de-commitment of funds<sup>1</sup>. However, the de-commitment rule has led to the tendency of supporting advanced single projects rather than favouring a structuring comprehensive approach of the different industries and their environment allowing them to be more competitive at international level. The regional authorities have tried to remedy this situation by ring-fencing allocations at the mid-term of the programme. The initial intentions were to concentrate the support on the sectors which were undergoing changes, but this approach was then replaced by a more general support to business alongside sectoral priorities. In particular, the regional authorities could not track the sectoral developments or the evolution in the structuring of the territory, except for the periodic evaluations carried out.

The rate and level of consumption of funds was the main criteria for judging the success of a measure. Consequently, the Structural Funds were used more for ‘easy to handle’ projects, for example buildings. Most ERDF funds went to measures dedicated to culture and tourism as well as to environmental measures (an important budget was dedicated to wastewater treatment plants), while measures more relevant to deal with structural change (business support, the reconversion of port sites and land planning) have lost in importance. On the contrary, measures dealing more with Research & Development or involving financial engineering, or networking of actors beyond the frontiers of the eligible area, have in general been financed through other channels than ERDF. Several schemes supporting the upgrade of the industrial fabric (most notably FRAC, ARC) have not been renewed in the new programming period since considered as a simple redistribution mechanism without a clear underlying strategy nor sustainability of the support granted (so called “politique de guichet”). The rationale of public support in France, and at the European level, has in fact moved towards financing sustainable projects rather than such ‘one-shot’ measures.

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<sup>1</sup> The de-commitment rule (N+2) is set out in Article 31 of Council Regulation 1260/1999 and is a financial control designed to encourage sound management of the programmes and avoid end-loading of activity. According to it, Programmes under Cohesion Policy framework are required to spend funds by the end of the second year following the year in which they are allocated. These targets are called the n+2 rule. Failure to meet the annual spending targets means that money will be returned to the Commission budget and therefore lost to the Programmes.

In any case, it appears that the choice to use ERDF funds to invest in relatively simple measures made it easier to reach a high number of small companies and to monitor the technical and financial implementation of the Objective 2 programme by the regional authorities. This did not impede the authorities to invest in more complex structuring projects using other regional and national funds. In this way, the region set out to optimise the use of the different funding sources depending on the type of project to be supported.

### **Main message**

The hypothesis tested in this case study was related to the regional specialisation. As discussed in the First Intermediate Report, regional specialisation is based on the endogenous geographical advantage of a region and can be beneficial for regional development, especially in sectors where supply-side and demand-side linkages are important. Industrial agglomeration economies are usually a comparative advantage. However, some Objective 2 regions may be heavily specialised in low-tech industries, which are more vulnerable to international competition. Specialisation in these industries can, therefore, turn from an advantage into a threat for regional development.

The overall message from the case of Brittany seems to partially validate the main message of the hypothesis, calling for a further elaboration. Although specialised in low-tech and low value-added sectors, particularly exposed to international pressures, Brittany has not seriously suffered from international pressures during the programming period, as the tested hypothesis would have suggested. The relatively inward-oriented tradition of Brittany reflected in existence of localised supply chains, together with the presence of many company headquarters in the region and a relatively low level of international openness, seem to have acted as a “buffer” against external threats.

However, the regional economic environment is not static and evolved over last years. Many companies located in Brittany started losing decision powers in favour of the headquarters outside the region. Brittany loses young graduates who leave to other French regions, notably to Ile de France. This and other trends may suggest the region could lose in the future its “buffer” becoming more vulnerable to the national and international competition. Thus, as postulated in the hypothesis, the specialisation in low-tech industries without the traditional protection can indeed become a significant disadvantage in the future. The regional authorities have considered this scenario as a real threat and decided to invest more in research and innovation activities in the new programming period in order to increase the value-added of the key Breton economic sectors.

The Breton case seems therefore to suggest that a viable long-term economic strategy, while recognising “path-dependency” of regional development, cannot be conservative, just by preserving the status quo, but should be investing in innovation and research to increase competitiveness of the key existing economic sectors.

## Introduction

The main research question addressed throughout the case study of the region of Brittany (France) relates to the influence of the region’s industrial specialisation on its ability to face international competition. Is the marked and, within the region, geographically concentrated sectoral specialisation a barrier or a driver in adapting to developments in global markets? How well did this traditionally self-contained region adapt to the challenges arising from changing patterns of international trade? What role did the ERDF intervention under the Objective 2 programme in the region play in this respect?

By measures “supporting structural change and enabling adaptation to globalisation”, the study refers to public intervention to promote the reallocation of resources (labour and capital) towards more efficient ends, either directly (e.g., promoting start ups, or favouring SMEs’ technological intake) and/or indirectly, by minimising possible adverse effects of structural change.

Firstly, in order to understand the structural changes and the process of adaptation to globalisation that took place in Brittany during the 2000-2006 period, the situation of the region prior to the launch of the Objective 2 Programme is briefly presented. This provides a baseline for determining whether the programme took the issues of structural change and globalisation specifically into account at the time when it was designed. Secondly, an analysis of structural changes that occurred during the 2000-2006 period is provided with an emphasis on two main aspects, considered as central for Brittany, that is socio-economic change/human capital and the regional specialisation. Against this background, the analysis focuses on the results and outcomes of a specific ERDF co-financed measure (3.1: ‘Mobilise companies for employment’) considered particularly relevant in the context of structural change and adaptation to globalisation.

The analysis of the effects of this specific measure in the light of the recent socio-economic trends in Brittany provides insights into the relevance and effectiveness of the ERDF interventions in dealing with the challenges arising from structural change and globalisation.



## 1. Structural change and globalisation in perspective

This section provides a profile of the Brittany region starting from a broad socio-economic perspective, and subsequently focusing on relevant dimensions of structural change and the effects of globalisation.

### 1.1 The region at glance

Located in the west of France, the peninsular region of Brittany has the longest seacoast of all French regions. The region was for long relatively isolated in infrastructural terms and has retained a distinct cultural and linguistic identity originating from the Celtic roots of the Breton people and the continued use of the Breton language. This strong regional identity allied to a relatively self-contained regional economy and society, until recent decades, created strong regional networks and a consensus-based decision-making tradition, but also a relative isolation from national<sup>2</sup> and global developments.

#### Searching the roots of change: socio-economic history of the region

In the 1950's, Brittany stood out from other French regions in that it had a strong agricultural sector and a low level of industrialisation. The structure of the economy has since shifted closer to the French average, thanks to a rapid industrial development, while retaining a strong agricultural base.

In the 1960's, a choice was made by the public authorities to avoid emigration from the region through an intensification of agricultural (animal and vegetable) production<sup>3</sup>. Since then, the region has grown in importance in France in terms of turnover from agriculture, the share of Brittany in the national agricultural production increasing from 9% in the 1970's to 12% in 2000. At the same time, agricultural employment decreased from 210,000 in 1983 to 83,000 in 2000<sup>4</sup>. Between 1990 and 1999, the share of the population of Brittany living in rural areas has decreased from 40% to 28%, which remains, however, still 10 percentage points higher than the French average. On the other hand, the population of the coastal zones has grown<sup>5</sup>.

Since the 1970's, Brittany is the French region where industrial employment has increased the most and this trend continued throughout the period 1989-2003, as the region gained 12,300 industrial jobs whereas France as a whole lost 710,000<sup>6</sup>. A 'dual' regional economy developed over the last half-century based on the initial concentration on the agriculture and maritime (shipbuilding, fishing, etc.) sectors through the location of

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<sup>2</sup> A public initiative to improve accessibility to the region was the launch in the 1970's of the Breton Road Plan (in today's prices an investment of €10bn over 25 years) to develop the road network. More recently, the high-speed train network (TGV) has brought the region closer to the rest of France and indeed the Benelux countries.

<sup>3</sup> Regional Chamber of Agriculture of Brittany

<sup>4</sup> Between 1988 and 1998, 69% of the regional losses in the agricultural population happened in the area eligible to ERDF funding over the period 2000-2006

<sup>5</sup> Particularly noteworthy is that the population aged over 85 has increased by 56% in the region over the 1990's, the highest regional rate in metropolitan France. The aging population has become a particular concern in the region, with a rate of natural increase becoming negative over the period 1990-1999, compensated by an increase in migration (+2,200 persons over the period).

<sup>6</sup> Statistical data is sourced from the French National Institute for Statistics (INSEE) unless stated otherwise.

manufacturing operations of major national firms in other industrial sectors: for instance, France Telecom, Citroen, DCN<sup>7</sup> which developed networks of sub-contractors around their operations.

From the 1960's, investment by ICT firms in the region has been a strong driver of diversification of the economy. In the areas of Lannion and Brest, the "Study and Liaison Committee for the Interests of Brittany" worked to open up and modernise the traditionally agricultural society<sup>8</sup>. The action of this committee led to the decision to locate the National Centre for Electronic and Communications (CNET) in Lannion. This is also linked to a regional specialisation in the defence industry, with a concentration of expertise in complementary fields to shipbuilding (e.g., radar signal technology). Over time, the defence and ICT sectors have spread out across the region and made Brittany a key player in these two fields in France.

Finally, the region has a strong military tradition. Brittany is ranked first amongst the French regions and is amongst the leading regions in Europe in terms of the relative share of economic activity related to the defence. Shipbuilding was (and still is) dominated by two major establishments of the DCN in Brest and Lorient, with a total of 7,700 employees in 1997 in comparison to 11,000 in 1975<sup>9</sup>. These two geographical zones, which were strongly specialised in the field (10.4% of total employment in Brest, 10% in Lorient), have been strongly hit by the crisis in the defence industries. Between 1995 and 2000 there was a 50% reduction in activity with strong impacts on employment. Both in the main establishments and in the network of suppliers, the decline in employment was marked and continuous between 1993 and 1997: 17% of the 6,950 jobs in Brest were lost and 33.3% of the 3,400 jobs in Lorient.

In order to understand the evolution of the region prior to the launch of the 2000-2006 Objective 2 programme, it should be highlighted that between 1993-1998<sup>10</sup>, even if some jobs were created in industry (e.g. agro-food in Saint-Brieuc and Brest, intermediate products in Quimper and Brest, equipment goods in Saint-Brieuc), many jobs were lost in the textile (Saint-Brieuc) and naval construction industries (Lorient and Brest). Business services or services to individuals, commerce and transport were the sectors accounting for an increase in employment. In the rural areas, the loss of jobs in agriculture was compensated by increases in industrial jobs, most notably in the agro-food sector. In the Lannion area, the losses in agriculture were offset by the tertiary sector (commerce, electronic components and transport).

### **Structural Funds programmes**

The region has received Structural Funds support since 1989 under the Morgane I programme, a specific application of the Objective 5b programme (rural and coastal development plan). This was reinforced by a first Objective 2 programme for the area of Trégor-Saint-Brieuc (1992-1993). The two distinct programmes were maintained during the period 1994-1999:

- The Objective 2 programme was extended to the zones of Lorient and Brest (representing a total of €564m of public funds for a zone with 762,000 inhabitants) and targeted defence industry conversion.
- The programme Morgane II (Objective 5b) mobilised €637m for an area with a population of 885,000. It focused mainly on the construction of industrial buildings for the food and drink sector.

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<sup>7</sup> DCN: Direction des constructions navales (Shipbuilding Directorate): a public administration until 2003, when Thales acquired 25% of the shares.

<sup>8</sup> See for instance: Newspaper L'Express, 'Les nouveaux défis de Lannion - Un destin «techno» agité', Pierre-Yves Lautrou, 14/06/2004, [http://www.lexpress.fr/informations/un-destin-techno-agite\\_656308.html](http://www.lexpress.fr/informations/un-destin-techno-agite_656308.html)

<sup>9</sup> Diagnosis of SCE, Objective 2 programme 2000-2006, Brittany, 1999

<sup>10</sup> Diagnosis of SCE, Objective 2 programme 2000-2006, Brittany, 1999

The region was also eligible for support from the ERDF KONVER programme as of 1993 for the conversion of its defence activities and received funds under the Objective 2 programme as of 1998 for the same purpose.

### **Brittany at the outset of the 2000-2006 Programming Period**

Brittany had a population of 2.9m in 1999 in an area of 27,208km<sup>2</sup>. As a result of its socio-economic history, the industry in Brittany at the beginning of the programming period relied on four main pillars:

- Agro food across the whole territory;
- Electronics and communication, with establishments essentially in Rennes, Lannion and Brest associating big enterprises (France telecom, Thalès, Alcatel, etc.) and many SMEs;
- The automotive industry with Peugeot-Citroen in Rennes and many sub-contractors;
- The shipbuilding and ship-repair sector, essentially in Brest and Lorient (DCN yard).

In 1998, the region produced 3% of the national industrial value-added with 4% of the total industrial workforce. The agro-food sector was particularly important to the whole region due to its economic weight (primary and secondary sectors) and its influence on land-use planning. The sector represented more than 10% of the regional GDP in 1998, which was particularly high in comparison to the French average (5.4%) or in other European countries considered as strongly agricultural (Netherlands: 6.3%, Denmark: 6.8%). Nonetheless this sector had a relatively low value-added: 13% in 1998 in comparison to 19% in France<sup>11</sup> and 80% of the workforce being manual workers and apprentices. Hence, price competition from third countries was particularly intense.

As regards the international openness of the region, the background analysis of the Objective 2 programming document highlighted that regional export potential was still not fully exploited despite a real improvement during the 15 years preceding the programme. The regional share in national exports was less than 2.4% in 1998 and less than 1,000 regional firms were exporting regularly. In particular, between 1997 and 1998, exports grew by only 4.9% in Brittany in comparison to 6.2% in all French regions. This was a reflection of the sensitivity of the regional productive sectors to international downturns. Agro-food products, in particular, suffered from the crisis in the emerging markets with a fall in exports of 14% in 1998. Nonetheless, together with agricultural products, they made up 42% of the regional exports (49% in 1997).

In terms of the regional scientific and industrial research capacity, the region is relatively well placed in France. For instance, it ranked fifth amongst French regions (Ile-de-France excepted) in 1998 for the number of researchers with more than 4,500 (3,000 in the four universities, 600 in other higher education institutions, around 1,000 in research centres). Moreover, the existence of four specialised research centres was regarded as a crucial element in supporting international competitiveness: civil and defence electronics (Brest); ICT (Lannion), sea resources (Brest, Lannion), zoopôle (Saint-Brieuc).

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<sup>11</sup> Diagnosis of SCE, Objective 2 programme 2000-2006, Brittany, 1999

### A closer look at the eligible areas

The eligible area for the 2000-2006 Objective 2 programme had 1.86m inhabitants in 1999<sup>12</sup>, or 64% of the regional population and 63% of employment in a zone covering 77% of the region. Half of the population was living in rural areas, compared to 39% of the Breton and 23% of the French population. In 1998, the unemployment rate was 11.5% in the 13 employment areas eligible for ERDF support, falling between the regional (11.1%) and the national (11.8%) average.

The agro-food industry had a prominent place in the productive system of the eligible area with 42,000 employees in 1997 followed by the metallurgy and mechanics (15,500 employees), electrical and electronic industry (13,000) and shipbuilding (10,200). These industrial sectors had a central position in the regional value chain in the sense that they safeguard jobs in the wholesale or transport sub-sector for the agro-industries, IT development for the electrical and electronic industry or industrial engineering and service sub-contractors for the shipbuilding.

Moreover, the craft industries had an important place in the economy of the eligible area with 28,000 enterprises in 1998 (23.7% of the total); 47% of these establishments had no employees and 46% had less than 10. White collars and intermediate professions were less represented in the eligible area (26.2%) than regionally (28.3%) or nationally (34.2%). In particular, the issue of a skills mismatch (good level of qualification not in line with the job supply) was a source of concern. The level of unemployment was higher among the under 25 age group in Brittany than in other French regions (outside Ile-de-France) although this population had a higher level of qualification on average than in other regions<sup>13</sup>. In addition the under-employment rate was particularly high in 1998 in the region as highlighted by the chart below<sup>14</sup>.

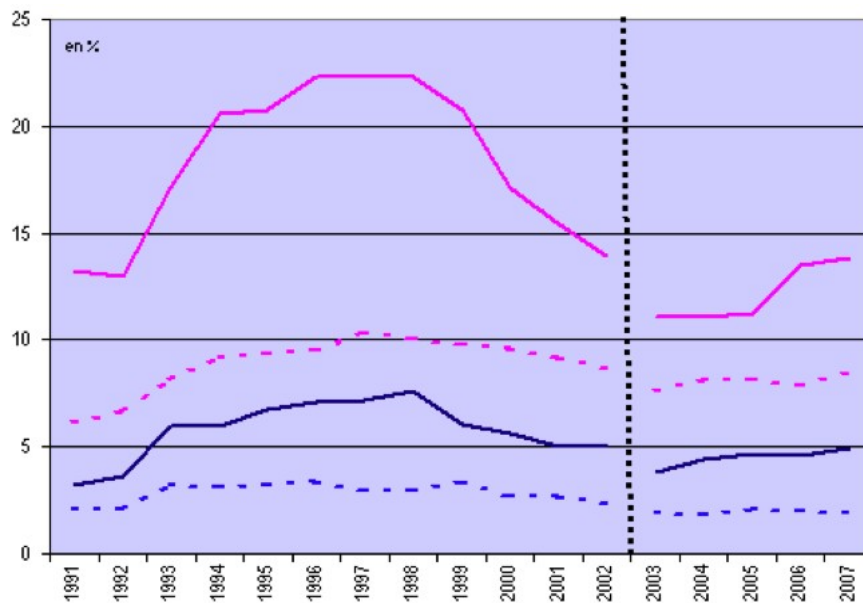
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<sup>12</sup> Objective 2 programme 2000-2006, Brittany

<sup>13</sup> see INSEE Brittany, Octant n°76, 1997

<sup>14</sup> The under-employment rate includes the persons working part-time and willing and ready to work more (available or looking for another job). The persons experiencing part-time or full-time lay-offs are also included.

Figure 1.1 - Underemployment rate from 1990 to 2007, depending on gender and time elapsed since completion of studies (population aged more than 15)



Legend: pink: women; blue: men; dotted line: more than 10 years' service, complete line: recent service

Source: INSEE Bretagne, Enquete Emploi, 1990/2007, result of a survey from 1990 to 2002 and then annual average

Another important characteristic of the eligible area was a pattern of mono-activity: for instance 85% of the industrial workforce in Lannion worked in electronics-telecommunications in 1998 and 25% in Brest (essentially Thomson). In the chemicals-para-pharmaceutical sector (overall representing 3% of the regional workforce), 93% of the workforce was located in the department of Morbihan. Finally, because of a strong specialisation in clothing, the Fougères area was hit particularly hard by the crisis in the textile sector in the 1990's.

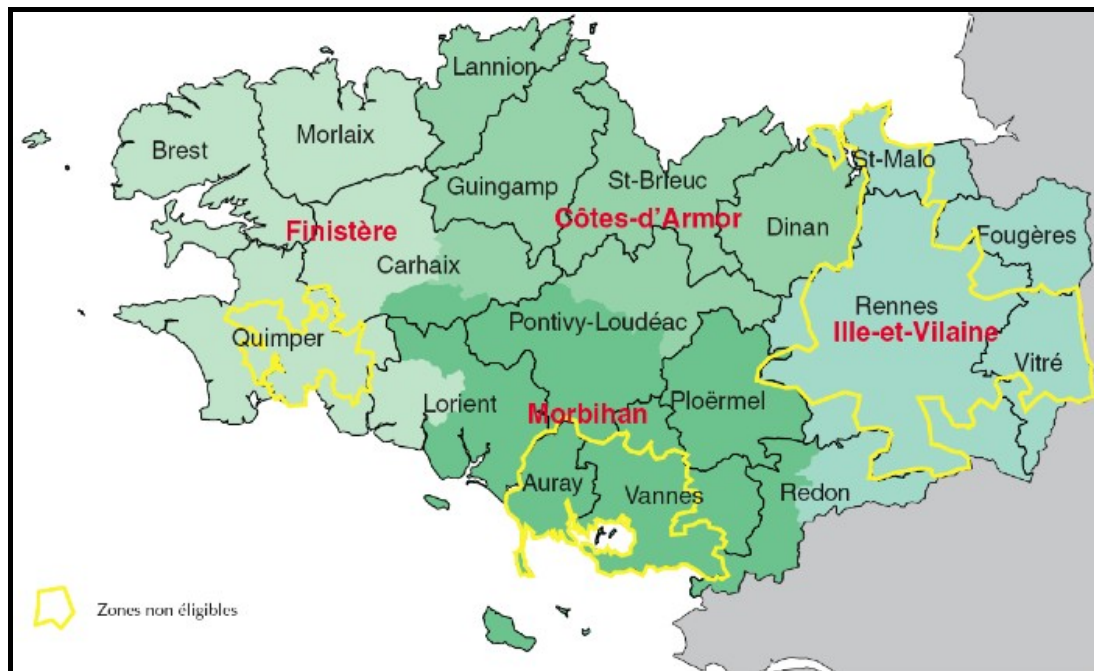
In general, the eligible areas under Objective 2 may be divided into two main groups<sup>15</sup>:

- Seven zones in the interior of the region (plus Morlaix on the north coast) with a strong rural character: low density (less than 90 inhabitants/ km<sup>2</sup>), small towns and between 12% and 22% of the population working in agriculture.
- Four areas (Brest, Quimper, Lorient and Saint-Brieuc) with a share of population living in urban areas higher than 60% and with the tertiary sector representing between 67% and 74% of employment (against 66.8% in Brittany and 71% in France).

The zone of Lannion shared both aspects with a productive structure based both on the production of professional equipment goods and intensive livestock and vegetable agriculture.

<sup>15</sup> Objective 2 programme 2000-2006, Brittany

Figure 1.2 - Brittany departments and zones of employment: eligible areas



Source: Objective 2 programme 2000-2006, Brittany

The eligible areas were selected taking into account their geographic, economic and demographic disparities in comparison to the rest of the region in 1999<sup>16</sup>:

- The north coast of Cotes-d'Armor and Finistère faced a demographic decline and industrial challenges in defence and agro-industries;
- The interior suffered from the consequences of the agricultural crisis (loss of population, ageing);
- The Ponant islands suffering from their remoteness;
- The Cornouaille hit by the fishing crisis;
- The area of Lorient faced a decline in ship construction and military industries;
- The area of Fougères had been weakened by the crisis of the textile industry.

The diagnosis of the region in the Objective 2 programme 2000-2006 highlighted specific development issues affecting the eligible areas at the beginning of the period:

- The areas of Brest and Lorient were suffering from the strong decrease in military order (end of the Cold War, more local than international conflicts). Even if alternative activities had emerged through the re-orientation of competences in the defence industries, these solutions were considered as fragile. The naval yards were at the heart of an important value chain with sub-contractors dependent on the future of the main establishment (DCN).
- The areas of Trégor (Côtes d'Armor) and Léonard (Finistère) faced both a significant demographic decline and in income. Industry was faced by a challenge to adapt to international competition since

<sup>16</sup> According to the European regulation 1260/1999 laying down the general provisions on the Structural Funds, the regions covered by Objective 2 shall be those with structural problems whose socio-economic conversion is to be supported in accordance with Article 1(2) and whose population or area is sufficiently substantial. They shall include in particular areas undergoing socio-economic change in the industrial and service sectors, declining rural areas, urban areas in difficulty and depressed areas dependent on fisheries.. The eligible zones in the French department of Finistère were selected according to the criteria 4 (8), 4(9)a or 4(9)c, in the Côtes d'Armor 4(6), 4(8) or 4(9)c, in Ille-et-Vilaine 4(9)a and in Morbihan 4(9)a and 4(9)c .

decision-making centres of the main sectors were often located outside the region and evolved according to the international market.

- Central Brittany, with an economy traditionally based on agricultural products, was still losing population. The economic structure essentially based on the low-value added processing of primary products was under threat from market liberalisation and a crisis of over-production in agriculture (poultry and pig farming).
- The areas of Quimper, Dinan and Fougères were lagging behind economically and were challenged by the slow renewal of the economic fabric. The Cornouaille and the Cap were hit by the fishing crisis while Fougères and Dinan needed to adapt their industrial fabric mainly composed of small firms and an under-represented tertiary sector.

### Key indicators on Brittany in comparison to other EU Objective 2 regions

The table below combines key regional indicators on Brittany and other Objective 2 regions in the European Union. In particular, the performance of Brittany can be compared to Aquitaine (France) and Upper Austria (AT), which are also strong agricultural regions. A noteworthy aspect is that the share of services in the economy is particularly high in the two French regions, in particular because of tourism activities. The population has increased strongly in these two regions over the period 1996-2005 in comparison to the other regions. Brittany had the lowest GDP/inhabitant of all these regions in 2004 but a rather strong growth rate over the period 1999-2004, demonstrating a catching up tendency. Although ranking well in terms of the share of researchers in the population and the number of students, the share of high-tech industries in total employment appears particularly low in Brittany as well as the share of active population involved in life-long learning. This underlines the difficulty in the region to match the good level of qualifications of the population with employment offered.

Table 1.1 - Comparison of key indicators between Brittany and other Objective 2 regions

	Brittany (FR)	Aquitaine (FR)	Basque Country (ES)	Upper Austria (AT)	Piedmont (IT)	West Midlands (UK)
<b>Socio-economic context</b>						
Population growth 1996-2005	0.7795	0.786	0.164	0.295	0.162	0.029
Average annual migration balance 2000-2005	0.6978	0.92	0.3242	0.25	0.78	0.11
GDP/inhabitant in PPS, 2004	21,198	21,957	26,975	25,857	25,703	23,677
Employment rate (population over 15 years old), 2006	50.9	48.3	53.4	59.8	49.1	57.9
GDP/employment in 2004, €	58,674	62,738	50,824	52,036	58,656	58,983
GDP growth 1999-2004	2.92	2.58	1.88	3.02	1.98	0.33
Employment growth 1999-2004	0.3786	0.311	1.324	0.332	0.413	0.222
<b>Repartition of activity between sectors, 2004</b>						
Agriculture	6.25	6.69	2.53	14.77	3.61	:
Industry	23.94	20.9	36.94	29.08	32.04	:
Services	69.81	72.41	60.54	56.15	64.34	:
% of high and medium tech industries in total employment	4.34	3.81	9.2	9.29	12.25	8.68
% of high tech industries in total employment	1.08	0.7	0.62	1.15	1.53	1.09
% of knowledge intensive services in total employment	2.74	3.02	2.99	2.26	3.85	3.57

	Brittany (FR)	Aquitaine (FR)	Basque Country (ES)	Upper Austria (AT)	Piedmont (IT)	West Midlands (UK)
<b>Human resources in science and technology</b>						
% of HRST in total employment	38.1	35.2	54.9	33.6	33.4	34.4
% of employment in high tech sectors	3.82	3.72	3.6	3.42	5.39	4.67
Number of researchers (full-time equivalent), Total, 2003	7,542	5,974	7,020	3,155	7,334	12,909
Number of researchers (% of active population), Total, 2003	0.56	0.49	0.7	0.46	0.38	0.49
Number of students in science and technology ISCED (98) 5-6	104,247	96,771	86,359	20,026	101,924	161,626
Life-long learning (% of active population), 2005	9.51	7.75	15.19	14.36	6.11	21.03

Source of data: INSEE

### Definition of the key research questions

From this short overview of Brittany, at the outset of the programming period 2000-2006, it is clear that the region was facing specific challenges related to its economic specialisation at the launch of the Objective 2 programme. As a result of its history and its natural endowments, the Breton economy has developed around four main pillars (fishing/agro food, shipbuilding, information and communications technologies (ICT), automotive industry), with a high share of SMEs.

However, all these sectors faced difficulties at the beginning of the Objective 2 programming 2000-2006 period, not solely due to the overall economic situation. They were in a period of reorganisation after a strong period of growth (ICT) or redevelopment of activities after a period of crisis (agro-industries, defence). In particular, the least innovative domains with a low level of value-added were increasingly confronted to the challenges of arising from the globalisation of exchanges.

The reliance on a limited number of sectors faced by international competition is, therefore, the key focus of the analysis. As argued in the first intermediate report presenting the conceptual model and the key hypothesis to be tested in the case studies<sup>17</sup>, regional industrial specialisation can be both an advantage, because of agglomeration economies, and a threat, because of vulnerability to external competition. It is, therefore, highly relevant to evaluate to what extent horizontal measures supported by the ERDF have been implemented, to foster either renewal or reorientation of the specialisation pattern.

#### Hypothesis 2 of the conceptual model: Regional specialisation

A certain degree of specialisation and distinctive core-competences linked to the regional innovation system and to promising markets could be a competitive advantage for a region. Some Objective 2 areas, however, specialise in industries that suffer from severe external competition. The vulnerability to globalisation is frequently a consequence of lock-in effects and negative selection mechanisms that slow down the necessary change and restructuring.

In this context, the main research question relates to the relations between the regional specialisation, the traditionally self-contained character of the regional economy and its ability to face international competition. Is the strong historically and geographically driven sectoral specialisation of the region a barrier or a driver in facing the developments on the global market? How well did this traditionally closed

<sup>17</sup> See the first intermediate report of this study for a comprehensive view on the set of hypothesis tested throughout the case studies: [http://ec.europa.eu/regional\\_policy/sources/docgener/evaluation/pdf/expost2006/wp4\\_1st\\_int\\_report.pdf](http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/wp4_1st_int_report.pdf)

and self-contained region adapt to the challenges emerging from the international environment? What role did the ERDF intervention under the Objective 2 programme in the region play in this respect?

Before analysing the results and outcomes of a specific measure of the ERDF Objective 2 Programme implemented in Brittany called "Mobilise companies for employment", which addressed issues related to structural change and adaptation to globalisation, the case study provides an overview of the developments in the region over the programming period as regards these specific issues, focussing in particular on the evolutions in the regional specialisation.

## **1.2 Regional structural change and globalisation issues in 2000-2006**

The conceptual framework of the evaluation identified a limited number of dimensions to be considered when analysing the structural change in a region and its adaptation to globalisation<sup>18</sup>. The regional structural change undergone in Brittany during the period 2000-2006 is analysed with respect to two main dimensions considered as particularly relevant for the relationship between the regional specialisation and the ability to face international specialisation. The first aspect concerns the degree of regional specialisation and trends in specialisation patterns in relation to challenges from globalisation. Another aspect considered is 'socio-economic change and human capital'. Both these aspects were considered important at the beginning of the programming period. The eligible area was losing population and faced a mismatch between the level of qualification and the needs of regional companies.

### **1.2.1 Dimensions of structural change**

#### **Regional specialisation**

During the programming period 2000-2006, there has been a reinforcement of the concentration of employment in the four main sectors (agro-industries, electronics and communications, automotive industry and shipbuilding and repairs), which accounted for three quarters of industrial employment in the region in 2006. During the period, salaried employment increased the most in the construction sector (around 22%), followed by the services and commerce sector while the industrial and agricultural sectors have lost jobs. Salaried employment in industry has strongly decreased in the whole eligible area, but to a lesser extent than in France (except automotive and equipment goods in the non-eligible area which increased). Employment in the primary sector has strongly declined between 1999 and 2004: the region is amongst the European regions where this decrease is the highest (-23.6% against -13.6%).<sup>19</sup>

In the zones of Centre-West-Brittany, Centre-Brittany, Pontivy or Morlaix, the agro-industries represented more than 10% of total employment in 2006 (6.6% regionally), this share was as high as 19.5% in 2002 in the zone of Pontivy-Loudéac. In this area, the agro-industries employ two-thirds of industrial employees. In the zone of Carhaix, agricultural and agro-food employment represents one quarter of the total employment: 70% of the regional agricultural production is processed in this area. During the 2000-2006 period, faced by important health and over-production crises, the agro-food sector has made moves to change the scale of

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<sup>18</sup> See first intermediate report of the evaluation (2009)

<sup>19</sup> SGAR Bretagne, Programme Objectif 2 – Période 2000-2006 - Rapport annuel 2007

operations resulting in increased concentration and partnerships. In addition, there was a shift towards improving quality rather than quantity through the implementation of standards and labels to make regional products more attractive internationally.<sup>20</sup>

These trends has led to a broadly positive outcome, with certain industries scaling down (e.g. poultry) but others emerging (e.g. processed meat). At the end of the period the level of employment was more or less stable in comparison to 2000<sup>21</sup>. There was, nonetheless, still an important lock-in effect due to a low level of cooperation, according to the representative of the agro-industry competitiveness pole. Moreover, agro-industries continue to generate a lower level of value-added compared to other sectors: 3.9% of the total gross value-added in 2005 for 9.6% of the total employment.

The area of Lannion has suffered from a recurrent crisis in the ICT sector. In particular, after a strong increase in the number of companies till the turn of the century, the 2000 Internet crisis jeopardised enterprises specialised in optical fibres and components, leading to a loss of almost a quarter of industrial employment in the zone between 2000 and 2004.<sup>22</sup> The software industry started growing, but was hit by the crisis as well in 2002-2003. The number of companies created in this sector decreased year after year, but the companies created just after the crisis in 2003-2004 appear to have developed well, according to the specialists of the sector interviewed. The SMEs were able to attract executives from the larger groups as the latter downsized. The cooperation patterns remain rather local and informal, with a privileged relationship between the supplier and the client.

One issue for the sector is that the capacity is not adapted to larger scale production. Indeed, according to the interviewees, regional exports in the ICT sector are decreasing, since the structural change undergone by the sector is not over yet in the context of fierce international competition. According to the regional stakeholders, 'the main areas for future development lie at the interface with other sectors like health or defence'.

The regional authorities have sought to take advantage of the existing research and innovation strengths through investments to support a move up the value chain of the main sectors. The most notable example is the launch of the Competitiveness Clusters in 2006, in line with the national strategy, to reinforce the attractiveness and competitiveness of the area through an increased level of innovation and a better external visibility of the regional potential. The aim is to identify 'cornerstones' on the basis of which longer-term R&D projects can be developed and around which clusters of research and training organisations and smaller and larger companies can be built. Four clusters were launched in 2006 based on the regional strengths of Brittany. Two of these clusters have an international dimension: 'Images and networks' (ICT) and 'Sea resources'; the other ones have a national dimension: 'Agro-industries', and 'Automotive'.

By the end of 2005, the regional industry employed 185,000 persons of which a third in the agro-food sector<sup>23</sup>. Five other sectors employed more than 10,000 employees each: mechanical equipments, chemicals-rubber-plastics, automotive, electrical and electronic equipments and metallurgy. The organisation into production chains creates a strong inter-dependence between these activities. The share of establishments with between 50 and 250 employees was higher than the national average (10% against 8%)<sup>24</sup>, while there

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<sup>20</sup> Several Innovative Actions have been supported by the European Commission over the period 2000-2006 in Brittany. For a case study on the support awarded for innovation in agro-industry in the region, see here (in French): [http://ec.europa.eu/regional\\_policy/cooperation/interregional/ecochange/goodpractice/1knowledge/2links/fr\\_agro\\_alimentaire.pdf](http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/goodpractice/1knowledge/2links/fr_agro_alimentaire.pdf)

<sup>21</sup> Observatoire des industries agro-alimentaires en Bretagne, Revue N°84, Janvier 2007

<sup>22</sup> Programme opérationnel FEDER Bretagne, Version 2.6 du 07/12/2007

<sup>23</sup> Programme opérationnel FEDER Bretagne, Version 2.6 du 07/12/2007

<sup>24</sup> Insee, en partenariat avec la Région Bretagne, DRIRE et DRTEFP

were relatively fewer firms with less than 10 employees than nationally. In sectors such as automotive, shipbuilding and perfumery, the concentration of employment in the largest companies is significant. This can be regarded as a factor of fragility in particular in the case of the automotive and shipbuilding sectors since these large employers are also the main decision makers in the value chain. Furthermore strategic decisions on the regional operations of these large firms are increasingly made outside Brittany. Nonetheless, apart from these specific cases, in the regional industrial companies dependent on industrial establishments of more than 20 employees, 82% of the personnel were employed by companies located within the region in 2006 in comparison to 74% in France and 71% in France outside Ile-de-France. In general, 60% of the regional jobs depend on headquarters located in the region (INSEE data). This relatively high rate of regional ownership seems to be a positive aspect: the region is less exposed to relocation risks. Only 13% of the industrial establishments in the region have foreign shareholders (the lowest rate nationally) and they employ 22% of industrial employees (31% in France). According to the director of the agro-industries Competitiveness Cluster, no company in the agro food sector has a majority of foreign capital. Nonetheless, with only 2-3% of national exports, the region is ranked 16th out of 21 French metropolitan regions (except Ile-de-France), and has been on a downward trend between 2002 and 2007.

### Socio-economic change and human capital

In terms of economic growth, the region caught up with the rest of the country during the period 2000-2006. The strong increase in GDP per employment allowed the region to close the gap with the national average (outside Ile-de-France) to 96.7% in 2006 in comparison to 94.8% in 2000 and 83.4% in 1990.

The regional population has increased from 2.9m in 1999 to 3.1m in 2007, i.e. an average increase of 1.7% per year but only 0.7% in the ERDF eligible zone. Only the territory of Centre-West Brittany kept on losing population in 2007. The demographic growth of the region has been essentially due to a positive migration balance, which is strongly negative for the group of 20-26 years old, but becomes positive for the group above 33 years old, notably for those in the age groups 30-35 (young families) and 60-65 years old (retired). Pensioners represent 40% of the positive migration balance for the region in 2006. The ageing of the population is particularly important: it is expected that in 2030, the share of Bretons aged over 60 will be 35% compared to 23.1% in 2000, and 31.1% at the national level in 2030.

Table 1.2 - Evolution of the population within each of the Departments of the region of Brittany

Departments of the region of Brittany	Côtes d'Armor	Finistère	Ille-et-Vilaine	Morbihan	Brittany	France (Métropole)
Annual average variation rate of the population (%)						
1975-1982	0.36	0.42	0.94	0.67	0.6	0.45
1982-1990	-0.01	0.15	0.79	0.6	0.4	0.51
1990-1999	0.08	0.18	0.92	0.42	0.43	0.37
Due to natural balance						
1975-1982	0.06	0.15	0.57	0.29	0.28	0.39
1982-1990	-0.02	0.12	0.51	0.23	0.23	0.42
1990-1999	-0.14	0.03	0.47	0.12	0.15	0.36
Due to migratory balance						
1975-1982	0.3	0.27	0.36	0.39	0.33	0.06
1982-1990	0.01	0.03	0.28	0.37	0.17	0.09
1990-1999	0.22	0.16	0.46	0.3	0.29	0

Departments of the region of Brittany	Côtes d'Armor	Finistère	Ille-et-Vilaine	Morbihan	Brittany	France (Métropole)
Total population						
2000	545,518	855,674	875,388	649,611	2,926,191	58,849,545
2001	549,379	860,024	885,964	656,704	2,952,071	59,249,169
2002	553,731	864,454	896,895	664,696	2,979,776	59,659,752
2003	558,452	868,807	907,881	673,220	3,008,360	60,066,779
2004	563,267	873,430	919,202	681,649	3,037,548	60,461,613
2005	566,946	876,680	929,947	688,544	3,062,117	60,825,000

Source: INSEE data

Since 1999, Brittany has seen a general rise in the level of education attainment. The growth was faster than in the rest of France<sup>25</sup>. Between 1999 and 2005, the share of population holding a third-level education diploma in Brittany increased by five percentage points, which is comparable to the trend in Rhône-Alpes and Midi-Pyrenees and only slightly lower than in Île-de-France (5.5%). The region also experienced the second biggest decline in the proportion of the non-qualified population (that is without a Certificate of Primary Education, so-called CEP). This evolution is mainly due to the demographic processes: the gradual replacement of older less qualified generation by the generation of young people who benefited from the easier access to the higher education. 41% of population between 25 to 29 years has a third-level education diploma compared to only 6% among the population over 65.

Table 1.3 – Educational attainment in Brittany in 2005 compared to the Metropolitan France (%)

	Brittany		Metropolitan France
	1999	2005	2005
No diploma or CEP	37.1	30.3	32.3
End of secondary education (BEPC, Brevet)	8.5	7.1	6.6
National Vocational Qualifications (Level 1) (CAP)	16.4	15.6	15.4
National Vocational Qualifications (Level 2) (BEP)	10.2	10.9	8.9
Baccalaureate (general)	4.9	7.4	7.8
Baccalaureate (technologic or vocational)	7.5	8.3	7.1
First-level education diploma	8.5	11.3	10.6
Second or third-level education diploma	6.9	9.1	11.3
Total	100	100	100

Source: INSEE data

In 2005, 39% of people moving to Brittany from other regions held a third-level education diploma whereas approximately 53% of the Britons who left to another region were graduates of higher education institution. In the 2000-2005 period, the overall migration balance of third-level education graduates remained favourable for Brittany. This balance, however, is not favourable for young population (age 20-29). 66% of young people who left the region in 2005 were university graduates and 84% had at least a baccalaureate degree; the new residents moving to Brittany were significantly less qualified: respectively 52% held university diploma and 75% had baccalaureate. As highlighted in several studies of INSEE, there seems to be a trend for young graduates to leave Brittany to search highly qualified jobs in other regions, notably in Ile de France. This is due to the structural mismatch between the growing qualification level of regional population and the current needs of regional companies.

<sup>25</sup> See INSEE, OCTANT n°111, 'Une Bretagne toujours plus diplômée malgré de nombreux departs de jeunes', January 2008

Table 1.4 - Educational attainment of population migrating to and from Brittany by region of origin and destination in 2005 (%)

	Stable residents in Brittany	Arriving to Brittany (from)			Leaving Brittany (to)		
		Total	Ile-de-France	Other regions and countries	Total	Ile-de-France	Other regions
Number	1,990,234	173,604	55,050	118,554	102,501	24,756	77,745
No diploma or CEP	31.6	15.3	17.4	14.4	8.7	5.1	9.9
End of secondary education (BEPC, Brevet)	7.2	6	6.4	5.8	4.3	2.6	4.9
National Vocational Qualifications (Level 1 or 2) (CAP, BEP)	27.1	19.9	20.8	19.5	15.3	7.8	17.6
Baccalaureate (general, technologic or vocational)	15.4	19.4	18.1	20	18.5	15.4	19.5
Third-level education diploma	18.7	39.4	37.3	40.3	53.2	69.1	48.1
Total	100	100	100	100	100	100	100

Source: INSEE data

Trends in unemployment were more favourable in the eligible zone than in the rest of the region. In general, even if the unemployment rate increased in the region between 2000 and 2006 (from 7.5% to 7.7%, Eurostat), the region maintained over the period a lower unemployment rate than in France (9.3% in 2006) or in the EU15 (7.8%). In particular, while the number of employees decreased continuously between 2001 and 2006 with a total decrease of 12,000 jobs<sup>26</sup>, the construction and the tertiary sector were the main source of new jobs. Over the period 1993-2003, the tertiary sector contributed to 82% of the progression of the employment at the regional level, even if in 2005, the sector had still a lower importance in the region than at the national or European level (69% of total employment in 2006 against 72.6% in France and 70.3 in EU15).

The increase in unemployment over the programming period 2000-2006 is partly due to the structural decline of the industrial sector (from 27.2% of total employment in 2000 to 21.3% in 2005, Eurostat). All industrial sectors are losing jobs in non-eligible areas, whereas this decrease is lower in the eligible areas than the French average. In addition, some strong territorial disparities exist: the employment zones of Pontivy-Loudéac, Saint-Malo, Vannes and Auray have seen an increase in employment in the private sector of more than 10% between 2000 and 2005, while it stagnated or slightly decreased in the areas of Lannion, Fougères and Redon

### 1.2.2 Understanding the geography of structural change

The eligible areas do not fit with the NUTS 3 statistical level as the latter corresponds to the level of the French ‘departments’ (local authorities) while the Objective 2 zoning reflects more the employment zones (so called ‘pays’). According to the regional authorities, the regional policy places an emphasis on regional cohesion (territorial, social and economic) and on land-use planning. The objective is to improve accessibility of specific areas (such as Brest or Morlaix).

The table below provides information on the main clusters in Brittany as identified by the European Cluster Observatory, which identifies clusters in terms of concentration of employment<sup>27</sup>. The specialisation is particularly high for the agrofood cluster and the fishing cluster, showing their relative higher importance in Brittany than in other European regions.

<sup>26</sup> SGAR Bretagne, Programme Objectif 2 – Période 2000-2006 - Rapport annuel 2007

<sup>27</sup> For more information see <http://www.clusterobservatory.eu>

Table 1.5 - European Cluster Observatory (ECO): main clusters in Brittany

	Number of employees	Size, % of total EU employment	Specialisation <sup>28</sup>	Focus <sup>29</sup>	Note of ECO	Innovation
Agrofood	67,830	1.36%	2.89	7.83%	***	Average
Fishing	8,576	2.38%	5.05	0.99%	**	Average
Financial services	39,467	0.56%	1.18	4.55%	*	Average
Transports	33,352	0.54%	1.15	3.85%	*	Average
Construction	23,134	0.35%	0.75	2.67%	*	Average

Source: <http://www.clusterobservatory.eu>

<sup>28</sup> Comparison of the share of regional employment in the sector with the share of European employment in this sector.

<sup>29</sup> Share of employment in the sector out of the total employment in the region.

## 2. Regional policy 2000-2006: strategy and objectives

### 2.1 Regional policy mix for structural change and globalisation

French regions have only recently gained more significant powers. In the 1980's, the French regions were given responsibility for managing high school and professional schools, life-long learning, economic development and regional transport. Lately, the devolution process from the State to the Regions accelerated. Over the period 1994-1999, the State-Regions Plan Contract (so-called CPER), enabled the regions to set up governance structures in the field of research, higher education and innovation<sup>30</sup>. Even though the State still has the major role in defining and funding the Contract, the regions gained powers over the years (the first contracts date back to the 1980's) notably via an increase in the share of funding (regional funding was 50% of the total budgets of the contracts on average for the period 2007-2013).

In particular, during the 1990's, most of the French regions designed specific instruments to foster networking of regional actors in research and innovation. Latterly, some regions turned their attention to the regional research system and tried to support research fields in which regional researchers were specialised. Complementary instruments were given larger budget over time to, firstly, put the emphasis on the regional research strengths and, secondly, to reinforce linkages between the regional research actors.

In 2002, the national strategy regarding regional policies was strongly modified. The Inter-ministerial Committee Spatial Planning and Regional Competitiveness identified territorial competitiveness as a main element for public policy in the field of innovation. To this end, a decision was taken to identify regional clusters. The process for identifying the Competitiveness Clusters was based on a debate at the end of the 1990's about the need to build a new research and innovation policy on the basis of regional strengths. A call for projects was launched so that regional actors could team up and submit a proposal to be labelled as a Competitiveness Cluster. As a result, each Region has been awarded at least one Competitiveness Cluster, even if some of them may be questionable from the point of view of excellence. However, still, for the first time, the national policy initiated thinking in terms of selection and to some extent of competition between regional teams to receive national funding. The competitiveness clusters and industrial R&D are supported via the inter-ministerial Company Competitiveness Fund (Fonds de Compétitivité des Entreprises [FCE]), which belongs to the Ministry of Economy, Finance and Employment and brings together corresponding credits from the Ministries of Defence, Transport, Health, Agriculture and the Interior Ministry.

The further reinforcement of the regional competences in economic development and research, in 2004, gave the regions the possibility to participate in the elaboration of the strategy of the intermediaries in charge of the transfer of technology from the research community to industry and in the identification of their priorities. The regional councils often took this opportunity to better connect the research and technological supply of these intermediate actors with regional needs.

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<sup>30</sup> The CPER is a document by which the state and the region are committed to programming and multi-year funding of major projects such as the creation of infrastructure or the support to growth sectors. Since the French decentralisation laws of 1982-83, the important choices regarding land use are indeed determined at the level of each of the 22 French regions by the Regional Councils, within a framework defined by the government. Every seven years, so as the Structural Funds programming periods, the CPER sets the broad objectives of economic, social and cultural development at the national level. Each region develops its own regional plan whose main purpose is to determine the economic, social and cultural objectives for its territory. These regional plans support the collaboration with the state and other local authorities.

The merger of the Agency for Industrial Innovation (AII) with OSEO, the agency in charge of promoting SMEs innovative activities, in 2006 underlines a shift in the French R&D policy towards addressing more efficiently SMEs. The initial purpose of the AII, to finance large-scale projects led by larger enterprises, was no longer in line with the policy-makers' priorities to support SMEs.

### The ERDF Objective 2 programme and the CPER

The ERDF Objective 2 programming document for Brittany was drafted in 2000 on the basis of work carried out for the preparation of the CPER and a series of thematic meetings attended by the main regional development stakeholders (State services, Regional Council, local authorities, chambers of commerce, etc.). It was approved, and effectively started, in March 2001.

Both the CPER and the Objective 2 programme covered the 2000-2006 period and adopted a common strategy and pursued the same approach to territorial development. The two programmes have a symmetric architecture and address the same broad themes: training and employment, territorial development, economic competitiveness as well as the protection of the environment. The two programmes gave, nonetheless, a different priority to each aspect, territorial development being more the focus of the CPER (e.g. transport infrastructures) and the Objective 2 programme focussed more on competitiveness (e.g. development of companies)<sup>31</sup>.

*Table 2.1 - Expenses in volume (€m) by broad thematic from the Objective 2 programming document and the Planning Contract between the State and the Region (CPER) 2000-2006, and their source of funding*

Expenses in volume and their source of funding	Programming document, in €m				CPER, in €m			
	EU	Public national contribution	Private funds	Total	State	Region	Other	Total
Development of companies	67	73	155	296	45	39	3	87
Activities linked to agriculture, forest and sea	23	42	26	90	62	55	4	120
Tourism, commerce and handcraft activities	62	64	34	160	17	18	3	38
Research, innovation and higher education	44	44	17	105	154	65	94	312
Transport infrastructure	30	67	1	97	316	248	210	775
Regional and local culture	16	17	3	37	20	20	1	41
Supply of habitations (public, social, private)	0	0	0	0	3	1	0	4
Rehabilitation of cultural heritage	10	10	1	21	0	0	0	0
Urban spaces & brownfields	23	25	2	50	19	9	8	35
Health improvement	0	0	0	0	3	1	2	6
Environmental protection	80	120	75	275	109	69	55	234
Promotion of leisure activities	12	12	2	26	8	8	0	15

Source: Mid-term evaluation of Objective 2 programme, 2003

## 2.2 Overall strategy of the 2000-2006 Objective 2 programme

The strategy of the Objective 2 programme is defined by actions concerning the whole eligible area and actions supporting local initiatives under a specific measure. The SPD for 2000-2006 focussed on five priority

<sup>31</sup> For a more comprehensive overview of the complementarities, synergies and overlaps of the CPER and the programming document, see the mid-term evaluation (Ernst&Young, 2003)

areas presented in the table below. The third priority area 'Improve the competitiveness of companies and adapt them to the global context' is the main field of intervention with 51% of the budget; a reflection of the strong priority given to the development of economic activity and employment.

Table 2.2 - Synoptic view of the Objective 2 programme

	Brief description and objective	Budget (€% of total budget), 31/12/2006
<b>Overall programme</b>	<p>The overall strategy of the Objective 2 programme is structured around five main aspects:</p> <ul style="list-style-type: none"> <li>– Intelligence: to be placed at the heart of economic activities as a source of value, for the conception of products but also for societal relationships and creativity</li> <li>– Attractiveness: based on a strong identity, natural and cultural heritage as a factor of differentiation</li> <li>– Openness in terms of accessibility (infrastructures) but also of openness to the world (internationalisation of activities) and open-mindedness (open training system, access to information and knowledge)</li> <li>– Organisation: of the activities (structuring of activities, common strategies of the actors) and of the territories (cooperation, solidarity, networks)</li> <li>– Quality: of products, of life, of social relationships</li> </ul> <p>All these elements have as a major objective the creation of jobs in the framework of a sustainable rural planning and development. The different priority areas have been defined based on these broad objectives.</p>	<p>€1,376,801,379 out of which 27.8% ERDF, 3% ESF and 19.2% private funds</p>
<b>Priority area 1</b>	<p>The first axis 'Develop and adapt the skills of men and women' aims at developing professional and technological training, reinforcing the linkages between the education system and companies, promoting the interrelations between employment and training and supporting the adaptation of the active population and of the organisations in the area which are subject to changes or conversions. This priority area is divided into four measures:</p> <ul style="list-style-type: none"> <li>– Develop the competences in the territories (ESF: 1.65% of the programme)</li> <li>– Support economic development through support to human resources and employment (ESF: 4.17% of the programme)</li> <li>– Support training and professional integration policies (ESF: 1.99%)</li> <li>– Develop teaching and technological and professional training (ERDF: 6.78%)</li> </ul>	<p>13.5% (initially 14.6%) of the programme: €186,655,786</p>
<b>Priority area 2</b>	<p>The second priority area aims at creating favourable conditions for growth and employment at the basis of regional competitiveness through the 'settlement of a balanced and attractive territory'. This is divided into four measures:</p> <ul style="list-style-type: none"> <li>– Protect and improve the environment (3.43% of the programme)</li> <li>– Support the modernisation of port sites (11.44%)</li> <li>– Support the modernisation of infrastructures (4.59%)</li> <li>– Territorial aspects (13.51% of the programme)</li> </ul>	<p>37% (initially 32,3%) of the programme: €510,311,339</p>
<b>Priority area 3</b>	<p>The third priority area has as an objective to 'improve the competitiveness of businesses and adapt the regional economy to the global context'. Four measures support this objective:</p> <ul style="list-style-type: none"> <li>– Mobilise companies for employment (28.55% of the programme)</li> <li>– Rehabilitate the military sites (2.76% of the programme)</li> <li>– Exploit the potential for R&amp;D, technology transfer and information diffusion (5.56%)</li> <li>– Promote the assets in terms of tourism and culture (14.43% of the programme).</li> </ul>	<p>48.2% (initially 51.3%) of the programme: €664,174,734</p>
<b>Priority area 4</b>	<p>The fourth priority area deals with the Regional rural development plan (FEOGA-Guarantee): Emphasis is on how to improve the competitiveness of agriculture and food processing, as well as product quality. Measures also cover improvements to water quality, village renovation, protection of the rural heritage and diversification into rural tourism.</p>	
<b>Priority area 5</b>	<p>The fifth priority area (1.13% of the programme) gathers the measures for technical assistance.</p>	<p>1.13% of the programme: €15,659,520</p>

Source: Objective 2 programme 2000-2006, Brittany. Version 07/12/2007

As stated in the programming document, the general objective was to 'support the improvement of the quality of jobs and a non-discriminatory growth, a significant decrease in unemployment, the creation of

jobs in urban and rural areas in new sustainable activities and services preserving the environment, as well as a reinforcement of the social and regional cohesion’.

Representatives of the regional and national authorities<sup>32</sup> highlighted that the issues of structural change and adaptation to globalisation were not explicitly targeted in the strategy of the programme. Rather, the main focus was on job creation. According to the managing authorities, at the time the programme was drafted, the region was not yet hit by the structural changes induced by the internationalisation of trade and by industrial downturns, due notably to the relative ownership of the business sector. The fact that the agro-industries were spread out across the region was seen as strength and the sector resisted to crises in the agricultural sector relatively better than other regions. In 2000, according to regional interviewees, the agro-food SMEs were not yet over-dependent on large industrial groups and relocation and restructuring were not considered a threat. There was a higher number of craft-entrepreneurs and the process of mergers was just starting.

In general, the background analysis and priorities of the programming document stressed the importance of support to the main pillars of the economy in tackling structural change. The issue of increasing the openness of the regional economy was not clearly a target, the focus being rather put on improving the value-added of the main regional sectors. At the outset, the logic was one of regional development based on territorial cohesion. The regional strategy consisted in reinforcing the regional economic fabric to generate a better capacity to face-up to the challenges arising from globalisation. The idea of developing the economy around the four main regional sectors emerged only progressively at the mid-term stage during the ‘ring-fencing of funds’ (see below) and coincided with a discussion on the Competitiveness Clusters<sup>33</sup>.

In order to understand the changes in orientations introduced at the mid-term stage, it should first be highlighted that the launch of the programme was slow. Delays were due to the late signature of the programming document and of the contracting with the regional partners in 2001, but also because of the overlap with the previous programme, which had been extended by one year. During interviews with the managing authorities, this overlap was highlighted as a cause of the absence of a pipeline (or stock) of “ready-to-fund” projects for 2000-2006, which required a pro-active intervention by the managing authorities in 2003. Moreover important infrastructure projects needed preparation time (technical studies, financial settings), notably for the rehabilitation of military or port sites. As a consequence of these delays, the targeted total of ERDF expenditures to be reached by the end of 2003 risked to be missed. In order to avoid losing ERDF funds, the main stakeholders were encouraged to propose already mature projects. This had a negative effect in terms of promoting the emergence of longer-term projects in line with the overall strategy since the priority was given to short-term projects able to easily and rapidly absorb funds. As some important structural projects risked not to be supported during the programming period as a result of this surge in consumption of funds at the mid-term stage, the programming of funds was stopped for close to a year for some measures, and the necessary funds were ‘ring-fenced’ in order to wait for the projects to be ready.<sup>34</sup>

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<sup>32</sup> The opinions provided in this case study by the regional and managing authorities and other important stakeholders have been gathered through on-site interviews.

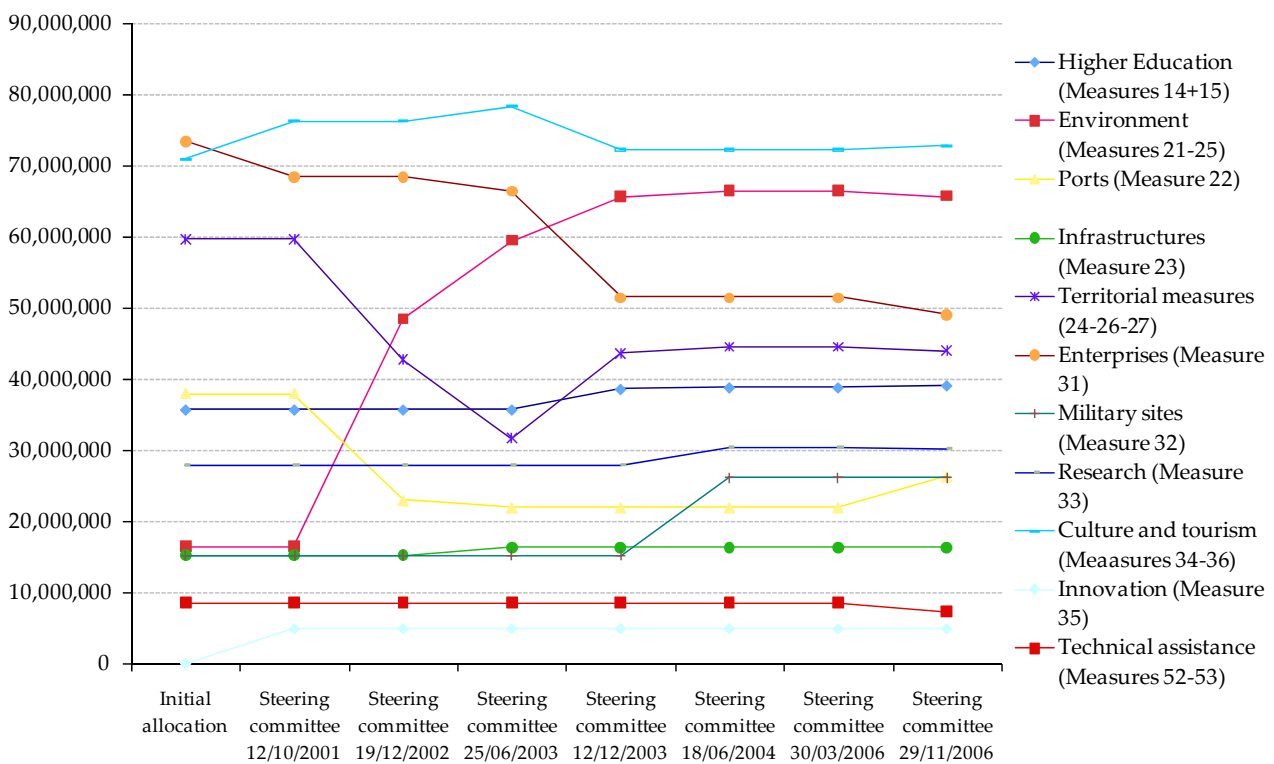
<sup>33</sup> For a presentation of the French Competitiveness Clusters, see: <http://www.competitivite.gouv.fr/index.php?&lang=en>

<sup>34</sup> The procedure launched by the regional authorities at mid-term to build a financial reserve for important upcoming projects is referred to in French as ‘sanctuarisation’ (‘ring-fencing’ in English)

In addition, the monitoring tools were not adapted to follow the distribution of funds amongst the priority sectors and areas. The managing authorities relied on the mid-term evaluation to re-allocate funds between the measures<sup>35</sup>.

As presented in the graph below, the thematic of environment has in particular received more funding than initially planned (measure 21 and 25), as well as the measure dedicated to military sites. On the opposite, the measures dedicated to enterprises (31), port sites (22) and the territorial measures have seen a decrease in their allocations over the period. At the end of the period the measures that have received most of ERDF funding have been the ones dedicated to culture and tourism and environment, followed by the measure dedicated to enterprises for which the specific outcomes will be analysed in more detail in the subsequent sections.

Figure 2.1 - Evolution of the financial allocations of the Objective 2 programme per themes - ERDF only, 2000-2006



Source: Monitoring data from the regional managing authorities of Brittany, SGAR, 2009

### The ERDF Objective 2 programme and the European Social Fund

The European Social Fund (ESF) was concentrated on three measures in the first priority of the Objective 2 programming document related to the development and the adaptation of the competences of men and women. It fitted into the regional strategy in a cross-cutting and integrated manner.

<sup>35</sup> The NAF code (INSEE code for classifying French activities) used under the PRESAGE tool to monitor the use of funds in France did not correspond to the sectoral challenges, since many companies dependent on one sector were not classified under the same code (typically sub-contractors). As highlighted in the final evaluation of the programme in 2006, an additional work was needed to isolate the priority areas, which impeded an efficient tuning of the use of funds .

The objective of the first priority, which was dedicated to human resource development, was to create the conditions for conversion activities and for economic development in terms of human resources as well as to enhance cooperation between training institutions and higher education institutions and enterprises. As highlighted previously, the issue of a skill mismatch was particularly relevant in Brittany at the beginning of the programming period. The final evaluation of the programme, carried out in 2006, argued that the operations supported by this axis, that involved education (47% of operations), social integration (24%) and labour market activation measures (21%), were consistent with the objectives.

As regards the training courses the evaluation report highlights that the only selection criteria of the ESF projects was the criteria for eligibility to the programme and not of the relevance to the policy pursued. The aid received under the Objective 2 programme has increased from 10 to 15% the overall supply of training by the AFPA (French organisation for adult training) according to the management of European funding of this organisation. In addition, the Objective 2 funding was considered as a ‘relief’ for many projects for which the programme has funded pre-existing projects but whose funding was reduced, especially for facilities like ‘Houses for employment’. Nonetheless, the sectors ‘undergoing changes’ (fishing, telecommunications and food) have not been especially targeted under this objective. Applications for training support for firms facing difficulties arose in an ad hoc manner from companies or managing services as a reaction to economic cycles and short-term challenges of the company requesting support. No strategic focus was given to training specifically tailored for the sectors undergoing changes or for the eligible areas. The support granted concerned almost exclusively existing training programmes. As a general rule for sectors such as agribusiness, the programme Objective 2 was simply a source of funds among others. Companies were directed to one of the programmes depending on their size or their eligibility to each programme.

*Table 2.3 - Type of operations*

Priority area 1	% of programmed projects
Development of education, professional training not linked to a specific sector (persons, enterprises)	47
Social integration	24
Activation policies on the labour market	21
Adaptability, company and innovation spirit, ICT (persons, enterprises)	7
Positive actions for women on the labour market	0
Agriculture	0
Other	0

*Source: Objective 2 programme 2000-2006, Brittany*

## 2.3 Selected fields of intervention and measures

### 2.3.1 Selection logic

As mentioned previously, the programme did not explicitly target the issues of structural change and globalisation. Nonetheless, in order to help companies face up to international competition, several strategies were proposed in the Objective 2 Programme, including:

- The reinforcement of the expansion of firms through support to the creation of enterprises (support of young entrepreneurs, creation of incubators); the support to technology diffusion (networking of very small enterprises, ICT use and diffusion, partnerships with research centres, training centres) and the reinforcement of access to equity capital (notably for small companies).
- The application of specific know-how in order to diversify the economy and increase the offer of products and processes. This issue concerns notably support for technology transfer and diffusion of scientific, technological and industrial knowledge and/or the commercialisation of regional research activities (across a range of fields like health sciences, environment, ICT, oceanic engineering, biotech, new materials, electronic, acoustics, etc.) through the development of clusters of scientific and technological competences.
- The promotion of networking: awareness raising actions, animation and support for business partnerships in order to assist companies to integrate key tools for improving competitiveness.

A detailed screening of the measures presented in the ERDF programming document was carried out, by the case study team, in order to identify the measures which were likely to have the greatest impact in addressing the issues raised by globalisation and structural change. The measures ranked in order of importance (three stars for the most relevant) are listed in the table below. The following measures dealing directly with these issues were identified:

- Mobilise companies for employment (measure III-1: 28.55% of the programme)
- Reinforcement of the business environment through the promotion of the research and development potential, of technology transfer and of information diffusion (measure III-3: 5.56%).
- Development of teaching and technological and professional training (measure I-4: 6.78%).
- Development of business innovation (measure III-5: global subsidy together with OSEO, the French innovation agency)

The measures related to the modernisation of ports (11.44%) and the modernisation of infrastructure (4.59%) were important but relatively less so than the direct business support measures above.

According to the programming complement<sup>36</sup> the budget allocated to the measures considered as most relevant for the issues of structural change and globalisation (three and two stars measures presented in the table below) amounted to a total of €606m (47% of the total programme). The ERDF contribution to these measures was €160m (42% of total ERDF funds). The national contribution to these measures was €422m (41% of the national contribution) and the private contribution was €184m. The total contribution of the ESF in the region over the period has been of €42m. It is difficult to compare this number with the overall

<sup>36</sup> Programming complement 14<sup>th</sup> June 2007

national and regional intervention through other programmes, since the issues of structural change and globalisation were not identified as such.

As highlighted previously the key hypothesis to be tested in this case study relates to the impact of the regional specialisation on the capacity to face the new challenges arising from globalisation. The study team has opted for focussing the analysis on the measure III-1 representing almost a third of the budget of the programme and not on other measures dealing for instance with environment or tourism, which are also of importance in the region. The analysis of the measure III-1 provides in particular relevant information as regards the support awarded to SMEs in Brittany. The measure was specifically dedicated to the business sector, most notably to support to regional companies to move up the value chain, in particular in sectors 'undergoing changes'.

Table 2.4 - Measures relevant with respect to structural change and globalisation: main features

Measures	Description	Financial weight		N° of projects / beneficiaries	Type of intervention	Structural change dimension	Relevance wrt structural change and globalisation *
		% tot. budget	% expenditure				
III-1	Mobilisation of the companies for employment: supports the creation and development of companies, notably the ones which have to face mutations, by implementing actions aiming at improving the start up of new companies, to increase their competitiveness and to create a beneficial environment for their growth	28.55	96.52	1,239 projects	Business support	Regional specialisation	***
III-3	Reinforcement of the environment of companies through the valorisation of their research and development potential, of technology transfer and of information diffusion: supports financially research centres, centres of technology transfer, technopoles and other interface organisations between competence poles and the enterprises of the area	5.56	99.10	198 projects	Innovation and technology	Innovation potential	***
I-4	Development of teaching and technological and professional training: develop or modernise the premises of the establishments for professional training and secondary technical teaching and, on the other hand, provide them with pedagogical, technical and scientific equipments they need, and support their R&D projects.	6.78	99.69	80 projects	Infrastructure investments	Socio-economic change and human capital	***
III-5	Development of innovation within companies (global subsidy to OSEO ANVAR): support innovation projects in enterprises to allow them develop new products or service or to diversify. These projects concern mainly feasibility studies, the reinforcement of competences, the development of prototypes, and preliminary works for industrial and commercial launches.	Global subsidy OSEO ANVAR (app.1%)			Innovation and technology	Innovation potential	***
II-2	Support to the modernisation of port sites: can be used for the studies, investments, equipments of the port sites when they have economic impact for the region; the operations of converting the waste land from the port sites and the prevention of environmental harms linked to port activities; the settlement of shellfish farming activity sites	11.44	102.29	59 projects	Infrastructure investments	Regional specialisation	**
II-3	Support to the modernisation of infrastructures: supports the realisation of transport infrastructures having economic impact on the region (airports, railway and local roads).	4.59	100.24	18 projects	Infrastructure investments	Production system	**
II-1	Protect and improve the environment Supports the priority actions for the region to protect, manage and valorise the environment. These actions target water quality and the preservation of the natural heritage.	3.43	100.37	335 projects	Infrastructure investments	Production system	*
III.2	Rehabilitate military sites Develops the attractiveness of the areas hit by the defence restructuring by converting the abandoned sites. This concerns financing of studies for the re-use of these sites, the adaptation of disused equipments, the search for potential new users, the settlement of military waste lands.	2.76	99.89	38 projects	Infrastructure investments	Regional specialisation	*
III-4	Exploit the regional assets in terms of tourism and culture: supports the actions to valorise the architectural and monumental landscape as well as the creation and modernisation of cultural equipments. This measure also supports the equipments and the tourist and leisure housings, the conception and development of tourist products	14.43	99.07.	431 projects	Other: tourism	Regional specialisation	*

\* Legend: \* marginally relevant, \*\* relevant, \*\*\* extremely relevant; Programming rate on 31st December 2007 Source: Objective 2 programme 2000-2006, Brittany

### 2.3.2 Detailed description of the selected measures

The general objective of the measure 3.1 ‘Mobilise companies for employment’ was to develop the necessary conditions for the development of employment in companies and to support SMEs in particular. More specifically the measure aimed at ‘supporting the creation and development of companies, notably the ones which have to undergo changes, by implementing actions promoting the creation of companies, increasing their competitiveness and creating a favourable environment for their growth’. The measure represented a significant part of the budget of the programme (approximately €320m budgeted, €51m from ERDF).

Given the importance of the defence industries, the agriculture, fisheries and agro food sectors for the region, structural change in these sectors has a strong influence on the entire regional economy. The response provided by this measure is through a collective support to these sectors in order to diversify them when possible, but also through the reinforcement and the intensification of other activities in the economy.

Several categories of actions are implemented under this measure, notably:

- support to the creation and development of companies (3.1.2),
- support to the development of SMEs and of the craft industry (3.1.4, 3.1.5),
- financial engineering (3.1.6),
- economic animation (3.1.7),
- reinforcement of the international competitiveness of regional SMEs, (3.1.8),
- support to projects of the competitiveness clusters (3.1.9).

### 3. Effects of the selected ERDF measures on the process of structural change and adaptation to globalisation

#### 3.1 Assessment of the structural and socio-economic effects

This section aims at analysing the extent to which the measure 3.1 ‘Mobilise companies for employment’ supported the structural change that took place in the region and enabled regional firms to face challenges arising from globalisation. The main aspects addressed relate to the impact of this measure on the regional economic structure: has the measure helped to reinforce the economy making it more competitive internationally? After considering the available evidence on the implementation of the measure, evidence on the impact is presented as a result of fieldwork. The influence of the implementation of this programme on policy learning is another key aspect that is finally considered.

##### 3.1.1 Performance of selected measures

The measure 3.1 ‘Mobilise companies for employment’ is characterised by the diversity of forms of actions supported, the relatively low contribution of ERDF funds allocated and the important share of private financing as depicted in the table below. The support granted is awarded in accordance with the legal framework for business support and the rules on the concurrent regional and national public support. As regards the measure 3.1, the ERDF intervention is limited to 15% of the financial plan as regards investment support (+10% if the measure involves financial engineering) and 50% of the total public funding for the other types of interventions. As regards the support to organisations supporting economic development and collective actions, ERDF funds are used for maximum 50% of the total public funding.

*Table 3.1 - Overview of allocations/expenditures on 31st December 2007 - Measure 31 ‘Mobilise companies for employment’*

Total (in €)	Financial allocations ①	Financial commitments②	②/①	Expenditures ③	③/①
European contributions	49,064,680	47,359,349	96.52%	41,672,840	84.93%
National public contributions	68,523,441	87,243,124	127.32%	79,203,024	115.59%
Private contributions	163,081,913	200,582,136	122.99%	185,043,967	113.47%
<b>Total costs</b>	<b>280,670,034</b>	<b>335,184,609</b>	<b>119.42%</b>	<b>305,919,832</b>	<b>109%</b>

*Source: Objective 2 programme 2000-2006, Brittany. SGAR Annual Implementation Report 2007*

Within the priority area 3 ‘Improve the competitiveness of businesses and adapt the regional economy to the global context’, the measure 3.1 ‘Mobilise companies for employment’ is the only measure that has not seen an increase in its budget during the programming period. The budgetary share of the measure fell by eight

percentage points within the priority (together with the global subsidy allocated to OSEO<sup>37</sup> under the measure 3.5: ‘Develop innovation within companies’) and two percentage points within the programme.

Due to a slowdown in economic activity at mid-term which limited the investment capacities of companies while reinforcing the need to pursue the objective of economic conversion, the mid-term evaluation of the Objective 2 programme carried out in 2004 suggested a reallocation of financial resources from the measure 3.1 towards measures responding to actual or potential needs: land planning, the conversion of military sites and the measure 1.4 related to education. Following the evaluation, the budget was therefore reduced from €61m to €51m<sup>38</sup> for the measure 3.1 and transferred to these other measures. However, in the framework of the ‘ring-fencing’ mentioned earlier, a reserve of €3m was set aside in order for the regional authorities to be able to support specific needs of enterprises faced by short-term structural difficulties, in particular in the agro-food sector.

According to the managing authorities, there was, in particular, a fear that the agro-industries would face another important crisis (loss of export markets, food safety, water pollution, etc.) and the situation of the ICT sector in Lannion remained a cause for concern. At the end of 2006, since this reserve had not been committed, a new sub measure 3.1.9 aimed at ‘supporting collaborative projects in the framework of the newly launched Competitiveness Clusters’ was introduced. Since the clusters could not be supported directly, the decision was taken to support some of their collaborative projects. The managing authorities found it difficult to stimulate the emergence of projects at a short notice within the restrictions of the State aid rules: indeed in case of applied projects carried by companies, the share of public funding cannot exceed 25 % of the budget in case of pre-competitive development and 50% for industrial research. According to interviews with the regional authorities, the political willingness to support these specific projects has been particularly difficult to implement. At the end of 2007, only 6.43% of the funds allocated to this sub-measure had been spent, as can be seen in the table below showing the state of progress of the different measures by the end of 2007.

*Table 3.2 - State of progress of the different sub measures of the measure 31 ‘Mobilise companies for employment’ by the 31st December 2007*

Sub-measure	Name of the sub-measure	Number of projects	Financial EU commitments (€)	% of realisation EU allocations/ EU expenditures
311	Improve the performances of companies in environment	116	6,828,809	82.98
312	Support the creation of companies and their development	47	9,856,034	91.33
313	Support to industrial buildings	187	13,703,294	96.93
314	Support the development of SMEs	507	8,885,429,	89.92
315	Support the development of craft and commercial VSEs	225	1,936,555,	90.57
316	Financial engineering	6	157,615	83.30
317	Economic animation	112	3,604,547	93.68
318	Reinforce the international competitiveness of Breton SMEs	23	338,437	99.90

<sup>37</sup> OSEO was born in 2005, by bringing together ANVAR (French innovation agency) and BDPME (SME development bank), around a mission of general interest supporting the regional and national policies for the decisive phases of the life cycles of SMEs and VSEs, most notably by risk-sharing: start-up, innovation, development, business transfer / buy out.

<sup>38</sup> Evaluation finale du programme Objectif 2 2000-2006, Bretagne, Trend Consultants, Janvier 2006

Sub-measure	Name of the sub-measure	Number of projects	Financial EU commitments (€)	% of realisation EU allocations/ EU expenditures
319	Support the projects chartered by the competitiveness clusters of the area	16	2,048,626	6.43

Source: Objective 2 programme 2000-2006, Brittany. SGAR Annual Implementation Report 2007

By the end of 2007, within the level of commitment of funds for the measures 3.1 'Mobilise companies for employment' and 3.5 'Develop innovation in companies' was slightly lower than the other measures of the priority (respectively 96.52% and 95.57%). By this time, funding had been awarded to 1,239 projects out of which 1,000 were closed. The average public (ERDF and regional) support per project was €38,223.

Classifying the different projects supported under the measure 31, it appears that most of the projects under this measure concerned SME support (89% of the projects), in particular advisory services to companies (internationalisation, exportation, environmental management, technology acquisition) which made use of a considerably lower amount of ERDF funding (€11,462 on average, €39,112 for larger companies) than other types of projects such as material investments (€64,163 on average for SMEs) or common services to companies.

Table 3.3 - ERDF amount programmed - Measure 31

Barnier classification		Files	ERDF programmed	Total EU amount paid	Average EU amount per project	
Productive environment (1163 projects)	Promotion of the adaptation and the development of rural areas (two projects, average funding of )	2	43,313.95	43,313.95	21,657	
	Fishing (one project)	1	66,762.30	66,762.3	66,762	
	Support to big companies (28 projects)	Material investments (installations and equipment, support schemes)	19	2,033,508.85	1,853,542	97,555
		Environmental technologies, clean and economic energy technologies	2	386,192.18	381,651.79	190,826
		Advisory services to companies (internationalisation, exportation, environmental management, technology acquisition included)	7	320,667.35	273,784.22	39,112
	SME and handcraft support (1,106 projects)	Material investments (installations and equipment, support schemes)	254	17,480,424.31	16,297,302.24	64,163
		Environmental technologies, clean and economic energy technologies	27	1,789,508.25	1,715,481.12	63,536
		Advisory services to companies (internationalisation, exportation, environmental management, technology acquisition included)	722	8,288,996.33	8,275,836.97	11,462
		Common services to enterprises (activity parks, business incubators, animation, promotion activities, conferences, commercial fairs)	97	9,277,164.56	8,849,190.22	91,229
		Financial engineering	6	152,447.57	131,290.88	21,882
	Tourism (three projects)	3	36,171.51	36,171.51	12,057	

Barnier classification			Files	ERDF programmed	Total EU amount paid	Average EU amount per project
	<b>Research, technological development and innovation (23 projects)</b>	Innovation and technology transfer, achievements in networks between enterprises and/or research institutes	23	3,085,847.95	1,494,146.32	64,963
<b>Human resources (one project)</b>	<b>Other (One projects)</b>	Other	1	7,584.57	7,584.57	7,585
<b>Basic infrastructure (72 projects)</b>	<b>ICT infrastructure and information society (two projects)</b>	ICT (security and risk prevention included)	2	42,207.54	42,207.54	21,104
	<b>Settlement and rehabilitation (70 projects)</b>	Settlement and rehabilitation of industrial and military sites	70	3,994,915.12	3,967,744.3	56,682
<b>Miscellaneous (one project)</b>	<b>Technical assistance and innovative actions (ERDF, ESF, FEOGA, IFOP) (four projects)</b>	Studies	4	52,727.84	52,727.84	13,182
<b>TOTAL</b>			<b>1,240</b>	<b>47,058,440.18</b>	<b>43,488,737.77</b>	

Source: Objective 2 programme 2000-2006, Brittany. Monitoring data from PRESAGE 31/12/2008

Considering now the output indicators of the measure 3.1, many sub-measures did not reach the quantitative targets as set up in the programming document (see the table below). On the other hand, some objectives were overtaken as the number of business parks and pools of companies concerned by the measure aiming at improving the environmental performance of companies. This also holds for the number of projects implemented to regenerate brownfields and the number of normalised business incubators. In addition all quantitative objectives set for the sub-measure dealing with economic animation (317) were exceeded. Under the measure 3.1.5 (Support the development of craft and commercial VSEs) 222 very small firms have benefited from the ODESCA scheme<sup>39</sup> (objective 400). Under the measure 3.1.7 (Economic animation) 170 collective actions were financed by ERDF funds concerning 5406 companies in total (objective 1000). Under the measure 3.1.8 (Reinforce the international competitiveness of Breton SMEs ), 13 recruitments of executives were supported. Under the sub-measure 314, 346 industrial companies were supported (objective 700), 74 in the agro-food sector (objective 220) and 64 in the sector of building, public works and transport (objective 280).

The interpretation of these output indicators should be done with care since these are neither indicators of the quality of the service performed nor of the impact of the measures for the companies and the regional development.

Table 3.4 - ERDF quantitative indicators - Measure 31

Sub-measure	Indicators	Quantity realised	Quantity expected	SPD 2006 objective	Number of files
3.1.1 Improve the	Recipient firms (out of the activity area)	1,368	2,260	2,500	117
	Business parks or pools of companies concerned	128	128	72	117

<sup>39</sup> ODESCA (Opération de Développement et de Structuration du Commerce et de l'Artisanat): Operation for the development and the structuration of commerce and handcraft: ODESCA takes place at the level of each zone of employment (so-called pays) on the basis of an action programme set at the start and validated by the various funders of the initiative. For more information, see here: <http://www.bretagne.cci.fr/1-22340-Accompagnement-territorial.php>

Sub-measure	Indicators	Quantity realised	Quantity expected	SPD 2006 objective	Number of files
performances of companies in environment					
3.1.2 Support the creation of companies and their development	Projects to rehabilitate brownfields	13	13	3	48
	Settled companies	90	77	100	48
	Normalised business incubators	13	16	6	48
	Creators and / or buyers supported	86	89	500	48
	Additional funding of the Premium for the land settlement (PAT)	1	2	2	48
3.1.3 Support to industrial buildings	Buildings created	186	193	400	189
3.1.4 Support the development of SMEs	Companies supported	149	149	1,200	504
	Enabled devices (ARC, FRAC, ATOUT, ANVAR, FDPMI) in agro-food industries	74	74	220	504
	Enabled devices (ARC, FRAC, ATOUT, ANVAR, FDPMI) in Industries	346	348	700	503
	Enabled devices (ARC, FRAC, ATOUT, ANVAR) in Building and Public Works and Transport sector	64	63	280	504
3.1.5 Support the development of craft and commercial VSEs	FRAC device - Files	6	6	600	222
	ARC device - Applications	5	5	30	222
	ODESCA device - Beneficiaries	222	415	400	222
	ODESCA device - Extension Projects	0	0	300	222
	ODESCA device - Modernisation Project	1	1		222
	ODESCA device - Project to implement health standards	0	0	100	222
3.1.6 Financial engineering	Small caseloads	10	31	20	6
	Loans made	63	81	100	6
	Contracted own capital guarantees	0	0	30	6
	Equity investments made	0	0	20	6
3.1.7 Economic animation	Collective actions conducted	170	171	100	112
	Companies concerned	5,406	5,289	1,000	113
	Companies involved in the operation 'pool of defence'	1,057	1,074	120	113
3.1.8 Reinforce the international competitiveness of Breton SMEs	Collective missions	6	6	66	23
	Beneficiary companies	129	138	330	23
3.1	Result - Jobs created (Men)	2,243	2,305	5,350	1,240
	Result - Jobs created (Women)	412	306		1,240
	Result - M <sup>2</sup> of industrial buildings built	370,063	404,523	430,000	1,240
No monitoring data on the competitiveness poles sub measure 3.1.9					

Source: Objective 2 programme 2000-2006, Brittany. Monitoring data from PRESAGE 31/12/2008

### 3.1.2 Contribution of selected measures to structural change and globalisation

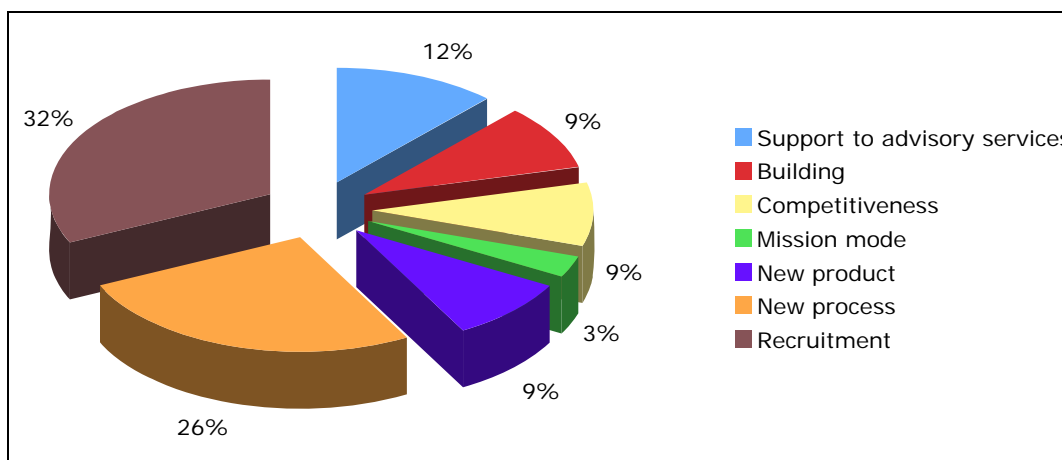
The final evaluation of the Objective 2 Programme for Brittany<sup>40</sup> specifically analysed the way the programme has targeted the different sectors that were undergoing change at the beginning of the period (fishing and shipbuilding activities, agro-food, ICT). According to this analysis, these sectors represent 175 out of the 458 enterprise projects supported in the framework of the priority area 3 'Improve the competitiveness of businesses and adapt the regional economy to the global context'. The agro food sector (117 projects) had been essentially supported through the measures 3.1 'Mobilise companies for employment' and 3.5 'Develop innovation within companies'. As for the sectors of fishing and shipbuilding

<sup>40</sup> Evaluation finale du programme Objectif 2 2000-2006, Bretagne, Trend Consultants, Janvier 2006

(26 projects), the funded projects concerned industrial buildings, studies for product development or industrial processes and recruitment support. The ICT companies (32 projects) have essentially been supported by the measure 3.1 and 3.5 as well for recruitment support and R&D support.

Amongst the sectors undergoing change, the most supported was the agro food sector with 61% of the support awarded to this sectors in terms of number of projects, which is coherent with the weight of this sector in the region. Nonetheless, although it was given a strong priority in the programming document, the sector of fisheries and shipbuilding received only 15% of the support to these sectors.

Figure 3.1 - Sectors undergoing change (fishing and shipbuilding activities, agro-food, ICT) - Types of operations supported (“Evaluation finale”, 2006, based on survey: 34 responding companies)



Source: Trend Consultants, Evaluation finale du programme Objectif 2 2000-2006, Brittany, January 2006

The most frequent type of activities supported included recruitment (32% of the support) of collaborators, site managers, commercial and production managers. As highlighted in the ‘final evaluation’, most enterprises would not have created these highly qualified jobs without the ERDF support. In the second place came support for the development of new production processes (26%): quality process, automation of the production chain, etc. The competitiveness operations (9%) concerned support granted for reflecting on the reorganisation and the development of the productive structure.

The companies surveyed for the final evaluation of the programme benefited from support mainly for developing new production processes (33%) while the ICT companies used it mainly for hiring expensive staff (63%). According to the same study, while one objective of the programming document was to adapt the companies and the regional economy to the international economy, only 6% of the surveyed companies have reported an increase in their export capacity as an effect of the support while 50% consider it has improved their value-added, 44% quality, 38% to launch new products, 38% to adapt the production process and 32% to reduce costs. Recruitment came in second place (29% of companies) for the agro-industries while ICT companies benefited from the support to launch a new product (25%).

*Analysis of specific schemes under the measure 31 ‘Mobilise companies for employment’*

The measure 3.1 included a set of initiatives dedicated to SMEs to support them in raising their level of competitiveness allowing them to be better positioned in an increasingly international market. According to

monitoring data but as well to interviews with the persons in charge of implementing several of the different initiatives, it appears that this support has been instrumental in this process, even if some measures achieved better results than others, as is discussed hereafter.

Amongst the different sub measures of the measure 3.1, the Performance networks, dedicated to SMEs, were originally launched in 1987 at the initiative of the PSA automotive company. The general objective is to promote the transfer of know-how from a large company to a small firm to help it grow. Through a light public support, these networks should help companies identify their weaknesses and boost a positive evolution in their organisational practices. Four networks were in place during the programming period and co-financed by the ERDF, all of them working on the basis of a specific request by a company. The last one is considered in some more detail below:

- Performance Brittany Quality +: this scheme aimed at the diffusion of ISO norms in companies. More than 2,000 companies benefited from this scheme since its launch to launch a quality process and to prepare for quality certification. This has been discontinued in 2008, since the need for such a measure no longer exists.
- Performance Brittany Environment +: this initiative is dedicated to raising awareness of companies about environmental management (e.g. regulatory issues, waste management, energy saving): since its launch, this measure has led to the creation within the participating companies of a network of more than 1,800 environment correspondents trained to carry out appraisals.
- Performance Brittany Human Resources +: this network supports companies in their forward-looking management of employees and creates the competence to manage human resources in line with future needs.
- Performance PSA Peugeot-Citroen: this measure made available to participating companies senior executives from the PSA company to help them develop organisational techniques: flows, data and stock lean management. This scheme is still in place since it responds to a constant need of companies.

The aim of the scheme 'Performance PSA Peugeot-Citroen' is to support companies in becoming more competitive in the area of industrial organisation and human resource management through a tailored support to prepare changes, implement actions and obtain sustainable progress. The scheme is dedicated to SMEs from the industry and the agro-food sector. The company may request support by itself (app.25% of requests) or through the Regional Chamber of Commerce and Industry (45% of requests) and other networks and partners (25%). The regional co-ordinator comes from PSA and three collaborators from the Regional Chamber of Commerce and Industry are provided to draw up a diagnosis of the strong/weak points of each company and an action plan. The general objective is to improve processes in companies through a transfer of know-how on themes related to management and industrial organisation.

The intervention is implemented in three phases:

- diagnosis by the co-ordinator together with the company manager: full audit of the company taking into account the business culture and performance, and proposals of target interventions;
- on-site analysis by an experienced consultant on information and production flows and potential improvements;
- elaboration of a concrete action plan.

**A beneficiary firm in Plougouver: “Advisory services to improve productivity”**

The firm is a limited company created in 1980 by the current owner, extending a family tradition since 1879 in craft bakery. The company of 12 employees produces different regional specialities in three different lines (flaky pastry, crust pastry, risen pastry) for large and medium wholesalers under its brands and distributors’ own-brands. The turnover is about 2.2 Euro million and the market is essentially national, although the company exports 7% of its production.

The measure PERFORMANCE BRITTANY PSA PEUGEOT CITROEN consists in helping SMEs to identify room for improving their competitiveness by essentially providing specialists of production and organisation managements coming from large industrial companies. The idea of such a method is to apply, in small industrial structures, methods proven in large organisation (e.g.: production management, HR management, investment optimisation, stock management...). The specialists start by an initial diagnosis identifying sources of potential improvements. The company, applies the recommendations (flow management, better uses of machines, raw materials management, logistics optimisation...) and follows the progresses with the methodological support of the coaches.

The cost for the company in implementing the intervention foreseen by PSA measure - i.e. in being provided for ten days of a business advisor - is considered as almost inexistent. Nonetheless, it requires a real involvement of the manager and the team to launch the process but also for its continuity. The prospects of high financial returns are strong incentives to initiate this process. The main results observed for the company were an improvement in its cash flow and its business’ flexibility. Productive investments have been made and the decrease of the number of employees is a consequence of the productivity improvement. During the period 2005-2006, the firm invested around €350,000.

The managers of the company highlighted that although the public authorities often consider that a project (new product, new investment, new recruitment) must be self financed in order to ensure its sustainability, this sort of support in kind was considered by the company as very valuable. The Performance PSA Peugeot Citroen modified strongly the health of the company in terms of financial situation, on reactivity and flexibility about market needs. Since then, the improved situation allowed the SME to recruit two high-qualified people in administration and management and in production organisation.

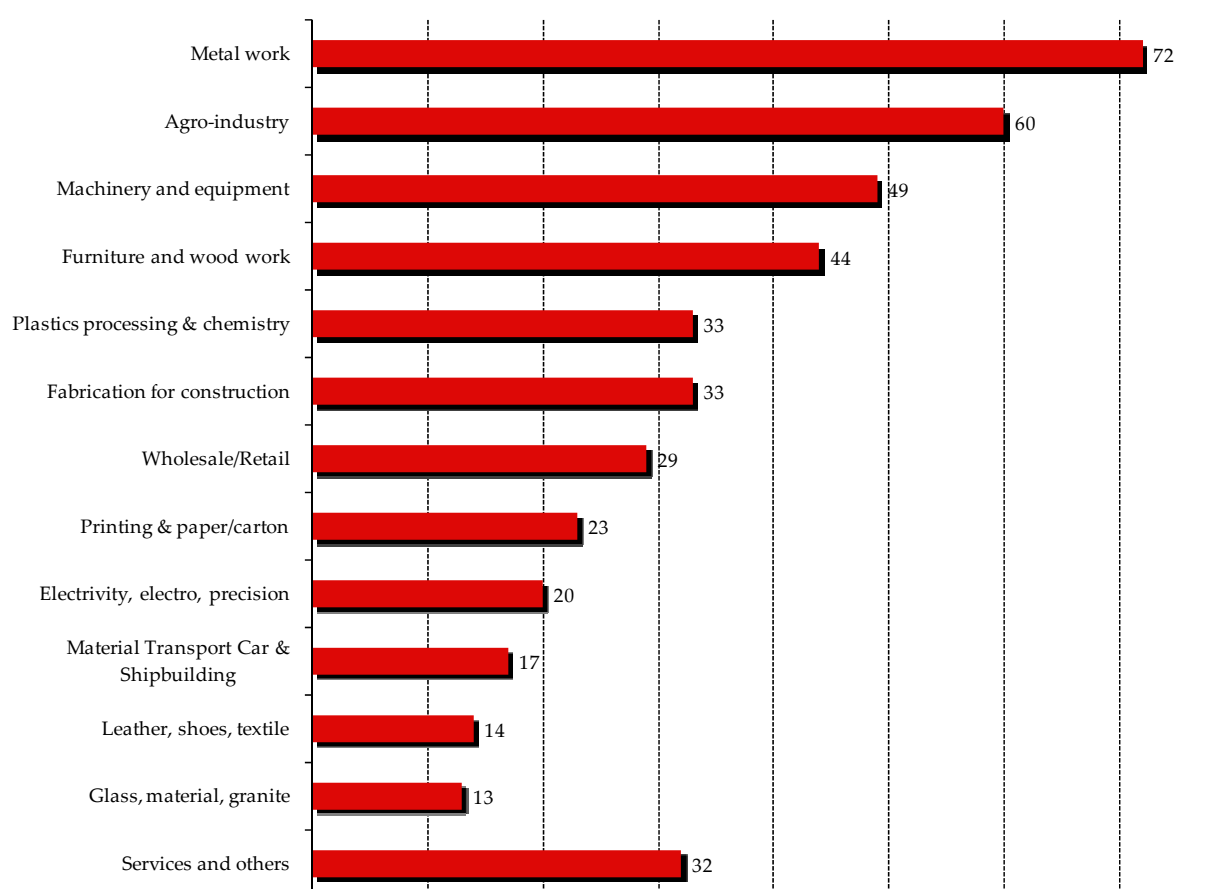
**Sub-measure 3.1.7 PERFORMANCE BRITTANY PSA PEUGEOT CITROEN**

**Support received: Advisory services for a total of ten days; no direct funding.**

The company implements the actions itself, or can use the services of other networks or private consultants. The box above presents a concrete example of a company which benefited from the scheme during the programming period. The case of this company is an exemplar of an intervention that had a positive impact on the firm’s competitiveness.

Out of the 429 projects supported through the scheme ‘Performance PSA Peugeot-Citroen’ over the period 2000-2006, 66% (285) were in the eligible area of the Objective 2 programme (46% in the Objective 2 zone, 20% in the transition zone); 80% of these companies had less than 50 employees (19% less than 10; 32% between 10 and 19; and 29% between 20 and 49). Most of the support requests from 2000 to 2006 were coming from the sector of metal work (17%) followed by the agro-industries (14%) the sector of and machinery and equipment (11%), as can be seen in the figure below.

Figure 3.2 - Performance PSA Peugeot Citroen - Support requests by sectors of activity - 2000-2006, monitoring data from CRCI, Total of 429 projects (Objective 2 and non-Objective 2 area)



Source: Regional Chamber of Commerce and Industry (CRCI) of Brittany

The survey of beneficiaries of the measure PSA Peugeot Citroen over the period 2003-2006 highlights that the rationale for requesting support through this measure lay for three quarters of the supported companies in the willingness to improve the organisation of the production in terms of management and methods. Almost half of the companies aimed at increasing their productivity and their competitiveness through this scheme.

Table 3.5 - Objective of the request for support through the performance PSA Peugeot Citroen scheme, survey of the beneficiaries 2003-2006 (65 respondents out of 124 recipients)

Rationale for request for support through the performance PSA scheme	%
Organisation of the production - Management – Method	74
Search for productivity - Value for money – Competitiveness	46
General organisation of the company – Organogram – Functions	40
General diagnosis of the company	37
Management of the personnel and of the executives	25
General and commercial strategy	11
Quality - Client satisfaction clients - Discards/Alterations	8
Analytical accounting - Costs management	3
Other issues	8

Source: Regional Chamber of Commerce and Industry (CRCI)

According to a survey of the beneficiaries over the period 2003-2006 carried out by the Regional Chamber of Commerce and Industry (CRCI), 89% considered the scheme responded to their initial expectations; 88% of the beneficiaries were satisfied with the method used, 81% of the rhythm of progress of the support. Some 78% of the beneficiaries considered the intervention had immediate results and 83% argued it prepared them for medium-term challenges. Particularly noteworthy as regards the impact of the scheme on structural change in the region, almost half of the firms considered the measure had an immediate impact on the organisation of the production in terms of management and methods and 30% on the general organisation of the company (chain of command, functions). In addition, around 20% of companies considered the measure had an impact on their productivity and competitiveness, a key issue to face international challenges. Out of 65% of beneficiaries that will use external support as a follow-up of the initial intervention, 69% will use the services of a consultant out of which 29% thanks to the FRAC scheme promoting the use of advisory services (presented below); 29% will recruit a new person and 9% planned to do it through the ARC scheme (support to recruitment, presented below).

*Table 3.6 - Survey of beneficiaries - Performance PSA Peugeot Citroen - 2003-2006*

<b>Immediate results within the company at the end of the intervention</b>	
Organisation of production - Management - Method	48%
General organisation of the company - Chain of command - Functions	30%
Management of the personnel and of the executives	24%
Productivity research - Value for money - Competitiveness	21%
General strategy and other issues	14%

<b>Points with which the firm was the most satisfied during the intervention</b>	
Relationship between service provider & company	58%
Method used - Methodological input	50%
Observations and advice - Diagnosis	29%
Intervention planning (frequency and duration)	5%

<b>Points to be improved for the running of the intervention</b>	
Intervention planning (frequency and duration)	21%
Objective observations advice from the service providers	11%
Methodological inputs - Put at disposal of general documentation	9%
Others	9%

<b>Planned follow-up of the intervention</b>	
Organisation of production - Management - Method	41%
General organisation of the company - Chain of command - Functions	23%
General and commercial strategy	23%
Management of the personnel and of the executives	21%
Productivity research - Value for money - Competitiveness	9%
Quality - Client satisfaction clients - Discards/Alterations	9%
Analytical accounting - Costs management	3%
Other actions	12%

Source: Regional Chamber of Commerce and Industry (CRCI) of Brittany

Some other initiatives carried out the measure 3.1 were considered as very effective in supporting the regional fabric by the implementing bodies but were stopped at the end of the programming period in particular the ARC and FRAC schemes presented hereafter.

The FRAC (Fonds Régional d’Aide au Conseil) was a scheme supporting regional companies in getting access to advisory services (e.g. quality certification, recruitment advice, commercial advice, development strategy). The scheme had an upper ceiling of €30,000 awarded to the same company over five years. The public support covered 80% of the diagnosis and 50% (max €15,000) of the study. Only SMEs in the ERDF eligible area from the agro-industries, public works and business services could apply for support. The FRAC scheme reduced the costs of advisory services to SMEs. At the end of the programming period, the range of advisory structures is still insufficient according to many actors interviewed even if the number has evolved over time, most notably for quality advice, organisation of production and development strategies. Since 2008, a professional chamber for advisory services Breizh Conseil exists in the region with the objective of promoting consultancy services, support newcomers and increase the professional level of consultants in the region. The case-study of an innovative company is presented below.

#### **A beneficiary firm in Pouldreuzic (Finistère): “Advisory services to develop a strategy”**

Created in 1907, this family firm has since developed into a company of 200 employees, with an annual turnover of 48.3 Eur million. Specialised in the production of canned meat (in particular pâté) and fresh sausages, it has its own accredited slaughterhouse with two dedicated production lines (one for pâté and one for fresh sausages). Operations are small scale: 30 pigs per hour instead of up to 500 or 600 per hour elsewhere. In order to attain their concept of high ‘naturalness’ (preservative-free products), ultra-clean conditions are applied and the sterilisation workshop uses the latest available equipment. The firm does not have specific R&D activities but places on the market around 10 new products per year. It sees advantage of the Competitiveness cluster, Valorial, devoted to agro-food activities in Brittany even if it is not directly involved.

Although not involved in sectoral networks, the company is strongly active in other professional organisations, e.g. the organisation ‘Produced in Brittany’, a network of different companies working for the elaboration, development and improvement of a regional label of origin. This represents for the company an involvement of around 30 working days per year.

The company is active on exports markets only for its production segment of ‘canned products’, mainly for logistics reasons (e.g. short sell by dates), and has a strong positive reputation of quality (many labels and certifications – ISO, IFS, BRC, USBA, Inter-arms, sanitary agreements in Korea, Brazil). Nonetheless, even if it looks to develop its export share, it is made difficult for diverse reasons such as sanitary crisis or protectionism (e.g.: their products are subject to a 100% import tariff in the USA).

Compared to other companies of the agro-food sector, the firm has a specific employment profile with 50% of jobs dedicated to production and 50% to other activities. This distribution is due to the fact that the firm does not work for distributors but has its own brand. The company therefore needs administrative, marketing and commerce employees. All the permanent people have a professional qualification in the agro-food sector. Technicians and maintenance people have a degree between baccalaureate and baccalaureate + 3 years. In addition, the company accepts around 40 interns per year.

The company received ERDF support to make use of advisory services in 2003, followed up by another intervention in 2004. The consulting services were related to the development of the strategy. A well-known French consultant was hired for both services, the second FRAC being an update of the first intervention.

The process mobilised a total of 12 working days of the high level staff of the company. It consisted in the definition of a long-term company strategy and mid-term objectives. The company is working on the implementation of the different

strategic lines corresponding to the exercise. Even if, for confidentiality reasons, it is impossible to give explicit outcomes of the exercise, the person interviewed highlighted that the results of the exercise were confirmations of decisions already taken before but revisited (e.g.: the involvement on the market of fresh products initiated in 1995; or the continuation and development of direct sale to the final consumer). Other effects of the intervention have been the clarification of different questions/choices or the decision to return to abandoned markets (the US market despite difficulties to obtain the USBA label). In particular, the strategic exercise confirmed the management decision to recruit a marketing person to work in the R&D activity. In addition, the FRAC opened new ways of looking to external growth (partnerships of various kinds...) when at first the only alternative was either to buy out a company/plant or create it abroad from scratch.

As regards potential collaborations with other countries, the main difficulties identified by the company are the questions regarding the various regulations applicable in the different countries. Projects of co-operation with foreign firms have never been realised but this is a current hot topic for the company. The form of the association (strategic partnership, merging, buying out...) is still open.

The impact of the clear definition of the development strategy during the exercise is considered as important by the interviewee. It had and still has effects on the definition of the different lines of work of the company, as well as on the identification of the company's challenges and the general objectives for the company to reach over the three following years, or on the reallocation of resources. As highlighted by the interviewee 'it has impact on essential things'.

According to the interviewee, the decisions taken during the exercise might be modified only if the global environment changes drastically (trade conditions, regulations, sanitary crisis...).

The company received other EU financial support, through the Arbre scheme (50% co-financing) for a marketing study on the UK market, or Leader + to create the Henaff Museum.

**Sub-measure 3.1.4 'Support SMEs' development': FRAC - Regional Fund to use advisory services**

**Public funding received: Two FRAC - Development strategy - 2003: Total cost €39,500 (ERDF: €15,000) and 2004: Total cost: €27,000 (ERDF: €13,500)**

The ARC (Aide au Recrutement de Cadre) supported the recruitment of executives in regional SMEs. The ceiling of public support for the ARC scheme was of €15,000 in the non-eligible area and €23,000 in the ERDF eligible area, the support being limited to two recruitments over five years. In particular, according to the managing bodies, which carried out surveys of the beneficiaries of this programme as well, the support for recruitment of executives has proven to be very positive in supporting the creativity and innovativeness of SMEs. 292 companies in the eligible area have benefited from this scheme, mainly industrial companies (agro-industries included). The random case study below illustrates the experience of one company.

**A beneficiary firm in Pordic: "Recruitment of executives"**

Created in 1999 by its current owner, this company of seven employees, works for several industrial sectors as a subcontractor: electricity and electronics, household electrical appliances, agro-food and pharmaceuticals. The company produces around three million plastic elements per month and is equipped with a computer-assisted production management system which guarantees traceability. The company works seven days per week with two teams (automatic operation during nights and weekends) and its annual turnover is 740,000 Eur.

The constant growth of the company led the owner to consider the recruitment of a high level engineer who could take the responsibility of the production which became too heavy for the owner when combined with the tasks of administration, marketing and sales, human resources, etc. The contact person of the company in the Chamber of Commerce and Industry proposed to support financially this recruitment of a key element of the SME by a specific

measure. The measure 'Support for the recruitment of executives' ensures the company to get a subsidy of 50% of the total salary costs of a new member of the staff.

This was the first time the owner of the company requested public support. The grant request was prepared by the Chamber representative and the manager of the company got the means to recruit this person. The senior person recruited had applied for a job in the company six months before mainly because of the good reputation of the company in terms of reliability and ambiance and its attractiveness. He left its former company without any wage increase. He has now been responsible for production and planning for three years.

The scheme allowed the owner to recruit a more experienced person than the one he could have afforded otherwise, which has in turn generated a higher growth for the company. According to the manager, without this support, he certainly would not have recruited such an experienced person (20 years of experience) but rather someone with fewer competencies and experiences and the growth rate of the activities would most probably have been lower. The grant to offset the cost of this important investment has reduced the adaptation costs incurred if another less qualified person had been hired. This kind of focussed measure is regarded by as well adapted to the needs of SMEs. The manager is aware of the source of these funds, i.e. ERDF funds, and considers this is a 'good effect of the EU'. He regrets that this measure does not exist anymore.

To accompany its development, the SME spends money in lifelong training actions (for production activities but also for organisation). A new computer-assisted production management system is planned in the short term. A current concern is the question of quality certification and other specific labelling. The expected growth rate for April 2008-March 2009 is of 24%.

**Sub-measure 3.1.4 'Support SMEs' development': ARC - Support for the recruitment of executives**

**Public funding received: ARC Industry - Recruitment of a responsible of production - Objectif 2T: €23,000 (support ceiling of the scheme)**

Over the programming period, some 550 projects were supported through the ARC or FRAC schemes in the eligible area as presented in the table below. In the eligible area, the average funding of one FRAC was of €6,000 while being of approximately of €20,000 for one recruitment of executive (ARC). In both cases the share of ERDF support was above 50% of the public contribution.

According to the Regional Chamber of Commerce and Industry, both the ARC (support awarded to SMEs for recruiting executives) and the FRAC (support to use advisory services) schemes appeared particularly important in terms of business support since it allowed SMEs to invest in immaterial assets. These schemes made available external expertise, either through the recruitment of executives or as advice from specialised consultants. They responded to a lack of management skills in companies and in particular in the agro-food sector.

*Table 3.7 - Number of files and distribution by zone and activity: FRAC (support to advisory services) and ARC (support to the recruitment of executives), 2000-2006*

2000-2006	Zone 2	Zone 2T	Non-eligible area	Total
FRAC	186 (37%)	79 (16%)	243 (48%)	508
ARC	204 (42%)	84 (17%)	196 (40%)	484
Total number of files	390	163	439	992
<b>Amounts awarded in € (European contribution in brackets)</b>				
FRAC	1,122,017 (54%)	441,685 (63%)	1,267,512 (0%)	2,831,214
ARC	4,100,319 (52%)	1,710,183 (57%)	2,963,482 (0%)	8,773,984
Total amounts	5,222,336	2,151,868	4,230,994	11,605,198
<b>Files per activity</b>				
Construction	48	27	37	112

Commerce	5	3	72	80
Regional delegation for Commerce&Craft enterprises	4	4	11	19
Export	23	11	40	74
Agro-industries	51	18	34	103
Industry	250	94	225	569
Transport	9	6	20	35

Source: Regional Chamber of Commerce and Industry (CRCI) of Brittany

Brittany is amongst the French regions with the lowest levels of training actions implemented by companies, which has a clear negative impact on the development potential of companies. It was felt by the representatives of the implementing agencies that these schemes were particularly useful in the eligible areas and for the smallest companies: two-thirds of the 992 companies supported over the period 2000-2006 were located in the eligible area. The somewhat fragmented zoning, from an administrative point of view, has allowed, in this case at least, to focus support on the areas that were most in need of such tools. These measures have been stopped at the end of the programming period where the focus moved more to support long-standing projects rather than such 'one shot' measures.

### 3.2 Assessment of the effects on institutional capacity and policy learning

The region has developed since 1988 a strong experience in implementing EU programmes. In particular, the Leader programmes managed by local authorities, have given a culture of these programme to the local animators, which, according to interviews with managing authorities 'have learned how to prepare files for funding their projects'.

As regards the implementation of the programme by the authorities, the partnering logic between the local and regional authorities is strong in the region. This may be due to the strong regional identity that reflects in all aspects of the economy, but also be due to the long experience of the region with ERDF programmes. It is illustrated in the involvement of all actors in the different steps of the programming period (elaboration of the programme, adaptation of the measures over time, participation to the different Steering Committee meetings), through an increased use of global subventions and a wide diffusion of monitoring tools (PRESAGE). The CRPE (Regional Commission of European Programmes) is an instance that had been set up expressly for programming and monitoring the state of progress of the programme which gathers all co-funding bodies. Decisions were taken on a consensual basis. Nonetheless, the management of the programming, constrained by the rule of de-commitment, has induced a 'stop-and go' functioning which was, according to the authorities 'badly perceived by the actors'.

According to the managing authorities, 'the 2000-2006 programme has taught them how to remain humble'. Although strong efforts have been devoted to launch a 'culture of Europe' amongst the stakeholders (during steering committees but also press conferences), 'they cannot stop this mobilisation and awareness raising of the main regional actors'. Indeed, the risk of losing EU funds in 2003 resulted in a stronger mobilisation of all actors. Even if this has led to the prioritisation of 'easy to handle and to invoice' projects, discussions amongst the actors has allowed safeguarding funds for major projects that were still in preparation and not ready for funding at this time (e.g. infrastructure projects on ports or military sites). At the end of the period, the challenge was to use remaining resources. On this point, the regional authorities have reinvested around

€50m that were remaining from the ERDF budget in the regional economy (mainly in ports, industrial buildings, tourism, defence).

As a result and according to interviews with different ERDF stakeholders, the SGAR (General Secretary for Regional Affairs – State body), the regional authorities and OSEO (innovation agency), it seems that there was a general trend to orient ERDF funds towards ‘easy-to-track’ operations such as material investment (industrial buildings, investments in special equipments for technological intermediaries or research labs), subsidies for feasibility studies, recruitment and other short-term projects, instead of more global complex multi-task, multi-funder systems. The regional authorities tend to make use of other regional and national public funds to finance projects related to immaterial or risky investments, or involving loans (e.g. research projects, financial engineering). In the case of the measure 3.5 supporting innovation, the regional operator has clearly highlighted that the ERDF funds were used essentially to support the first step of products/processes/services development (e.g. feasibility studies) and not innovation projects as such. Allied to the fact that these projects are risky per nature, OSEO tends indeed to provide its support more through guarantees or loans and not subsidies.

In addition to the issue of the type of projects funded, it appears from the interviews with the regional stakeholders that the risk of losing ERDF funds in 2003 also led to a logic of support granted to mature individual projects rather than a comprehensive package of measures supporting structural change in industry and making Breton firms more competitive internationally. The procedure of ‘ring-fencing’ financial resources at mid-term point tried to remedy to this situation but, in the specific case of the measure 3.1, the final allocation of these funds to the projects of the Competitiveness Clusters has been done in an opportunistic way, meaning that this was not in the initial plan but was a good way to use remaining EU funds. Particularly as the long-term impact of these clusters on the competitiveness of the area remains an open question, since they are still in a early phase of development<sup>41</sup>. In particular, the emergence of the Competitiveness Cluster “Images and Networks” in 2006 is a follow-up of the shock provoked by the ‘dot com’ crisis in 2001. The downsizing or relocation of large firms has provoked discussions on the best way to federate the actors around a viable core of activity: the clusters were considered as a way to create linkages and to help the regional economy to develop along a sustainable trajectory. The need to invest in R&D activities and to attract qualified workers is clearly a challenge the region is trying to address through the clusters.

It was felt by several actors (managing authorities but also intermediaries) that ‘the reliance on semi-public structures is too strong in the region’ (several actors highlighted in particular that 80 support structures exist just in the field of innovation)<sup>42</sup>. According to these actors, there is a need to foster private service providers and to exploit the knowledge and dynamism of companies. Indeed, it appears ‘difficult to mobilise companies when too many semi-public structures crowd out private initiative’. In order to support structural change within the region, there is a need to identify more clearly the needs of companies and provide them with specialised technical knowledge.

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<sup>41</sup> According to the national evaluation of the competitiveness clusters carried out in 2008, the Breton competitiveness clusters ‘Sea resources’, ‘Images and networks’ and Valorial (agro industries) have attained the objectives set by the policy whereas the ‘Automotive’ clusters partly did. Only Valorial remains a competitiveness cluster with a national reach in opposition to the three others which have an international vocation.

<sup>42</sup> This idea is supported by a study carried out in 2006 in the framework of the EU funded ImpactScan project: [http://www.bretagne-innovation.tm.fr/innover/publications/fiche.php?publication\\_id=346](http://www.bretagne-innovation.tm.fr/innover/publications/fiche.php?publication_id=346)

In general, the strategy to support structural change followed over the period was not clear. The programming document has for instance defined priority sectors (fishing, telecommunications, agro food), some themes (environment, territorial development) or certain equipment (transport infrastructures) as strategic. Nonetheless, the tools provided in the monitoring system (PRESAGE) did not allow for this thematic follow-up of challenges and implementation<sup>43</sup>. Apart from the follow-up of realisation of the dedicated measures, the managing authorities could not a priori follow the realisations of the programme with respect to these priorities (issues of the definition of sectors, the localisation of the operation instead of the one of the master-builder). This did not allow for tracking the operations covering a broad territory. In addition, there were no tools available to assess the effects of the measures. As reported by the managing authorities, the monitoring of the programme to check whether it effectively followed priority themes could therefore be done only on the basis of the allocation of financial envelopes and expenditures of dedicated measures or as a result of the mid-term evaluation. For some themes, there were no dedicated measures. As a result, the priorities of the programming document could therefore not be integrated into the monitoring tools, in particular with respect to sectors undergoing change, and the shaping of the territory.

As highlighted in the final evaluation of the programme, the areas that managed to generate the most projects at the beginning of the programme were relatively more supported. These areas were, in general, the ones that were already better placed. The territories lagging behind in terms of development (coastal zones, and regions at the East of a line Saint-Brieux-Lorient) received less support per capita. The programme, however, recognised the challenges faced by each area: support to economic development was more used in the zones of Redon and Ploermel and Central Brittany, where there is a strong focus given to the settlement of new companies. Other zones like Brest, which was confronted to the challenge of site reconversion and accessibility, mobilised the support to public infrastructures. Other zones mobilised the support to rural areas, like Brocéliande, which is affected by the urbanisation and has to offer new services and equipment to an increased population.

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<sup>43</sup> Evaluation finale du programme Objectif 2 2000-2006, Bretagne, Trend Consultants, Janvier 2006

## 4. Conclusions: key findings and main message

### Key findings

As highlighted in this study, regional policy of Brittany has traditionally favoured the promotion of a balanced territorial development rather than the emergence of dynamic economic centres. The issues of structural change and adaptation to globalisation were not therefore explicitly amongst the regional priorities at the beginning of the programming period. This is an important aspect explaining the way the programme addressed these issues over the period and the specific contribution of ERDF interventions in this respect. Three main features can be highlighted:

*1. The regional strategy has resulted in a reinforcement of the regional specialisation in the face of globalisation with a limited identified impact of ERDF interventions on structural change.*

Although not targeted directly and explicitly by the Objective 2 programme, it appears from this analysis that the issue of tackling structural change was of high relevance in the region at the beginning of the programming period, more than the issue of adaptation to globalisation as such. The region is relatively self-contained with a strong identity and a tradition to work locally and this has not changed much over the programming period. Interestingly, the relative “economic autonomy” of the region and the location of most of the decision makers within the region seem to have worked as a protection to strong relocations. During the programming period, the region has reinforced its specialisation around its main economic sectors. Schemes such as the Performance networks have supported an important bunch of SMEs in improving their organisation and eventually their move in the value chain, which is not negligible.

More generally the reinforced specialisation of the region over the period seems to have emerged independently rather than as a result of the ERDF interventions. The national policy of Competitiveness Clusters launched in 2006 is the main instrument that has a clear impact on supporting structural change in the region and making the regional fabric more visible internationally. The development of these clusters is based on different rationales depending on the sectors, as consolidating a still fragile sector through investments in innovative projects (agro-industries), or grouping companies around a main manufacturer (automotive) but they all clearly aim to use the regional strengths to turn them into competitive advantages, most notably through investments in research. However, during 2000-2006, the ERDF programme was only superficially mobilised in support of this new strategic initiative.

*2. A structural tendency to mono-activity and a skills mismatch not especially addressed by the programme.*

In order to increase the cost competitiveness of the agro-food sector in front of international competition, a trend to mergers and concentration has been at work during the period. Allied to a mono-activity of certain areas in internationally exposed sectors (ICT in Lannion, textiles in Fougères), this risks becoming a threat in case of important international crises since the decision centres are becoming less regional. At the end of the period the economy relies on the same pillars than at the beginning of the period and there is no clear

evidence of a diversification of the economy or even of a cross-fertilisation between sectors yet. In addition, the persistent mismatch between the jobs offered in the region and the level of qualifications of the workforce remains an important barrier to go up in the value chain.

The final evaluation of the programme in 2006 had in particular a look at the use made of the ESF funds (priority area 1) dedicated to the zones in conversion to improve qualifications of the human resources. It appeared that the programme did not especially target the sectors undergoing changes and that no specific strategy or initiative was implemented for these sectors. Some interesting scheme like the ARC supporting the recruitment of executives appeared as instrumental and welcomed by SMEs in supporting their access to highly qualified people but the measure has not been renewed in the new programming period.

### *3. A monitoring system efficient to track the consumption of funds but to a lesser extent the follow-up of the regional ERDF strategy.*

In general the partnering logic in the region of Brittany is well developed and consensual decisions are the rule. Allied to a good knowledge of European programmes, this has allowed for rapidly fine-tuning the programme when needed, most notably in 2003 in order to avoid de-commitment of funds. Nonetheless the risk of losing financial allocations in 2003 has led to a tendency to support advanced individual projects more than a structuring approach of the different industries and their environment allowing them to be more competitive at the international level. The regional authorities have tried to remedy this situation by ring-fencing allocations at the mid-term of the programme. But despite the initial intentions to focus support on the sectors undergoing changes, it seems that a more general support to business has prevailed over sectoral priorities. In particular, it has not proven possible for the regional authorities to track the sectoral developments or the evolution in the structuring of the territory, apart via the periodic evaluations that were carried out.

The main criteria for judging the success of a measure was the rate and level of consumption of funds. As a direct consequence, the Structural Funds were used more for 'easy to handle' projects, like buildings. The measures dealing more with intangible assets (R&D) or involving financial engineering, or which involved networking of actors beyond the frontiers of the eligible area have in general been financed through other channels than ERDF. Most ERDF funds went to measures dedicated to culture and tourism as well as to environmental measures (an important budget was dedicated to wastewater treatment plants). Measures that appear particularly relevant to deal with structural change (business support, the reconversion of port sites and land planning) have lost in importance during the period. Several schemes supporting the upgrade of the industrial fabric (most notably FRAC, ARC) have not been renewed in the new programming period since they were considered as acting as a simple redistribution mechanism without a clear underlying strategy nor sustainability of the support granted (so called "politique de guichet"). The rationale of public support in France and at the European level has since then moved towards financing sustainable projects rather than such 'one-shot' measures.

Despite these considerations, it appears that the choice to use ERDF funds to invest in relatively simple measures made it easier for the regional authorities to monitor the technical and financial implementation of the Objective 2 programme while reaching a high number of small companies. On the other hand, this did not impede the authorities to invest in more complex structuring projects using other regional and national

funds. In this way, the region set out to optimise the use of the different funding sources depending on the type of project to be supported.

### **Main message**

As discussed in the First Intermediate Report, regional specialisation is based on the endogenous geographical advantage of a region and can be beneficial for regional development, especially in sectors where supply-side and demand-side linkages are important. Industrial agglomeration economies are usually a comparative advantage. However, some Objective 2 regions may be heavily specialised in low-tech industries, which are more vulnerable to international competition. Specialisation in these industries can, therefore, turn from an advantage into a threat for regional development.

The analysis conducted for the Brittany case study has shown that Brittany presents a very peculiar picture. Even if specialised in low-value-added sectors particularly exposed to international pressures, Brittany has not seriously suffered from international pressures during the programming period, as the tested hypothesis would suggest. The relatively inward-oriented tradition of Brittany reflected in existence of localised supply chains, the presence of many company headquarters in the region and a relatively low level of international openness, seem to have acted as a “buffer” against external threats.

Nonetheless, the regional economic landscape is not static and has evolved over last years. Many companies located in Brittany started losing decision powers in favour of the headquarters outside the region. Brittany loses young graduates who leave to other French regions, notably to Ile de France. This and other trends may indicate that the region may be losing its traditional “buffer” and become more vulnerable to the national and international competition in the future. Thus, as postulated in the hypothesis, the specialisation in low-tech industries without the traditional protection can indeed become a significant disadvantage in the future. The regional authorities have considered this scenario as a real threat and decided to invest more in research and innovation activities in the new SF 2007-2013 programming period in order to increase the value-added of the key Breton economic sectors.

Finally, the overall message from the case of Brittany seems to partially validate the main message of the hypothesis. For a period of time specific regional socio-cultural and economic context can act as “buffer” against international competition. However, the Breton case suggests that a viable long-term economic strategy, although recognising “path-dependency” of regional development, cannot be based solely on preserving status quo. Hence, the regional authorities chose to invest in innovation and research to increase competitiveness of the key existing economic sectors.



## 5. Annexes

### 5.1 List of references

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### 5.2 List of persons interviewed

*Persons interviewed on-site 11th March - 13th March 2009, Rennes, France*

- Mr Challemel du Rozier, General Secretary for Regional Affairs (Secrétariat Général pour les Affaires Régionales), Chargé de mission auprès du préfet de Région
- Mr Chapon, Bretagne Valorisation, Co-director 'Technology transfer'
- Mr Denoue, OSEO Brittany, Business manager for the IT sector
- Mr Guillois, Competitiveness Pole 'Images et réseaux' (Images and networks), Technical manager

- Mr Haussonne, Ministry for higher education and research, Regional delegate for research and technology for the region of Brittany
- Mr Leighton, Bretagne Innovation, Managing director
- Mr Pinel, Competitiveness Pole Valorial (agro-industries), Director
- Mr Sorel, Regional Chamber for Commerce and Industry, Director ‘Development of enterprises’
- Mrs Adeline-Peix, Regional Council of Brittany, Competence pole Economy - Employment - Higher education and Research, Director
- Mrs Audic, Regional Council of Brittany, Director for higher education, innovation and research
- Mrs Bigot, Regional Council of Brittany, Competence pole Economy - Employment - Higher education and Research, Co-director
- Mrs Grézil, Regional Council of Brittany, Directorate for the coordination of public policies, Co-director for Evaluation and observation
- Mrs Leroy-Crete, OSEO Brittany, Delegate for Innovation
- Mrs Macé, Regional Council of Brittany, Directorate for the coordination of public policies, Head of department European and national contractualisation
- Mrs Mercier, General Secretary for Regional Affairs (Secrétariat Général pour les Affaires Régionales), Europe Department, Head of unit Animation and management

#### *Telephone interviews*

- Mr Cozamet, Ouest Ventures, Co-director of investments
- Mr Guilloux, Atouts Plastiques, Director
- Mr Hénaff, Société Hénaff SAS, Director of marketing
- Mrs Menou, Biscuiterie Menou, Director