# Cluster policy in Europe

A brief summary of cluster policies in 31 European countries

**Europe Innova Cluster Mapping Project** 

Oxford Research AS January 2008





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### Introduction

As part of the Europe INNOVA Cluster Mapping Project<sup>1</sup>, a comprehensive mapping of cluster policies, cluster institutions and cluster programmes in 31 European Countries has been conducted<sup>2</sup>. Oxford Research AS in Norway has carried out the mapping, and this report summarises the main findings. The purpose of the report is to give various stakeholders an overview of cluster policies and cluster organisations in Europe, both at a national and a regional level.

The synthesis report is based on separate reports for each participating country. Oxford Research has developed the overall structure of the mapping in cooperation with Stockholm School of Economics – the main contractor of the Europe INNOVA Cluster Mapping Project. However, most of the work on the individual country reports has been carried out by research institutes or consultancies in the various countries. These organisations are members of "The European Network for Social and Economic Research – ENSR" or partners in the Europe INNOVA Cluster Mapping Project.

To get an overview of the cluster policy in the different countries, Oxford Research has made a quantitative summary of the individual country reports. This summary forms the basis for the synthesis report, and is based on a certain level of interpretation of the collected material. To ensure an accurate picture of the situation, the conclusions in this report have been validated by the persons responsible for the respective country reports. For those interested in more comprehensive and detailed information about the different countries, the individual reports can be downloaded at: <a href="http://www.clusterobservatory.eu">http://www.clusterobservatory.eu</a>.

The Europe INNOVA Cluster Mapping Project has been financed by the European Commission. However, the views expressed in this report, as well as the information included in it, do not necessarily reflect the opinion or position of the European Commission and in no way commit the institution.

Kristiansand, Norway, January 2008.

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<sup>1</sup> For more information about the project, please go to: http://www.europe-

innova.org/index.jsp?type=page&lg=en&from=child&classificationId=5969 &classificationName=Cluster&20Mapping&20EU15+&cid=5983&parentClassificationId=5967&parentClassificationName=Cluster&20Mapping&parentContentId=5981.

<sup>2</sup> According to the contract, only 22 countries were supposed to be covered, but we have also been able to include EU 10. Hungary is, however, lacking - leaving us with 31 countries in total. These are listed below.

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# 1. Clusters and cluster policy

### 1.1 Why clusters matter

A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities. Because of the shared proximity – both in terms of geography and of activities – cluster constituents enjoy the economic benefits of several types of positive location-specific externalities. These externalities include access to specialised human resources and suppliers, knowledge spillovers, pressure for higher performance in head-to-head competition and learning from the close interaction with specialised customers and suppliers.

Clusters are important because they create tangible economic benefits. The benefits of a cluster come in three dimensions<sup>3</sup>:

- Firstly, companies can operate with a higher level of efficiency, drawing on more specialised assets and suppliers with shorter reaction times than they would be able to in isolation.
- Secondly, companies and research institutions can achieve higher levels of innovation. Knowledge spillovers and the close interaction with customers and other companies create more new ideas and provide intense pressure to innovate while the cluster environment lowers the cost of experimenting.
- Thirdly, the level of business formations tends to be higher in clusters. Start-ups are more reliant on external suppliers and partners, all of which they find in a cluster. Clusters also reduce the costs of failure, as entrepreneurs can fall back on local employment opportunities in the many other companies in the same field.

# 1.2 What is cluster policy?

The large majority of all the clusters we currently observe have developed without the help of any designated policies intended to create them. Given the mounting evidence that such clusters make a positive contribution to regional performance where they exist, pressure is increasing to design policies that can foster the development of clusters or increase their economic benefits.

In this study, we will define cluster policies as policies that fall into one of the following three categories.

- Cluster development policies directed at creating, mobilizing, or strengthening a particular cluster, e.g. a national funding competition for the best life science cluster strategies.
- Cluster leveraging policies that use a cluster lens to increase the efficiency of a specific instrument, e.g. an R&D subsidy provided only to companies in regional clusters where the subsidy is likely to incur spill-over effects beyond the recipient firm.

 $<sup>^3</sup>$  See Porter: Clusters and the new economics of competition (1998) Harvard Business Review. Nov-Dec.

• Cluster facilitating policies directed the elements of the microeconomic business environment to increase the likelihood of clusters to emerge, e.g. regional or competition policies that remove barriers for competition between locations.

Policies falling into the first category are traditionally at the core of what researchers have looked at. We want to cover that, but want to add a perspective on the two other categories as well.

In order to understand 'policies' better, we will use three different terms:

- Policy; Often, governments set out their strategic intentions in a specific document, a policy (or white paper). This document does not have to define specific tools, allocate funding, or create responsibilities. But it does set the political objectives and present the motivation concerning why specific activities in the direction described are deemed important.
- Programme; To move from intent to real action, governments then design specific programmes that allocate funding, create organisational responsibilities and define specific conditions under which funding can be made available.
- Implementing agency; It will be the responsibility of a government agency or ministry to implement each programme. The programme might be their main activity, or it could be a small part of their overall responsibilities.

## 2. Summary

## 2.1 National cluster policy

- All countries have cluster programmes on a national and/or regional level. However, cluster policy is still at an early stage in many countries. Around half the countries in the survey first started applying cluster policy after 1999.
- There are huge variations among the countries when it comes to how many and what kind of national ministries that are responsible for the implementation of cluster policy. In 13 of the countries, there are two or more ministries responsible.
- The importance of cluster policy at national level varies to a great extent. Thirty percent see cluster policy as important, forty percent of medium importance and thirty percent of low importance. The latter group is dominated by countries organised as federations or where there is highly autonomous regions.
- With some exceptions, clusters do not play important roles as frameworks for national policy related to innovation and technology, regional economic development and entrepreneurship and SME. The areas where clusters play the most prominent role are science and education.
- Two thirds of the countries have published policy papers on a national level where the cluster approach is part of the innovation policy. Cluster policy is getting more important with time.

## 2.2 National agencies and programmes

- In most of the European countries, cluster policy on a national level is implemented by agencies organised under the different ministries. In the 31 countries covered by the study, a total of 75 national or state-level cluster agencies have been identified. The majority of the countries have between one and three agencies.
- National cluster programmes are found in 26 out of the 31 countries. In total 69 national cluster programmes have been identified. The majority of the countries have one or two programmes, and the main source of finance is national budgets.
- Thirty six of the sixty nine cluster programmes have no particular focus on clusters in a certain life cycle. The programmes that focus on particular life cycles tend to focus on emerging and embryonic clusters.
- Almost half of the European cluster programmes are classified as related to either industrial & enterprise policy or science & technology policy. Approximately one in four of the programmes are related to regional policy.
- Almost all of the European cluster programmes have private businesses as their target group. The other major target group is research and development institutions.
- The research and development involvement in the European cluster programmes are high in general.

• Fifty percent of the European cluster programmes includes some sort of cross border activity, but only a minority are defined as cross border programmes.

### 2.3 Regional policy and programmes

- The importance of cluster policy at a regional and national level is highly correlated, i.e. the countries that consider cluster policy to be of importance at a national level also state that it is important at a regional level.
- It is not possible to state exactly how many organisations that are responsible at a regional level. Nonetheless, it is clear that the number of organisations is much higher than at a national level.
- Most of the agencies responsible for implementation of cluster policy at a regional level focus on business and regional development in general. The number of cluster organisations varies a great deal from country to country.
- There are fewer regional cluster programmes than national ones. There are no regional cluster programmes in 43 percent of the countries. These are in general the smallest countries when it comes to population and/or geographical size.
- The number of cluster programmes varies greatly between the countries. The dominating focus among the regional programmes is regional development, and the most prominent target group is businesses.

# 3. The countries included in the mapping

Thirty one countries are included in the mapping in total. These countries use a wide variety of terms to describe clusters. The number of phrases stretches from 1 to 8.

Table 1 Countri	es included in the mapping and terms or phrases
Country	Terms or phrases used to describe clusters
Austria	Cluster, Netzwerk, Unternehmensnetzwerk, Wirtschaftskomplex, Kompetenzzentrum, Technopol
Belgium	Cluster, réseau, d'enterprises
Bulgaria	Клъстери, Свързани производства, Гроздове, промишлени
Czech Republic	Klastr
Cyprus	$\Sigma$ ΥΣΤΑΔΕΣ (Systades), ΘΕΜΑΤΙΚΑ ΙΚΤΥΑ ( Thematica
Denmark	Klynger, kompetenceklynger, ressourceområder
Estonia	Klaster
Finland	Osaamiskeskus, osaamiskeskittymä, klusteri, osaamisklusteri, tietämyskeskus, alueellinen innovaatiopolitiikka, toimialaklusteri, teollinen klusteri
France	Pôle de compétitivité
Germany	Cluster
Greece	Βιομηχανικές συστάδες, συνεργατικοί σχηματισμοί
Iceland	Klasi
Ireland	Cluster, network
Israel	MA'AGAD, EGED, ESHKOL
Italy	Distretti industriali
Latvia	Klāsteris, puduris
Lithuania	Klasteris, Žinių ekonomikos branduolys, Integruotas
Luxembourg	Grappe
Malta	Cluster, network
The Netherlands	Cluster
Norway	Klynger, industrielle distrikter, agglomerasjoner
Poland	Klaster, grono, sieć współpracy/sieć współpracy pomiędzy sektorem nauki, samorządami i przedsiębiorcami, lokalny system produkcji, kompleks przemysłowy
Portugal	Cacho, aglomerado
Romania	Entitati din infrastructura de inovare si transfer
Slovakia	Klaster
Slovenia	Mreže, grozdi
Spain	Cluster, Agrupaciones Empresariales Innovadoras, micro-clusters, Unidades Empresariales Productivas, and Sistemas Productivos Locales
Sweden	Kluster, innovationssystem, klusterinitiativ, agglomerationer, industriella distrikt
Switzerland	Cluster
Turkey	Kümelenme
United Kingdom	Cluster

# 4. National cluster policy

The national cluster policy lays the foundation for more concrete actions. At policy level, plans and strategies are developed in the form of policy documents, directives and legislation, rather than concrete programmes and organisations. There may be one overarching policy for clusters, a "cluster policy", outlining specifically how cluster development should be pursued. In addition, clusters may form a framework in a range of policy fields, for example innovation and technology, regional economic development and entrepreneurship.

Below, we will give a short overview of different characteristics of the national cluster policy in the thirty one European countries that are included in the mapping:

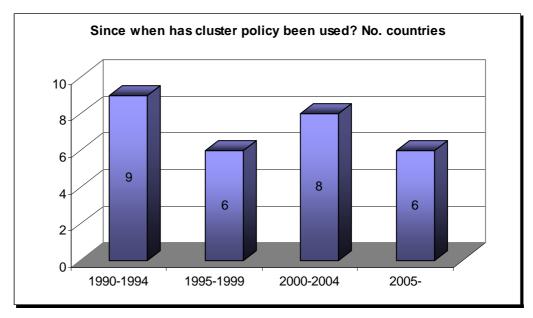
- Since when has cluster policy been used?
- Are there any specific persons or organisations behind the cluster policy?
- Which national ministries are responsible for cluster policy implementation?
- How important is cluster policy at a national level?
- What is the role of clusters in other policy areas?
- Are there policy papers at a national level?
- Is there a cluster or competitive council?
- Has the importance of cluster policy changed over time?

# 4.1 Since when has cluster policy been used?

The underlying concept of clusters dates back to the 1890s and the work of Alfred Marshall. In recent times, the term cluster was introduced and popularised through Michael Porter's book from 1990: "The competitive advantages of nations". As a consequence, none of the countries have used cluster policy explicitly before this.

The number of countries adopting cluster policy in the time periods from 1990-1994, 1995-1999, 2000-2004 and from 2005 is fairly equal. A slight overweight of countries started to use the concept in the period from 1990-1994, i.e. early adopters, and in the period from 2000-2004. Considering the fact that around half the countries used cluster policy for the first time in the period from 2000 until today, the policy area is still at an early stage in many countries. There is also a notable distinction between countries from Eastern and Western Europe. Among the adopters after 2000, many of them are small in population size and/or from countries in Eastern Europe.

Figure 1 Since when has cluster policy been used? Number of countries.

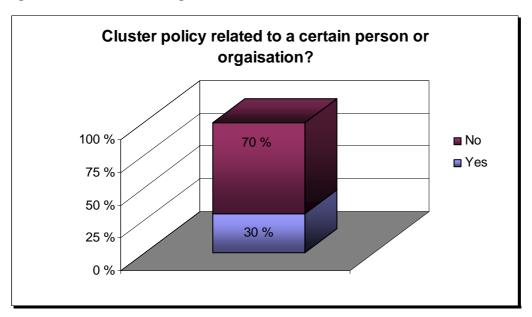


In relation to the figure, it should be noted that it is not crystal clear how long cluster policy has been used. This boils down to the division between the introduction of the concept and the introduction of cluster agencies and programmes. In some countries, the former will be regarded as sufficient for adoption, while in others, the latter must also be present. Due to some countries being federations, it should also be pointed out that cluster policy may have been introduced at an earlier stage on a regional than on a national level. This is for example the case in Spain.

# 4.2 Specific persons or organisations behind the cluster policy

The introduction and development of a country's cluster policy can be associated with a particular individual/political party/research institute. The mapping shows that in most instances cluster policy is not related to specific persons or organisations. This is the case in 21 countries (70 percent), while the introduction and development of cluster policy is attached to a specific person or organisation in 9 countries (30 percent). Among the latter, countries from Northern Europe dominate. These are amongst others the Scandinavian countries, the Netherlands and the UK.

Figure 2 Cluster policy related to specific person or organisation. Percentage of countries.



# 4.3 National ministries responsible for cluster policy implementation

There is a huge variation among the countries when it comes to how many and what kind of national ministries that are responsible for the implementation of cluster policy. In thirteen of the countries, at least two ministries are responsible. The clear majority of these thirteen are countries located in Western Europe, but it is hard to identify any regular pattern among them. A lot of different combinations are utilised.

The ministries that are most used as implementers of cluster policy are the ministry of industry (16 countries) and the ministry of finance/economy (14 countries). The ministry of science and research (9 countries) and other ministries and organisations are also quite common (11 countries). There is a quite clear division between economies that can be characterised as emerging and the more mature ones in "the old EU". A general impression is that the ministries of finance/economy play a more vital role in the emerging economies, while thematic ministries are involved to a greater extent in "the old EU".

Ministries responsible for cluster policy. No. countries 16 14 12 10 16 8 14 6 11 9 4 2 0 Finance/economy Science and Industry and trade Interior Other research

Figure 3 Ministries responsible for cluster policy. Number of countries.

#### Huge variation in ministries responsible in the different countries

There is a huge variation among the countries when it comes to the ministries responsible for the implementation of cluster policy. To illustrate some of this variation, we will take a closer look at the present situation in Finland, Germany and Italy.

**Finland.** Three ministries are responsible; the Ministry of Trade and Industry, the Ministry of Education and the Ministry of Interior. In addition to the ministries, a broad range of other institutions are also involved; The Parliament, the Cabinet, the Science and Technology Policy Council, the Academy of Finland, the National Technology Agency, sector specific research and development institutes and the Finnish Innovation Fund.

**Germany.** Certain departments within the following three ministries are responsible; Federal Ministry of Economics and Technology, Federal Ministry of Education and Research and Federal Ministry of Transport, Building and Urban Affairs. As a supplement to the ministries, the office of the initiative Networks for Competence in Germany and number of support agencies also play a role.

**Italy.** The organisation which deals with the development and implementation of industrial areas is the Institute of Industrial Promotion (IPI): an operative branch of the Ministry for Economic Development. Within this ministry, the organisation which deals specifically with industrial districts is the political department of development and competitiveness.

#### 4.4 The importance of cluster policy

The importance of cluster policy at a national level varies among the countries. Cluster policy is seen as important in 9 countries (30 percent), of medium importance in 12 countries (40 percent) and of low importance in 9 countries (30 percent). There is no clear picture regarding what kinds of countries that are found among those who

find cluster policy important. Among the nine countries, we find the three largest countries in Western Europe, three Nordic countries and three countries of various sizes from Eastern Europe.

Among the nine countries that count cluster policy to be of low importance, there is a wide variety of countries. However, it is possible to identify some uniting characteristics between them. The common denominator is the overall organisation of the country. Firstly, cluster policy plays a less significant role for some countries organised as federations. This is probably why Belgium and Switzerland are found in this group. Secondly, the degree of autonomy at a regional level is also vital. Some countries where the regional level plays a significant role, for example Denmark (in the field of innovation and regional development) and Italy can also be found here.

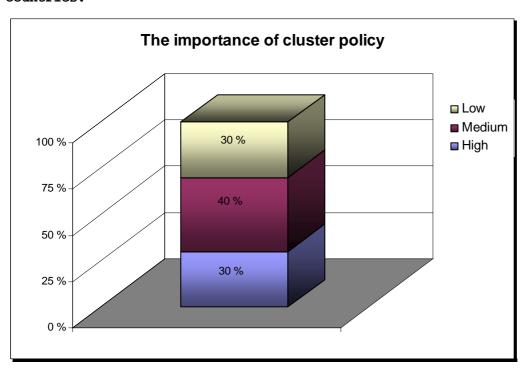


Figure 4 The importance of cluster policy. Percentage of countries.

# 4.5 The roles of clusters in other policy areas

Clusters may play a role as a framework in a number of policy areas. Through the mapping, emphasis was put on identifying the role of clusters in the following more aggregate policy fields; innovation and technology, regional economic development and entrepreneurship and SME. The results indicate that clusters generally do not play an important role within these fields, but there are some notable exceptions.

Through the mapping, we have also looked at the role of clusters in six more detailed policy areas: business network policy, FDI attraction policy, export promotion policy, sectoral industry policy, science and education policy and competition and market integration policy. The importance of clusters varies somewhat from area to area, but the general impression is nonetheless that clusters play only a minor role. The area where clusters play the most prominent role is

science and education. Within this field, cluster policy is important as a framework in around 40 percent of the countries.

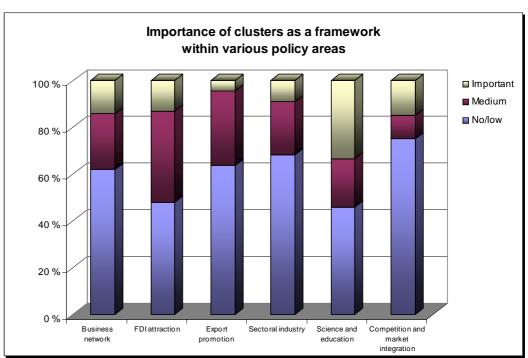
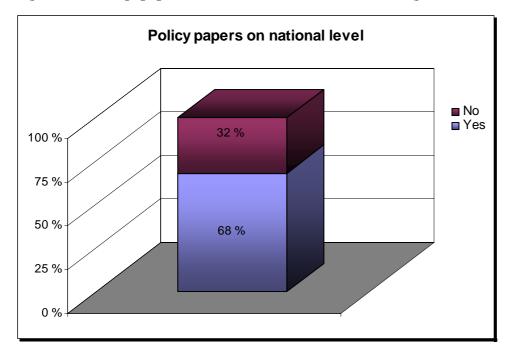


Figure 5 The importance of clusters as a framework within various policy areas. Percentage of countries.

#### 4.6 Policy papers on national level

In relation to developing cluster policy, it is important to know whether or not the policy has been rooted in different public documents. This question is related to whether policy papers have been published on a national level, public and/or official studies, i.e. white papers where the cluster approach is part of the innovation policy. The conducted mapping shows that two thirds of the countries have published policy papers on a national level, while one in three have not. In the latter group, around half are countries that emphasise national cluster policy to a low degree. In addition, the group consists of some of the smallest countries, for example Malta and Luxemburg.

Figure 6 Policy papers on national level. Percentage of countries.



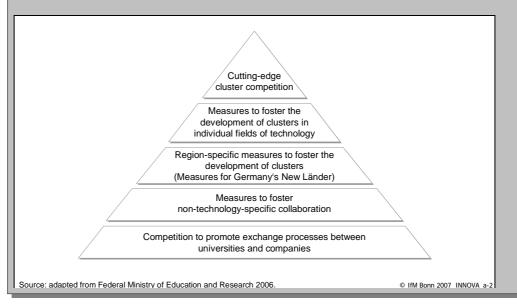
#### The German cluster strategy

In 2006, the federal government started to develop a comprehensive High-Tech Strategy involving all its ministries. The federal government's cluster strategy is part of this approach. The range of the cluster strategy extends from measures with a widespread impact to modular, region-specific or technology-specific approaches all the way to fostering and funding high-powered, highly productive leading-edge clusters. This can be considered as a new stage in the federal government's cluster policy.

At the level of the Länder, programmes fostering network structures between science and industry have been implemented since the 1980s. That means that the Länder – in particular Baden-Württemberg, Bavaria and North Rhine-Westphalia – performed ancestors of cluster policies long before the federal government started its first cluster programmes in the mid-1990s. But only in the last two or three years have the Länder started to use the term "cluster policy". It is the aim of the new approach to pool the resources of the often unstructured existing activities arisen from grassroot efforts to foster cooperation between science and industry and to set up a comprehensive and coherent cluster strategy.

The figure below describes the activities involved in the government's cluster strategy:

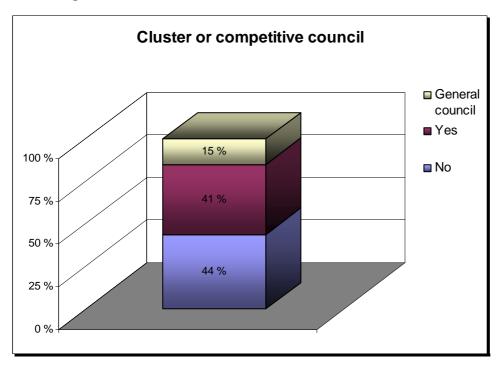
Figure 7 The main activities in the German government's cluster strategy.



### 4.7 Is there a cluster or competitive council?

The existence of cluster or competitive council varies to a great extent between the countries. Of the 27 countries that have answered the question, 12 (44 percent) have no cluster or competitive council. Eleven countries (41 percent) have such a council, while 4 (15 percent) have a general council. It is very difficult to identify a clear pattern among the countries with and without a cluster or competitive council. There are both small and large countries in each group, as well as countries from Eastern and Western Europe.

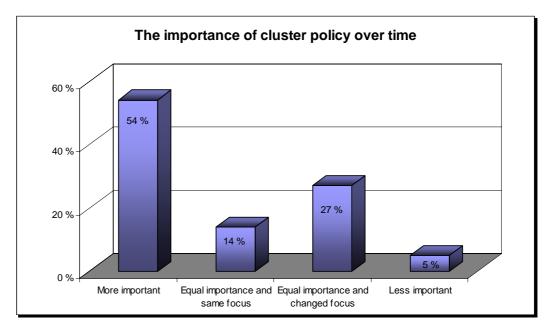
Figure 8 The existence of a cluster or competitive council. Percentage of countries.



# 4.8 The importance of cluster policy over time

When discussing the development of cluster policy, it is interesting to see how it has developed over time. For instance, has it become increasingly more important or has the focus of the policy changed? The figure below illustrates this in more detail. The general impression is that the importance of cluster policy has increased or remained the same. To elaborate, the importance of cluster policy has increased in fifty four percent and remained the same in forty one percent of the countries. In the latter group, the focus of the policy is the same in fourteen percent of the countries while it has changed in twenty seven percent.

Figure 9 The importance of cluster policy over time. Percentage of countries.



# 5. National agencies and national cluster programmes

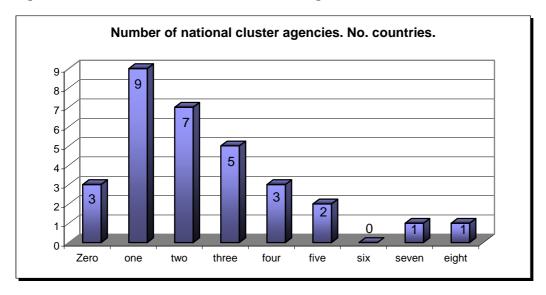
In the major part of the European countries, cluster policies on national or country level are implemented by agencies organised under the different ministries. In the country reports, the European countries have each listed between 0 and 7 national agencies responsible for the cluster policy each country. Some of these agencies have implemented regular national cluster programmes, while other agencies deal with the cluster policies on a more general level; hence they have not formulated individual cluster programmes.

Part of the explanation behind the different numbers is to be found in the structure of the states included in the study. In some countries, cluster policies are not particularly relevant on a national level, but they are more relevant on a decentralised regional level. Federal states like Belgium, Italy, Switzerland, the UK, Spain and Turkey are special cases in this matter. In these cases the national levels are defined as the federal level, which means that not many cluster agencies or cluster programmes have been identified.

# 5.1 The national agencies with responsibilities for the European cluster policy

In the 31 countries covered by the study, a total of 75 national or state-level cluster agencies have been identified.<sup>4</sup> The majority of the European countries (21 countries) have reported between one and three agencies responsible for the national cluster policy. With seven and eight agencies respectively, Ireland and Finland are the countries that have reported the most cluster agencies.

Figure 10 Number of national cluster agencies.



 $<sup>4\ {\</sup>rm In}\ {\rm Belgium}\ 4$  decentralised agencies have been identified, which are not counted in the above. The reason is that this is more in line with the reports from the other federal stats.

#### Finland: Many national cluster agencies – and high innovation performance!

With eight reported national cluster agencies, Finland is the country in Europe with the largest number of national cluster agencies. At the same time, Finland is often referred to as one of the global innovation leaders in terms of international recognised innovation output indicators. Below the eight reported national cluster agencies in Finland are listed.

- The National Technology Agency (TEKES)
- The Science and Technology Policy Council (STPC)
- The Finnish Innovation Fund (SITRA)
- Academy of Finland
- National Research and Development Centre for Welfare and Health (STAKES)
- Agricultural Research Centre of Finland
- Technical Research Centre of Finland (VTT)
- CoE programme

Source: Country report Finland and European Innovation Scoreboard 2006

Almost every cluster agency reported from the European countries has a range of other tasks in addition to the national cluster policies. Only three of the reported 75 agencies have cluster policy as their only task.

One of the few examples of agencies with cluster policy as its only task is the Public Institution National Office of European Technology Platforms in Lithuania. This agency was founded in 2004 in order to create technology platforms and clusters in Lithuania.

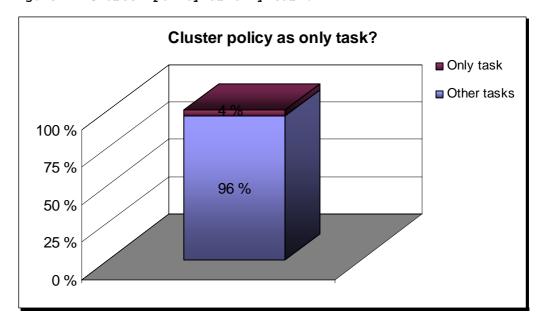


Figure 11 Cluster policy as only task.

#### 5.2 National cluster programmes

In the questionnaire we have asked if the European countries have programmes at a national or state level with the purpose of developing clusters or cluster-like

environments. It can, however, be quite difficult to define whether a national programme is a "cluster programme" or not, because these programmes are often not called cluster programmes. But the questionnaires have included a common cluster definition – and working with this common cluster understanding, a majority of the European countries have identified one or more programmes aimed at promoting cluster development at a national level.

Only five of the 31 countries have no national cluster programmes – and these countries are typically federal countries were the cluster programmes are located at a decentralised level.

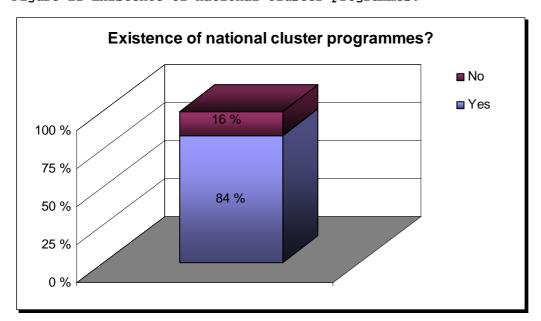
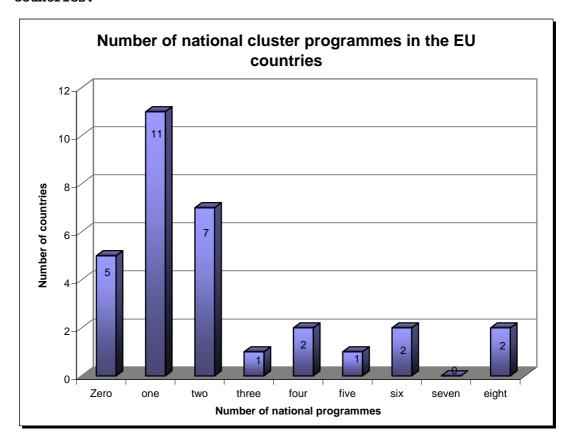


Figure 12 Existence of national cluster programmes.

A total of 69 national cluster programmes have been identified in the survey. Each of these programmes is described in detail in the individual country reports that can be downloaded from the cluster observatory website.

In a majority of the European countries either one or two national programmes have been identified. Eight countries have more than two programmes ranging between three and eight national cluster programmes.

Figure 13 Number of national cluster programmes in the EU countries.



# 5.3 Financing of the European cluster programmes

In terms of financing, we have asked if the national cluster programmes are financed from national budgets, European budgets, regional budgets or other sources.

The programmes are often financed from a variety of sources, but when we look at all the 69 programmes it is significant that national budgets are the main source of financing, while EU budgets are involved in approximately one in five of the cluster programmes.

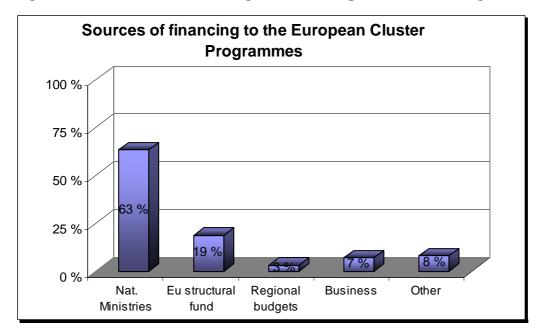


Figure 14 Sources of financing to the European Cluster Programmes.

# 5.4 Policy focus in the national cluster programmes

In the individual country reports, a range of policy focus issues for the 69 European national cluster programmes were identified. We have selected information concerning the following issues on each of the programmes:

- Geographic coverage are the programmes national, regional or local?
- Main policy area in focus can the programmes be classified as regional development policy, science & technology policy, industrial policy or a mixture?
- Cluster lifecycle oriented are the programmes aimed at clusters at a certain stage, emerging clusters, mature clusters etc.
- Main target groups of the programmes are the programmes aimed at business, research institutions, training & education institutions, public authorities or a mixture?
- Focus on SMEs do the programmes have a special focus on SMEs?
- Level of R&D involvement in the programmes can the R&D focus be characterised as low, medium or high?
- Interregional focus do the programmes include cross-border activities?
- Selection of clusters are the programmes based on applications from clusters, and has the selection been based on a top-down or a bottom-up selection of clusters?

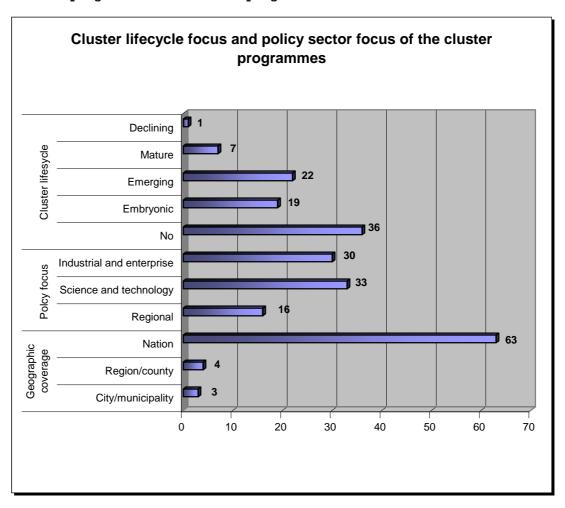
In the following, we will sum up the answers from all the European programmes in terms of the above listed policy issues. Not all information is available for all programmes. In the individual country reports more information can be found on several of the programmes. Information on budget, time frame, as well as more detailed descriptions is available for a large number of the programmes.

<u>Geographic coverage</u>: As for geographic coverage almost all the programmes are national in their focus. Only seven of the 69 programmes have a geographical focus, which is either regional or local.

<u>Cluster lifecycle focus:</u> 36 of the 69 cluster programmes have no particular focus on clusters in a certain lifecycle. The cluster programmes that focus on particular lifecycles of clusters tend to focus on emerging and embryonic clusters.

**Policy sector focus:** As for policy sector focus, nearly half of the European cluster programmes are classified as related to either industrial & enterprise policy or science & technology policy. Approximately one in four programmes is classified as related to regional policy.

Figure 15 Cluster lifecycle focus and policy sector focus of the cluster programmes. Number of programmes.



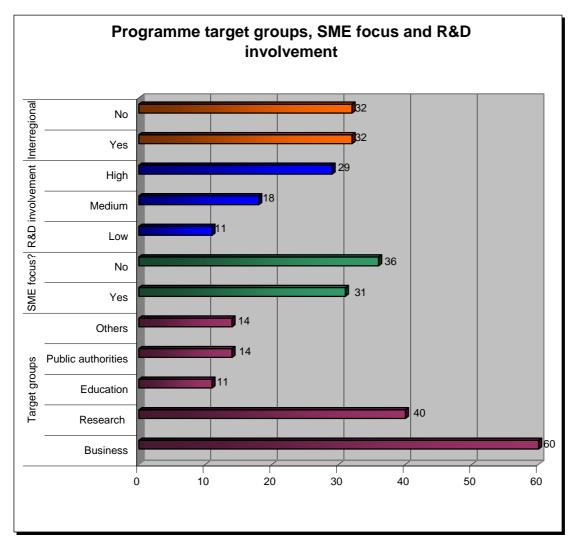
<u>Target groups:</u> Nearly every European cluster programme has private businesses as their target group. Hence cluster policy is to a great extent designed to promote innovation in the European private sector. The other major target group is the research institutions – 40 of the 60 programmes have research & development institutions as an important target group. Only a minority of the European programmes name training/education and public authorities as important target groups.

**SME focus**: Of the 69 national cluster programmes, a particular focus on SMEs has been identified in 31 programmes.

**R&D** involvement: In general, the research & development involvement in the European cluster programmes is high. Twenty nine programmes are classifieds as "high" in terms of R&D involvement. Eighteen programmes are classified as "medium", while only 11 of the 69 programmes are classified as "low" in terms of R&D involvement.

<u>Interregional/Cross border:</u> Fifty percent of the European cluster programmes include some sort of cross border activity. Only a minority is defined as primarily cross border programmes – but a large number of programmes include export projects or other activities with cross border elements. One example of a real cross border cluster programme is given in the text box below.

Figure 16 Programme target groups, SME focus and R&D involvement. Number of programmes.



#### Cross border cluster programme - Biovalley Basel

Biovalley Basel was founded in 1996, financed from Interreg sources and different sources from Switzerland, France and Germany. The focus of this programme is bringing together strong actors in the biosector, across national borders in Northwest Switzerland (Basel area), South-Baden (Germany) and Alsace (France).

The programme involves more than 300 life science companies, including major global players in the pharma and agro business. It also includes 40 scientific institutions and 4 universities with about 280 research groups. The cluster programme operates in one of the largest biotech regions in Europe. The "BioValley" tries to bundle the power of the strong actors in the region.

The cluster programme is organised with a central cluster association building on three associations in Switzerland (BioValley platform Basel), France (Association Alsace BioValley) and Germany (BioValley Germany).

#### 5.5 Cluster selection process

A majority of 57 of the European cluster programmes are based on some sort of application process, where a group of clusters or potential clusters have made an application for support. In 39 of the cluster programmes, the selection process has been a 100 % bottom-up process, while 28 programmes have been more top-down oriented in terms of selecting the clusters.

In the questionnaire we have also asked which type of support the programme offers the different target groups in the programmes. In 31 programmes, financial support is the only support type in the programme. Eight programmes only support the clusters with knowledge sharing/network buildings etc. In 26 programmes we have identified a combination of financial support and different forms of knowledge building/network building.

Selection criteria and support types Buttom-up Selection Top-down Selection Appointment Application 26 Both Support type knowledge/network Only finance 10 20 30 40 50 60

**Number of programmes** 

Figure 17 Selection criteria and support types. Number of programmes.

# 6. Regional cluster policy, agencies and programmes

Due to differences in the way the countries are organised, it is very important to supplement the mapping at the national level with a similar one at the regional level. Firstly, some countries are organised as national states and some as federations. Secondly, the autonomy of the regions varies to a great degree. Some countries prefer to support national clusters while others prefer to provide national money to the regions.

To get an outline of the cluster policy at a regional level, we will look into the following aspects in the 31 countries that are included in the mapping:

- How important is cluster policy at a regional level?
- How many agencies are responsible for the implementation of cluster policy at a regional level?
- Do regional programmes exist in the different countries?
- How many regional programmes are present?
- What is the policy focus of the regional programmes?
- What are the targets groups of the cluster programmes?
- What do the regional programmes offer?

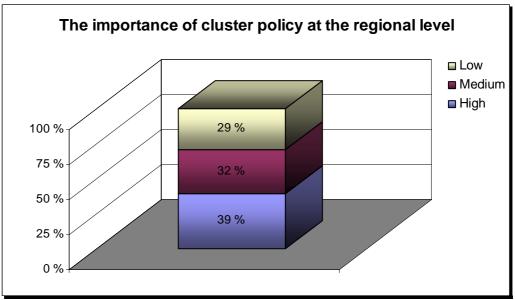
We will point out that the mapping of agencies and programmes at a regional level does not provide a complete review. Due to the complexity of the matter and somewhat limited resources per country, not all programmes have been identified and reported upon. However, the mapping that has been carried out is still extensive enough to give a fulfilling picture of the situation.

# 6.1 Importance at regional level

The figure below shows that the importance of cluster policy at regional level fluctuates quite a lot among the countries. Cluster policy is seen as important at regional level in 11 countries (39 percent), of medium importance in 8 countries (29 percent) and of low importance in 9 countries (32 percent).

In all the countries, the general impression is that the importance of cluster policy at regional and national level is highly correlated. In other words, the countries which consider cluster policy to be of importance at national level also think that it is important at regional level. At the same time the countries regarding cluster policy to be of low significance at national level do not change the assessment at regional level. The exceptions here are Austria, Denmark and Spain, who attach greater importance to cluster policy on regional than national level. This can be attributed to the strong role played by the regional level in these countries at least when it comes to innovation and regional development.

Figure 18 The importance of cluster policy at regional level. Percentage of countries.



# 6.2 Agencies responsible for implementation at regional level

It is not easy to get a definite picture of the number of agencies responsible for the implementation of cluster policy at regional level, but it is evident that there are a high number of organisations. Due to the limited nature of this mapping at regional level and problems related to definition issues, it is not possible to state exactly how many. Nonetheless, the conclusion that can be drawn is that the number of organisations responsible at regional level is much higher than at national level. In this context it should be noted that some of the regional organisations are branches of national agencies. Whether it is fair to characterise these as regional organisations, depends on their autonomy. The autonomy fluctuates from organisation to organisation.

Both the types and number of regional cluster organisations vary between the different countries. There is a division between the more cluster specific organisations and the broader ones working with business and regional development in general. The first are much rarer, but are present to some extent in countries such as Austria and Spain. These organisations are typically anchored regionally. Most of the agencies responsible for implementation of cluster policy at regional level focus on business and regional development in general. These organisations can be anchored regionally or be a part of a national organisation with a regional responsibility. Although the division between the two is somewhat unclear, the mapping indicates that the former option is more common than the latter.

Even though the mapping at regional level is not complete, it is clear that the number of cluster organisations varies a great deal from country to country. The way the relation between national and regional levels are organised is of significance in this regard. The number of agencies is typically higher in the Nordic countries, where there are fairly small units at regional level. In countries which are small in geographical extension (such as Latvia and Luxemburg) or have large administrative regions (such as Germany and UK), the number of cluster agencies is often lower.

## 6.3 Existence of regional cluster programmes

Regional cluster programmes are less common than national ones. There are no regional cluster programmes in 13 of the countries (43 percent), while such programmes are found in 17 countries (57 percent). There is a clear distinction between these two groups. The 13 countries where regional programmes don't exist are in general the smallest countries population wise and/or geographically. This is documented by the presence of such countries as Cyprus, the Czech Republic, Finland, Malta, Norway and Slovakia in the group. Among these, it should be noted that the inclusion of Finland and Norway is due to a weak regional level and not a particularly small geographic extension.

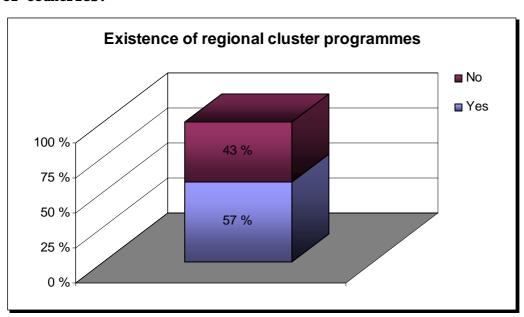


Figure 19 The existence of regional cluster programmes. Percentage of countries.

#### 6.4 Regional cluster programmes

In the 17 countries where regional cluster programmes are present, there are 88 programmes. Due to the somewhat limited nature of the mapping, this number represents a lower estimate of regional clusters. With this limitation in mind, the material still indicates that the number of cluster programmes varies greatly between the countries. Around 50 percent of the programmes exist in only two countries; Poland and the UK. It should be noted that many of these programmes are broader development programmes, but the common denominator is that cluster policy is a vital component. With at least 10 programmes, the number of regional cluster programmes is also high in Spain.

# 6.5 Regional programme policy focus

The overall policy focus is stated for 84 of the 88 cluster programmes. Among the eighty four, fifty two have a regional focus; forty have an industry and enterprise

focus and thirty target the area of science and technology. This implies that the average number of policy focus areas is 1.45. This result hides the fact that this due to a few countries, in particular Poland. The rest of the countries with regional cluster programmes have a sharper focus, i.e. focus on one a single area.

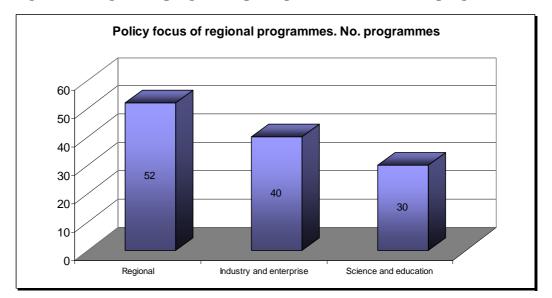


Figure 20 Regional programme policy focus. Number of programmes.

### 6.6 Regional programme target groups

The regional cluster programmes can be targeted at businesses, research institutions, educational institutions, public authorities and others. The dominating target group is businesses. Eighty one of the programmes fall into this category. Among the remaining groups, there is a fairly equal distribution among research institutions (52 programmes), educational institutions (45 programmes) and public authorities (43 programmes). Based on a holistic perspective, this proves that is common with several target groups per programme. The average number of target groups per programme is three. There are no significant differences between the countries in this regard.

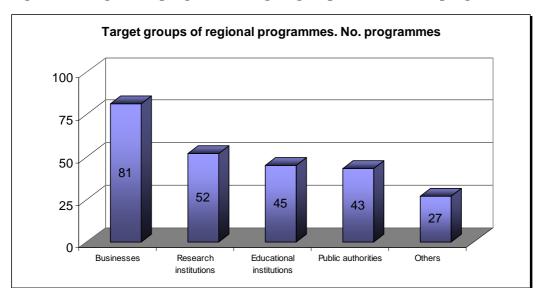


Figure 21 Regional programme target groups. Number of programmes.

## 6.7 What do the regional programmes offer?

In general, the regional programmes can offer finance, knowledge/network or both. The mapping shows that there are only minor differences in what the programmes offer. Twenty nine only offer finance, thirty one only knowledge/a network and twenty five offer both. It is not possible to identify any significant differences between the countries.

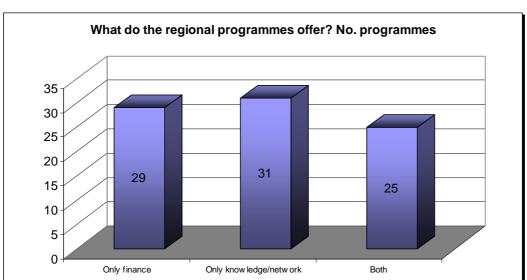


Figure 22 What do the regional programmes offer? Number of programmes.

#### A successful regional programme: the Basque Competitiveness Programs

The Basque Competitiveness Program was initiated by the Department of Industry, Trade and Tourism and the Department of Transport in 1991. Since then, there have been different Basque Competitiveness Programs, but the long term objectives are still being pursued. Today the programme is called the Basque Competitiveness and Social Innovation Programme.

To run the programme, Cluster Associations were established. The Cluster Associations group together companies, universities, training centres, technology centres and public actors (Municipalities, deputations and different departments of the Basque Government), and act as facilitators in order to improve the competitiveness of the clusters through cooperation. In other words, they organise all their activities to reach this objective.

The relationship between the regional government and Cluster Associations is regulated by a cluster collaborative agreement between the Department of Industry and each Cluster Association. In addition, there is an agreement regulating the financial support to each Cluster Association. To receive the financial support, each Cluster Association has to present an annual plan and a Strategic Plan for 3 or 4 years every year.

The programme consists of 9 priority clusters; home appliances, machine-tools, and value-added steel, the shipment and manipulation cluster connected to the port of Bilbao, aeronautics, paper, automotive components, tourism and food. A work group related to each cluster defines priority improvement areas and proposes concrete actions. The following activities are pursued through the programme; strategic reflections, consensus building, creation of formal committees, design of action plan mainly in the areas of technology, internationalisation and quality management.



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