

Cluster Monitor Germany

Trends and Prospects of Clusters in Germany Monitoring Results of the 3rd Round of the Survey Conducted in May/June 2013

Publication data

Published by

Federal Ministry for Economic Affairs and Energy (BMWi) Public Relations Division Scharnhorststraße 34–37 10115 Berlin www.bmwi.de

Status February 2014

Design VDI/VDE Innovation + Technik GmbH

Picture credits © Frank Peters – Fotolia

Editor Michael Nerger VDI/VDE Innovation + Technik GmbH Steinplatz 1 10623 Berlin

www.vdivde-it.de



The Federal Ministry for Economic Affairs and Energy has been awarded the berufundfamilie[®] audit certificate for its family-friendly HR policy. The certificate is awarded by berufundfamilie gGmbH, an initiative of the non-profit Hertie Foundation.

This brochure is published as part of the public relations work of the Federal Ministry for Economic Affairs and Engery. It is distributed free of charge and is not intended for sale. The distribution of this brochure at campaign events or at information stands run by political parties is prohibited, and political partyrelated information or advertising shall not be insert in, printed on, or affixes to this publication.

Table of Contents

1	Preface	4
2	Summary of the Findings	5
	2.1 The Current Survey Round – at a Glance	5
	2.2 Trends in the Clusters	6
3	High Percentage of Key Players in the Clusters	7
4	Companies Benefit from an Active Involvement in Cluster Activities	8
5	Economic Situation and Policy Environment Better than the Industry Average	9
5	Economic Situation and Policy Environment Better than the Industry Average	
5		9
5	5.1 Overall Economic Situation of the Cluster Players	9 10
6	5.1 Overall Economic Situation of the Cluster Players5.2 Economic Situation of the Cluster Management	9 10 11

1 Preface

Clusters and regional networks are the focus of a consistently high degree of attention from policy-makers and business people at national and international level. As regional networks and clusters become increasingly established and receive more funding from the public authorities, there is also a greater need for reliable information on their impact.

Given the increasing demand for information on the effects of clusters and networks, the Federal Ministry for Economic Affairs and Energy has launched the "Cluster Monitor Germany". The study was tested for the first time in a pilot survey conducted in autumn 2011. As a result of the active participation and the promising findings, the first official round of the survey was carried out in spring 2012.

The "Cluster Monitor Germany" systematically monitors current trends in research- and innovationfocused clusters. The intention is to carry out regular monitoring in order to identify developments and draw conclusions regarding a potential need for action over a longer period of time.

The "Cluster Monitor Germany" aims to reach the cluster managers of the most efficient clusters and networks in Germany – hereinafter referred to as "clusters". The aim is to receive regular feedback on a biannual basis on the following aspects:

- \rightarrow successes and impact on the enterprises in the clusters,
- → economic situation and the environment for innovation policy, and
- $\rightarrow~$ growth and dynamism of the clusters.

This brochure covers the third survey round, which took place in May/June 2013.

The survey was conducted among managers from 55 clusters with a total of about 5,000 players from the business and scientific communities operating in nine fields of innovation relevant to Germany – based on the structure of the German economy:

- → Biotechnology
- → Health and Medical Sciences
- \rightarrow Transport and Mobility
- \rightarrow $\,$ New Materials and Chemicals

- → Production and Processes
- → Aerospace Industry
- \rightarrow Energy and Environment
- \rightarrow Information and Communication
- → Micro, Nano and Optical Technologies
- \rightarrow Design and Construction.

These fields cover all stages of the value chain as well as associated research areas.

2 Summary of the Findings

2.1 The Current Survey Round – at a Glance

Companies profit from their involvement in the cluster. 37 percent of the respondents stated that the companies had benefited financially from their activities within the cluster. Whilst just over one-fourth of the surveyed cluster managers commented that cluster companies were still investing more than they were receiving in return, active involvement in the cluster was seen as a long-term process which implies indirect beneficial effects. It should also be noted that clusters with a very high percentage of active members continue to profit to a substantially greater extent, also with regard to tangible financial benefits. Compared to the previous survey period, this view has hardly changed.

The economic situation of the cluster players outperforms the industry average – and this is expected to continue.

The clear majority of the cluster managers (62 percent) evaluated the overall economic situation of their cluster players as more favourable than the industry average. For the following six months, most of the cluster managers (64 percent) did not expect their economic situation to change; 22 percent anticipated an improvement.

The surveyed clusters have a large share of active key players.

46 percent of the respondents reported that at least 50 percent of the cluster consisted of key players. Key players are those cluster members that are very actively involved in the cluster activities over a lengthy period and that play a vital role in the implementation of strategic topics. Three-quarters of those surveyed believe that the financial situation of the cluster management is secure for at least one year or longer – with a positive outlook. The majority of the surveyed cluster managers (84 percent) believed that the cluster's financial sustainability was secured for at least one year. This percentage is comparable to the result gained in the previous survey period. At 7 percent, the share of cluster managements that took a critical view of the financial situation is relatively low.

The economic and innovation policy environment for cluster managements and cluster players is rated as good to very good by the majority of the respondents. The situation is expected to remain stable in the next six months.

56 percent felt that the economic and innovation policy environment in Germany was good or very good; the majority of the respondents felt that no significant changes in these trends were likely during the next six months.

The clusters will continue to acquire new members – positive growth trend expected.

Although the surveyed clusters have already existed for years, almost half of them had recorded a further increase in members by at least 5 percent over the past six months. 49 percent of the respondents expected their membership numbers to continue to grow in the course of the next six months.

2.2 Trends in the Clusters

What has changed over the last six months and what is anticipated for the coming half year?

	Trends in comparison with the previous survey
Do companies involved in a cluster also benefit financially?	The financial benefit to the cluster players remains high. Compared to the previous survey round, this benefit remains encouragingly stable.
Does outstanding commitment to the cluster pay off?	Clusters with a high share of active players can generate a particular financial benefit for the companies involved.
How does the economic situation of the firms in the clusters develop compared to the industry average?	The firms' economic situation continues to be rated more favourably than the industry average. Compared to the previous forecast, the economic situation has actually improved more than expected. The majority believes that this will remain the case in future.
What is the percentage of particularly active key play- ers in the cluster?	The cluster players remain very active. Compared to the previous survey round, the activity level of the whole group of players has actually increased further.
Is the future financing of the cluster management secured?	The financial situation of the cluster managements is stable. For a small group, it has improved further compared to the previous survey round. The outlook for the coming six months remains very positive compared with that of the previous survey.
How is the economic and innovation policy environ- ment seen?	The environment was again rated as very good. The future outlook continues to remain positive.
Will the clusters continue to grow?	The development in the number of cluster players continues to present a consistently positive picture. The positive trend of cluster growth continues, albeit at a slower pace.

3 High Percentage of Key Players in the Clusters

The cluster managers have been asked to indicate the proportion of particularly active or key players for their respective clusters.

Key players are particularly committed to the activities of the cluster over a lengthy period. Their commitment is characterised by a close interaction with the cluster management organisation and the other participants of the cluster initiative. Key players play a vital role in the implementation of strategic topics, such as R&D partnerships, basic and advanced training concepts, international cooperation, etc.

The surveyed clusters have a large share of active key players:

Almost half of the surveyed clusters reported that the percentage of actively involved cluster players was between 25 and 50 percent at the time they were questioned. Nearly one-third of the respondents indicated that more than 50 percent of their cluster players were actively involved. In seven percent of the clusters, more than three-quarters of cluster members were actively committed, whereas 15 percent stated that the proportion in their cluster was less than a quarter (see figure 1).

A comparison of these values with the results of the previous survey round reveals a slight trend towards more and more active cluster players.

The cluster managers were also asked whether they felt that certain companies stood out from the rest of the cluster players in terms of a higher or lower level of activity (see figure 2). The differences were small. Thus, more than one third of the clusters that took part in the survey estimated that between 25 and 50 percent of their companies were key players. However, in relation to the overall number of cluster players, no further significant differences were found.

As compared to the previous survey round, no trend in this regard is revealed - in either direction. Unlike the number of active cluster players as a whole, the number of companies actively involved in the clusters has remained constant.

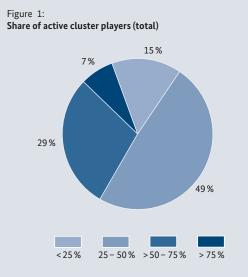
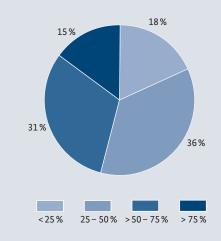


Figure 2: Share of active companies (key players)



4 Companies Benefit from an Active Involvement in Cluster Activities

Some stakeholders invest more than others in terms of an active involvement in cluster activities or efforts spent on cluster work (defined here as "cluster investment"). This is mostly expressed in an assignment of staff and/or financial contributions in the form of membership fees or the use of fee-based services offered by the cluster management. Investments in R&D are explicitly not meant in this context. Cluster players expect their cluster investment to achieve an impact in the sense of tangible monetary benefits.

Definition monetary benefit:

The term "monetary benefit" may for example imply: additional revenues, licensing revenues, cost savings, reduced development time, lower financial risk, etc.

The survey participants were asked to give an estimate of the realised and the achievable monetary benefits, respectively, in relation to the investments made by the cluster players in the past year. Here, benefits such as gains in expertise, new contacts, etc. are deliberately omitted, whereas they should naturally be taken into account for an overall assessment of the effectiveness of capabilities.

An active involvement of the companies in cluster activities also brings a clear financial reward.

According to the cluster managers, 37 percent of the companies had realized clearly measurable financial gains. This estimated value is slightly below the positive result obtained in the previous survey round (40 percent).

In 39 percent of the cases (previously equally 39 percent), revenues and expenses had roughly been balanced. Another 24 percent (previously 21 percent) had invested a little more than they had finally received in return (see figure 3).

When considering only those clusters with a share exceeding 75 percent of particularly active members, a more diversified picture of the respective advantages is revealed. Almost 30 percent more cluster players had been able to achieve a sizable financial benefit (66 percent versus 37 percent), whereas only 7 percent (compared to 24 percent) had invested more than they had ultimately benefited (see figure 4).

Compared to the second survey round, a slight decline in financial benefits can be observed, but one that is within the usual statistical variation. Generally, cluster players displaying a high commitment to cluster activities can still benefit much more than those which are less committed.

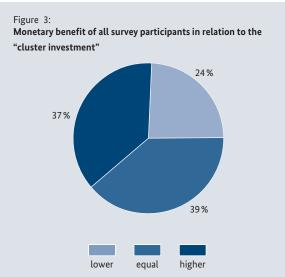
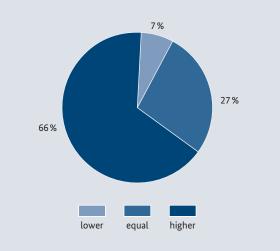


Figure 4:

Monetary benefit of the clusters with a share of active cluster players exceeding 75 percent in relation to the "cluster investment"



5 Economic Situation and Policy Environment Better than the Industry Average

5.1 Overall Economic Situation of the Cluster Players

This question dealt with the assessment of the overall economic situation of the cluster players – especially that of small and medium-sized enterprises – relative to the average for the relevant industry. Here, a differentiation was made between the economic situation as seen at the time of the survey and a forecast outlining how it was likely to develop in the following six months.

The overall economic situation of the cluster players is rated better than the relevant industry average and is expected to remain stable.

At the time of the survey, none of the responding cluster representatives stated that the economic situation of their cluster players was worse than the relevant industry average. A total of 60 percent indicated that they found themselves in a better or significantly better economic situation. According to 40 percent of the respondents, the overall economic situation of the cluster players was comparable to the industry average. Compared to the previous survey period, the overall situation has therefore slightly improved. When comparing this result with the anticipated future outlooks of the second survey round, the expectations have largely been fulfilled and in some cases even exceeded (13 percent had forecast a deteriorating economic situation).

With regard to the future development in the following six months, in total, 16 percent of the cluster managers expected the economic situation to improve. The majority of the cluster managers (80 percent) assumed an unchanged business environment; only 4 percent anticipated a deterioration of the economic situation.

While the future economic development had been seen as very favourable in the previous survey period – 22 percent had expected an improvement – this time, only 16 percent of the cluster managers anticipated a positive economic development. In total, however, prospects remained more or less stable.

Figure 5: The overall economic situation of the cluster players relative to the

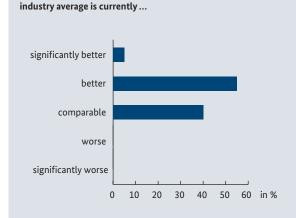
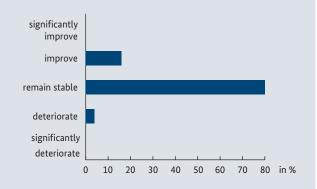


Figure 6:

In the next sixth months, the overall economic situation of the cluster players relative to the industry average will ...



5.2 Economic Situation of the Cluster Management

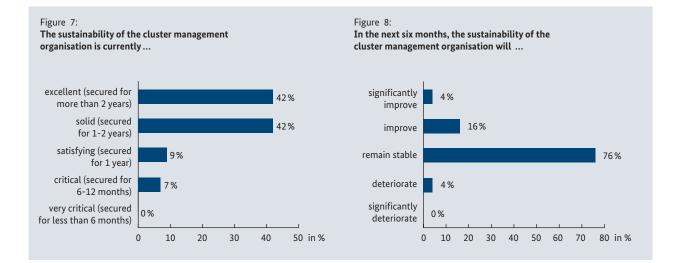
The main purpose of the question regarding the economic situation and sustainability of the cluster management was to obtain an assessment of their financial security and stability at the time of the survey and in the following six months.

According to the majority of the cluster managers, the financial situation of their cluster management organisations is viewed as sustainable for the next two years and beyond – the trend remains positive.

84 percent (previously 85 percent) of the respondents felt that their financial sustainability was secured for at least between one and two or more years. Similarly to the results of the previous survey round, 9 percent (previously also 9 percent) evaluated the current sustainability of the cluster management organisation as satisfactory, 7 percent (previously also 7 percent) actually took a critical view. The overall result reflects almost exactly the result of the previous survey round. However, in contrast to the second survey period, 16 percent evaluated the financial situation of their cluster managements as secured over a medium term only, and not for the long term.

When the results of the previous survey on expectations for the future are compared with those of the current analysis, it can be seen that the expectations have been met for those cluster managers questioned.

More than three-quarters of the respondents expected their situation to remain stable for the following six months; 16 percent anticipated a positive development, and 4 percent expected a significant improvement. Only 4 percent predicted a deterioration in sustainability. So the vast majority of the clusters will maintain their solid or excellent financial basis, allowing them to concentrate on their key tasks for the benefit of their members. Thus, development prospects can again be evaluated positively.



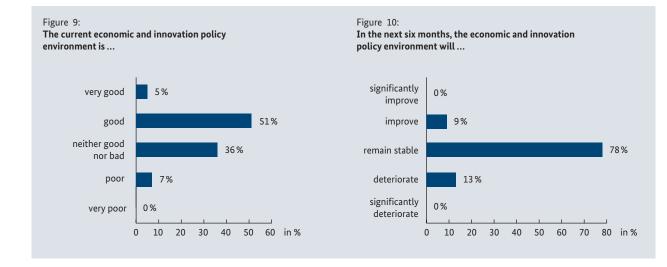
5.3 Economic and Innovation Policy Environment

This question aims to evaluate the environment for economic and innovation policy impacting the cluster players. This is defined as measures designed to support companies and research institutes as they generate innovations and convert research and development work into marketable products and services – and thus enhance their competitiveness – through the sustained provision of public funding.

The economic and innovation policy environment for cluster managements and cluster players was rated as good to very good by more than half of the persons surveyed.

Compared to the previous survey, there are indications of a more positive trend in this regard. At the time of the survey, more than half of the respondents indicated that the economic and innovation policy environment was good (51 percent) or very good (5 percent). More than one third of the clusters stated that the policy environment was neither good nor bad. 7 percent of the cluster managers, however, judged the current environment to be poor. When compared to the positive forecast given in the previous survey period, the economic and innovation policy environment has improved for the vast majority of the clusters surveyed.

From the viewpoint of more than three-quarters of the respondents (78 percent), the current situation was not likely to change in the following six months. According to 9 percent, the policy environment was expected to improve; about 13 percent, however, anticipated a negative development. Hence, the cluster managers surveyed took a slightly more sceptical view of the future development than six months before.

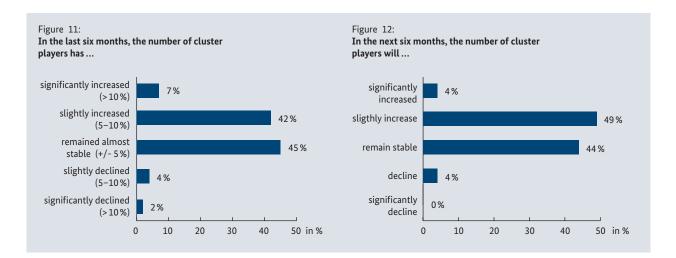


6 Growth and Dynamism: Clusters Continuing to Grow

Cluster players generate corporate and economic effects. The increase and decline of the number of players gives an insight into the development trends within the respective clusters and the potential influence of external framework conditions.

The development of the number of players involved in the clusters presents a consistently positive picture. Almost half of the clusters surveyed recorded an increase in cluster players of more than 5 percent over the last six months. This upward trend reflects the expectations mentioned in the last survey round with a slight deviation of 10 percent. 45 percent of the respondents indicated that their cluster player base had remained stable. Only 4 percent of the clusters stated that the number of cluster players has declined slightly in contrast to the previous survey round; 2 percent have recorded a significant decline. Referring to the number of members, a positive growth trend was also expected with regard to the future development: three-quarters of the surveyed clusters that were recording an increase in cluster players at the time of the survey also expected the number of members to rise in the next six months. Altogether, more than half of the respondents anticipated an increase in players. 44 percent expected the number of players to remain stable. The growth trend of the clusters has thus continued. A decline in cluster players in the following six months was anticipated by those clusters surveyed that had already been observing a decrease in cluster players at the time of the survey.

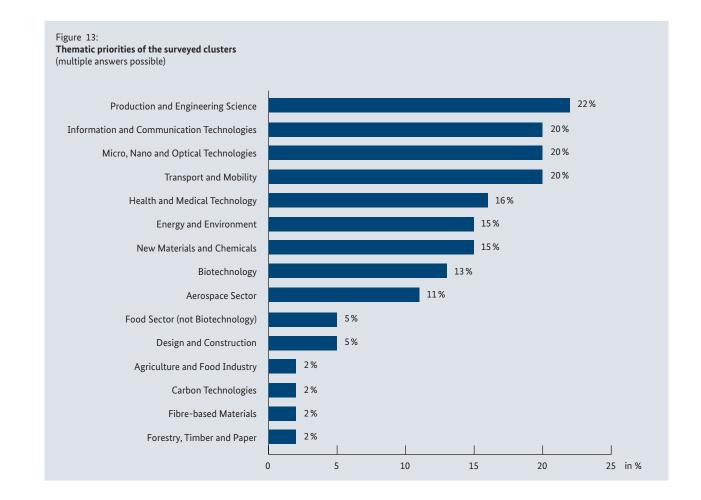
In general, the growth prospects have revealed a positive picture similar to that resulting from the survey of the previous year, with a slight trend towards consolidation.



7 Thematic Priorities

The cluster managers were asked to indicate the thematic focus of their respective cluster.

One-fifth of the respondents are operating in each of one of the following areas: transport and mobility; micro-, nano- and optical technologies; information and communication technologies. The vast majority of the cluster managers surveyed cited production and engineering science as a prevailing thematic priority.



www.bmwi.de

