

## Cluster Communication Model of Composite and Textile Industries: A Regional Case Study

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### Abstract

The study conducted as part of the Bursa Technical Textile and Composite Materials Cluster analysis aims to lay the groundwork for future cluster development stages in Bursa. The primary goal is to formulate a cluster strategy and comprehensive implementation plan. Bursa, with its robust infrastructure and innovative enterprises, specializes in various disciplines within the tech textiles and composite materials industries, positioning itself as a global industry hub. Identifying key stakeholders, skills, and areas for improvement within the Initial Phase of the Bursa Technical Textile and Composite Materials Cluster framework was a key focus of the study. The first stage of cluster development commenced with a specific emphasis on strategy formulation and roadmap establishment. The research serves as a cluster communication service manual for the Composite Material and Technical Textile Prototype Production and Application Center (BUTEXCOMP) Cluster Coordination Unit in Bursa, Türkiye. It provides guidance on building relationships with cluster members and external stakeholders, as well as communicating the concept of clustering effectively.

### Keywords

composite materials, technical textiles, clusters analysis, bursa

## 1. Introduction

In the realm of economic policy, academic discourse, and corporate strategies, cluster thinking has emerged as a prominent framework over the past three decades [1]. Clusters, defined as groups of businesses and organizations sharing industry focus, geographic proximity, and interconnectedness based on commonalities and differences [2], have gained recognition for their capacity to foster collaboration and generate synergies [3]. Notably, a search on Google in February 2015 for 'Cluster Competitiveness' yielded an overwhelming 14,900,000 results, originating from esteemed institutions like the World Bank, and advocacy organizations such as the US Cluster Mapping Project and the European Foundation of Cluster Excellence. This widespread acknowledgment underscores the influence of Michael Porter, who emphasized clusters as pivotal drivers of competitive advantage [4].

The World Economic Forum (WEF) considers clusters integral to national competitiveness, reflected in assessments within its Global Competitiveness Report (GCR). Specifically, the level of cluster development contributes to the 'business sophistication' pillar of the index, indicating its significance in evaluating a nation's economic landscape [5]. Moreover, clusters have garnered attention as potential solutions to challenges faced by small and medium enterprises (SMEs) in emerging economies, addressing the "missing middle" phenomenon [5]. Their role extends beyond local economic dynamics, as clusters have been identified as catalysts for regional development and globalization, attracting both governmental and corporate interest for policy and strategic considerations [6].

The significance of clusters is evident in the trajectory of nations like China, where their proliferation has been credited with substantial economic ascent over the past four decades [6]. China's prominence in cluster development, ranking second globally behind Italy, underscores the validity of Porter's concept and its impact on governmental, regional, and sectoral competitiveness. Despite this, research on cluster competitiveness remains limited, with existing literature primarily consisting of unidirectional studies [7].

Understanding a nation's competitiveness encompasses various institutional, legislative, and productivity factors, with clusters forming fundamental components, as envisaged by Porter [9]. Clusters, as subsets reflecting national competitiveness, play a crucial role in integrating local influences and policies, thus extending their significance to the national level [10].

In light of these considerations, our research has focused on regional and global market analyses, particularly in sectors such as technical textiles and composite materials [11, 12]. We observe a growing international demand for high-value-added products like technical textiles, with nations restructuring their production systems to prioritize such commodities, enhancing their global competitiveness. Similarly, the composite materials sector has witnessed significant growth, contributing to nations' economic competitiveness [13]. Our analysis underscores the pivotal role of factors such as production costs, technological advancements, product quality, innovation, and sustainability in shaping the competitiveness of these industries [14-16].

This research has been prepared as the cluster communication service manual for Composite Material and Technical Textile Prototype Production and Application Center (BUTEXCOMP) (Türkiye, Bursa) Cluster Coordination Unit to follow while building relations with cluster members and with the actors in cluster external environment. Manual also comprises key approach on how to communicate concept of "cluster" among related parties. Communication manual is a supporting document in line with the strategy and action plan of the cluster. Before starting with establishment of cluster communication and creating tools, it is recommended to follow content of this research.

## 2. Cluster Concept

Definitions on cluster can vary based on the country examples and studies undertaken by different clusters, academicians and specialists. As seen in different concepts, definitions of clusters have been evolved as clusters evolved since the day clusters started to be discussed. There is a wide variety of different definitions of a cluster. However, most cluster definitions – from the literature as well as from the practitioners interviewed – have the following common traits:

- A geographical concentration of firms interconnected (Porter, [2]) by being part of the same industry or the same supply chain, by a common resource or market, by a similar philosophy, by facing similar opportunities and challenges or by collaboration with the same university or research institution and public bodies,
- A critical mass [17] of actors, resources, competences (in absolute terms – in relation to cluster competitors in other regions – but also in relation to other cluster candidates in the respective region) in order to sustain interaction between the cluster actors in the long term and to attract new members, and
- Existing interaction and cooperation of firms [18]. *"These carries marked features of both competition and cooperation"* [2].

Porter ([2], p. 79) sums it up as follows: *"A cluster, then, is an alternative way of organizing the value chain. Compared with market transactions among dispersed and random buyers and sellers, the proximity of companies and institutions in one location and the repeated exchanges among them – fosters better coordination and trust. (...) A cluster of independent and informally linked companies and institutions represents a robust organisational form that offers advantages in efficiency, effectiveness and flexibility"*.

These definitions strongly focus on companies, which are at the core of clusters, and their interaction. However, with the increased involvement of policymaking and the expansion of the knowledge-based economy, the active presence of actors from higher education, research organisations and policy is increasingly seen as a decisive factor for cluster development. Clusters are understood as regional innovation systems.

Another definition provided by the cluster development guideline study of GTZ, clusters are (regional) concentrations of businesses including their service providers along a value chain. We also speak of networks of complementary businesses in this situation. Successful clusters mostly involve a complementary mix of three kinds of businesses:

- Internationally active companies which are particularly strong in the market and are technological leaders,
- Suppliers or supplementary businesses (often small or medium sized enterprises – SMEs),

- Particularly innovative and dynamic knowledge-based specialists (e.g. research facilities, advanced training institutions, ICT specialists etc.),
- Economic and regional policy supports cluster formation and development by establishing or promoting the necessary (hard and soft) infrastructures. In many countries, policy also promotes the creation of cluster structures (cluster management) and the services of cluster management to the businesses in clusters,
- Clusters are networks of alliances between a large numbers of different actors in a (regional) production system.

According to criteria in above definition, which also gives clear relation between clusters and networks, BUTEXCOMP Cluster can be described as a strong cluster ecosystem with internationally active companies, supplying companies, regional and economic policy supports and actors as well as strong universities and research centres. This definition can be only criticised by relatively weak emphasis on presence of organised efforts coordinating stated actors. In this regard a cluster ecosystem with presence of stated actors can be transferred into cluster initiatives and clusters through effective cluster organisations and management teams. From this point of view communication services and communication of cluster concept by BUTEXCOMP cluster management and governance gains utmost importance for competitiveness of technical textile and composite material cluster and companies.

According to same study the following factors are important for the success of a cluster:

- Businesses with **adequate potential output** in terms of economic performance, market access and ability to innovate,
- Clear expectation of and orientation towards benefits as a basis for **active involvement of the partners** in the cluster and the cluster activities,
- **Readiness to engage in active pooling of knowledge, and specifically of so-called “tacit knowledge”**,
- Establishing and maintaining **reciprocal trust** as a basis,
- Joint **network management** by all partners to coordinate cluster activities and handle internal and external networking (cluster management),
- **Development of a common image to the public and the markets (cluster PR and marketing systems)**.

As it seen in above factors for cluster success there is a lot of emphasis made on involvement of cluster partners which means leadership and involvement of cluster coordination organisations, companies, university and training institutions and public institutions. Importance of development of a common image to the public and markets is also underlined. It is vital for BUTEXCOMP cluster to first increase awareness on cluster development and ownership among leading actors starting from internal environment to a wider external environment. To this end ownership of decision makers is key for starting a healthy cluster development and communication of cluster and the cluster services.

It is a buzzword, but nevertheless true: globalisation is making life difficult for businesses; everything is becoming faster, bigger and less predictable. To succeed in the increasingly complex and turbulent environments, businesses have to;

- Sell a stream of new and better products on (often remote and heavily contested) growth markets,
- Take the lead in quality and technologies, and
- Produce and sell at competitive costs.

Innovation – the permanent development and introduction of new processes, products, organisation and management systems, and the successful development of new markets – is becoming the keystone of sustainable competitiveness. This is only possible for very flexible and knowledge-based businesses, which also have sufficient market know-how, product knowledge, ability to learn and capital. However, all-rounders are rare, and it is enormously expensive to try and be the best in every field. **This is why globalisation is forcing businesses to concentrate more on their core competences and take on just a small section of the entire added value chain from the raw materials to the product ready for the consumer.**

In short, globalisation is leading to an increasing division of labour and increasing economic interrelationships. The success of any one business is depending more and more on the contribution of

other businesses. Cooperation is becoming the key, with the success of a business increasingly resembling an orchestral concert where numerous soloists blend in an unmistakable overall sound.

### 3. Clusters and SMEs

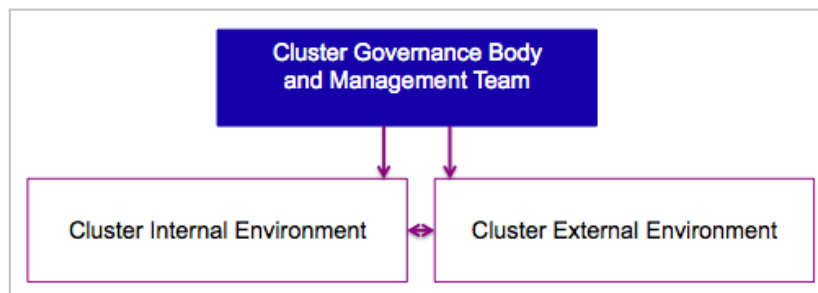
Globalization and digital transformation processes increase the demand for innovation. Competitiveness and innovation on SME level depends on multiple competences, which rarely one SME can raise on its own. Reaching out to select partners is essential in order to integrate and bundle necessary competences and to leverage synergies for successful outcomes.

Clusters offer SMEs, especially in developing countries, an opportunity to stimulate each other's business development and to establish an international profile through networking, cooperation and joint undertakings.

Whereas the overall objectives of cluster development are similar for well-developed and less developed regions, the focus areas may differ. Whereas joint R&D and innovation as well as common product development is at the core of many cluster activities in developed countries, cluster in less developed countries often focus on productivity improvement, raising quality of products, skill development, policy advocacy or export promotion.

### 4. Why Cluster Communication Matters?

Cluster communication has vital importance for increasing recognition of the cluster with its unique solutions and competences at regional, national and international level. Communication of the cluster is one of the key actions to be coordinated by the cluster coordination or cluster management teams in internal and external environment of the cluster. Cluster communication is not the same in internal and external environment of the cluster and needs to be strategically undertaken.



Cluster visibility is another important area attention to be paid. Visibility of a cluster including a strategically designed communication content and corporate identity will contribute success of the cluster at a substantial level.

Cluster communication and promotion can be undertaken through below tools and channels:

- Cluster web site,
- Cluster social media,
- Media relations,
- Newsletters,
- Dissemination Materials such as success stories, lessons learnt etc.,
- Portfolio of cluster members,
- Being a member of national and international cluster platforms.

### 5. Cluster Branding and Marketing

Marketing strategies can be designed to actively promote cluster services. When it comes to branding, a cluster develops a brand comprising the values and attributes of the cluster. Branding is a strategic process that not only includes the view of the cluster organisation and its members but also the perspective of additional stakeholders. These include policy makers, donors, partner clusters from neighbouring economic regions and the public at large. The regional context of the cluster location must be taken into consideration – including policy framework, economic structure and cultural aspects.

Once a cluster brand is designed and visualized in the form of a logo, brochures and/or video and shared among the members and stakeholders, marketing activities can be implemented to promote and consolidate the brand. For each target group, the objectives of the communication activities need to be agreed upon in order to guide the choice of tools and media as well as the timing of the marketing activities. Goals associated with branding and related marketing activities are:

- To strengthen commitment of currently involved cluster actors,
- To further anchor and establish the cluster strategy,
- To attract new cluster actors,
- To increase visibility beyond regional borders,
- To increase attractiveness for human resources, partners and investors,
- To foster cross-cluster and cross-border collaboration.

## **6. Communicating Cluster Internal Environment**

Internal communication will include developing continuous relations with cluster members, cluster stakeholders and not member actors in the cluster ecosystem. Internal communication also covers promotion of the cluster and cluster services to undertake cluster activities and ensure sustainability of the cluster.

Cluster communication should follow an integrated and participatory approach where practitioners – cluster management team – should avoid promoting activities within a single company or institution if they are aiming to strengthen the cluster. This is unlikely to provide benefits to the wider cluster or support the development of the cluster itself. Instead, practitioners should take every opportunity to promote joint working and the sharing of information, such as through joint research projects, so contributing to the development of networks with a purpose.

Another area to be paid attention is how to communicate term “cluster” with cluster actors and companies along with cluster development stages. Use of cluster and collaboration terms can cause increase of expectations from cluster management and may create misunderstandings among cluster actors.

To avoid above situation below are given as tips for the Cluster Coordination Unit of BUTEXCOMP Cluster:

- At the initial stage of the cluster development studies first be use you understand what cluster concept is and how you will communicate the concept among cluster actors,
- Do not promote word “cluster” as a magic word which will bring solutions to problems of cluster companies and the region,
- First review in detail cluster analysis and strategy to set communication basis for cluster communication. Without knowledge of the sector and the cluster dynamics communication of cluster concept and services will not be satisfactory,
- Do not feel pressure to get members and involve all companies at the starting point, clusters are ecosystems and cluster initiatives can start with volunteering cluster actors.

In order to amplify satisfaction and commitment from cluster actors, the cluster management should focus on several core activities. One of them is direct contacts with members, visiting them, capturing their needs and offering high quality services based on these needs will bring about the most positive effects.

## **7. Communicating Cluster External Environment**

As stated earlier in this manual visibility of the cluster at international level contributes competitiveness of the cluster and cluster members while increasing recognition of the cluster with its products, services and solutions as a specialised province. To this end there are key steps for cluster coordination units or cluster management teams to be taken. Clusters are accepted and proven systems that help provinces and companies to access market information, trends, join with international networks and better integrate with international value chains. Guiding information on cluster network and business development is separately provided in the related document for BUTEXCOMP. Under this heading it is important to underline that as one of the supporting strategies of the cluster communication and promotion is highly interrelated with network development and internationalisation strategies and services. To this end below are the key channels for communication and promotion at external environment:

- Effective promotional and visibility materials to be used in national and international events, fairs, seminars,
- Presence and participation in regional, national and international sectoral and cluster environment to present cluster, companies and offered solutions,
- Presence and participation in national and international cluster organisations, seminars and sectoral events,
- Constant and close work with regional and national media,
- Membership to cluster and industry specific networks and platforms,
- Dissemination of information and materials such as success stories, lessons learnt and market trends etc.,
- Studies to promote cluster companies starting from the cluster web site to physical events and organisations.

## 8. Marketing Cluster Services

Cluster services have to be professionally presented and marketed. The first priority in marketing services is to clearly structure them and to feature them as appealing and sense making as possible to cluster members. The following instruments have proven particularly effective as marketing instruments:

- Presenting the services on the cluster web site,
- Information on the services at cluster meetings and workshops.

Marketing strategies can be designed to actively promote cluster services. When it comes to branding, a cluster develops a brand comprising the values and attributes of the cluster. These, in turn, create an image among stakeholders.

Consequently, branding is a strategic process that not only includes the view of the cluster organisation and its members but also the perspective of additional stakeholders. These include policy makers, donors, partner clusters from neighbouring economic regions and the public at large. The regional context of the cluster location must be taken into consideration – including policy framework, economic structure and cultural aspects. It is especially relevant to create a consistent branding. It should be well in line with the brands of the cluster members and the branding strategy of the entire region in which the cluster is located.

Once a cluster brand is designed and visualized in the form of a logo, brochures and/or video and shared among the members and stakeholders, marketing activities can be implemented to promote and consolidate the brand. For each target group, the objectives of the communication activities need to be agreed upon in order to guide the choice of tools and media as well as the timing of the marketing activities. Goals associated with branding and related marketing activities are:

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## 9. BUTEXCOMP Communication Tools and Steps

### 9.1. Approach and Key Messages for Cluster Communication

BUTEXCOMP Cluster has been defined as an innovation cluster, which is based on a strong and developed textile, automotive supplies and related supported industries along with the value chain. In the light of its objective, core strategic pillars of BUTEXCOMP cluster are; open innovation, productivity for transformation and internationalisation. Communication of the cluster with members, potential members and external actors for collaboration has to be in line with strategic priorities of the cluster. Cluster Management Team has to keep in mind key below messages and values while communicating cluster:

- BUTEXCOMP is an innovation cluster, aims to support cluster companies access knowledge, support finding partners and improve innovation capabilities thereby development of new product and process ideas,

- BUTEXCOMP Cluster is based on strong and well-developed industry value chain. Start of the cluster is with BUTEXCOMP Project however cluster is not a project, rather cluster is formulation of a system with companies which is coordinated by the Cluster Coordination Unit to facilitate activities for cluster members to better access tools, information, sources, markets and creates value added networks for better way of competition,
- BUTEXCOMP Cluster is not a close system or cannot be defined as closed organisation, cluster is open to companies, institutions and academicians who believe they can benefit from the cluster and/or provide added value to the cluster.

While communicating with company's cluster managers and/or teams often struggle to explain how they can attract interest and ensure involvement of companies. As the Cluster Coordination Unit, do not give any promises or try to ensure companies will earn or make better profits in their businesses through cluster membership. Clusters are collective phenomenon in which each and every member contributes for collective development and do not push any actor for involving in cluster activities. Go with the ones who are ready to walk with you even with small steps.

## 9.2. Cluster Web Site

Cluster web site is the most important communication tool of the cluster and has to be a separately prepared and developed page. A cluster web site had not be a part of a project event it is a final output or activity of a project. This is the key requirement for registration and validation for ECCP – European Cluster Collaboration Platform (see next picture).



ECCP Platform Cluster Validation Criteria shown in Cluster Web Pages

The cluster web site has to be designed and developed in the way that it reflects -at least- below items:

- Cluster vision and mission,
- Cluster services,
- Cluster news - including innovation networking activities,
- Cluster members,
- Cluster management team.

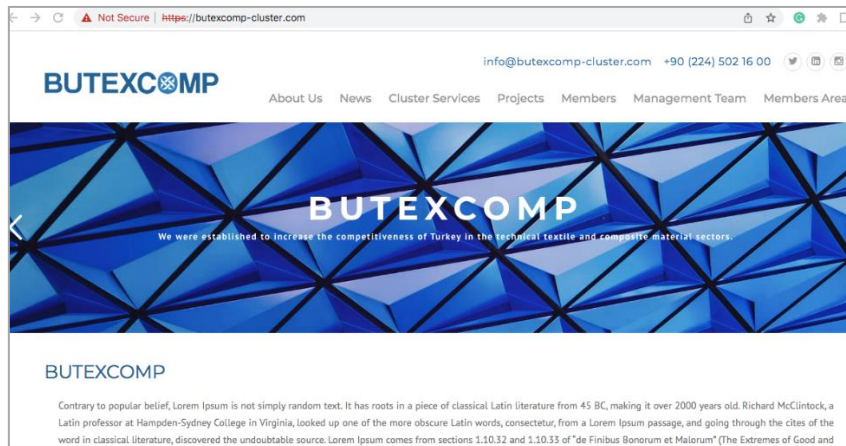
In the light of above framework BUTEXCOMP Cluster Web Site development studies started to take place just before CCU Manager has been assigned. The CCU team under supervision of the cluster expert will undertake web site content development and update work until the end of the project. After completion of the project and implementation phase of the cluster studies, it is expected CCU team will continue to keep updating the web site. Web site address: [www.butexcomp-cluster.com](http://www.butexcomp-cluster.com).

**Cluster theme, sub-pages design and visibility** (an example in the following image).

### 9.2.1. About Us

BUTEXCOMP - Bursa Technical Textile and Composite Materials is an innovation cluster which based on strong presence of advanced industry and brings together cluster textile, technical textile and

composite material manufacturing companies, companies from supporting industries, academia and research institutions and public bodies.



BUTEXCOMP Cluster is located in Bursa, which is one of the key leading industrial provinces of Türkiye with strong transportation and physical infrastructure, and well connected with İstanbul, enjoys also its ports which makes Bursa one of the most competent provinces exporting to EU.

Rise and development of specialised technical textile and composite materials of Bursa is based on developed automotive and textile industries, apart from furniture and food-processing sectors. Seating systems for automotive, railway and aviation sectors, technical textile solutions for automotive, railway and aviation, automotive composite materials, wide range of functional textiles for homotech, clothech and protech are among key products of the cluster. BUTEXCOMP provides solutions for its partners, customers and cluster members from material to process and the final product.

Supporting open innovation in cluster ecosystem, transformation by productivity and internationalisation for growth constitute three key pillars of our strategy. Since its establishment in 2020, green and digital transition is among top priorities of the cluster.

**Cluster Vision:** *“BUTEXCOMP Cluster aims to be among the world's leading clusters with its green and digital transformation approach in the technical textile and composite materials sector, with value-added products and technological solutions in areas where sustainable and high-performance materials are used.”*

**Cluster Mission:** *“Bursa technical textile and composite materials cluster through its professional cluster management capabilities, supports cluster companies and cluster ecosystem with continuous innovation, productivity and internationalisation. Cluster works in close collaboration with key stakeholders for up-skilling workforce and improves competences of the companies in line with changing needs of the industry.”*

### 9.2.2. News

Under news section up to date information on cluster activities especially the ones with cluster members undertaken have to be provided. News section has to be continuously updated by the cluster coordination unit.

### 9.2.3. Cluster Services

Cluster services were defined in the cluster strategy and action plan. These cluster services has to be clearly stated and explained in the web site. Below can be used as the related content for this segment:

- Information and Training Services,
- Internationalisation – Export Development and Partnerships Services,
- Network Development Services,
- Innovation Services,
- Marketing and Promotion Services,
- Industrial Tests and Analysis,
- Project Development Services.



### **Information and Training Services**

BUTEXCOMP Cluster provides sectoral trainings to its members to improve both competences of cluster member companies and skills of employees. Theoretical and applied trainings take place in collaboration with cluster partners and BUTEKOM.

BUTEXCOMP Cluster organises seminars and information days in the areas of technical textiles, composite materials and in the application areas such as automotive, hometech, clothech and protech. Seminars and information days organised by the cluster is open to industry.

### **Internationalisation Services**

In line with the internationalisation strategy, BUTEXCOMP Cluster provides services for cluster members in two main areas:

- Export Development, and
- Finding Partnerships for Technology Development.

BUTEXCOMP Cluster aims to support cluster members to find partners to improve their products, solutions and develop export markets. BUTEXCOMP internationalisation services are B2B matchmaking activities, cluster-to-cluster activities and establishment of relations with related actors at international level.

### **Network Development Services**

Cluster networking services aims to facilitate communication, collaboration and business development among cluster members and from actors at external environment of the cluster. Since BUTEXCOMP cluster enjoys presence of actors representing entire value chain of technical textile and composite materials sector at a high number of players, networking services gains substantial importance.

Networking services also comprise activities in which suppliers and customers can meet and develop mutual commercial businesses.

### **Innovation Services**

BUTEXCOMP is an innovation cluster by its industrial structure and profile of cluster members. Therefore, providing services facilitating open innovation, supporting cluster companies in their innovative product ideas, products and processes and supporting cluster actors in their innovation capacity is key priority of the cluster. In this sense in collaboration with cluster member organisations, public bodies and BUTEKOM, cluster designs and develops services for undertaking advanced research, developing project ideas, prototyping and testing along with TRL1 to TRL9 processes.

### **Marketing and Promotion Services**

It is aimed to promote cluster companies, expertise and solutions provided by the cluster. BUTEXCOMP Cluster aims to represent cluster at national and international environment and promote cluster companies in targeted markets.

BUTEXCOMP aims to increase international recognition of the cluster at national and international level to establish new partnerships, attract investments and initiate strategic partnerships in technical textile and composite materials apply.

### **Project Development Services**

Project development services of the cluster are provided in collaboration with cluster members in the strategic priority areas of the cluster. Through project development services cluster able to establish long-term strategic partnerships, run innovation projects and contribute market development. BUTEXCOMP provides the environment and networking for cluster members to find strategic partners to develop and implement variety of projects.

### **Projects**

Under this page information and related links of completed and on-going projects should be provided.

### **Cluster Members**

This page is the place where cluster composition is shown and has utmost importance for cluster visibility especially for the ECCP Platform. In this page, cluster composition should compose at least 15 cluster companies, business support organisations, and academia and public bodies. Names of cluster members with their link to company web sites are mandatory in this page. Page has to reflect presence of cluster triple helix.

Cluster coordination unit has to get in touch with cluster members before placing names and links of the cluster members.

### **Cluster Management Team**

Information on cluster management team has to be provided with this page. In this page –at least- dedicated cluster manager has to be seen with the accessible contact information.

### **Members Areas**

This page will be accessed by a password and will be open to cluster members. This page can provide specific information that can be shared only with the members; such as market research documents etc.

### **9.3. Cluster Informatory Power Point Presentation**

Cluster Coordination Unit has to prepare a power point presentation to be used in national and international events, networking meetings and may also share it completely or partially in the cluster web page for information purposes. Cluster presentation should be prepared in English and in Turkish and has to cover below topics:

- Introduction;
- Geographic location of the cluster;
- Information about province, export, GDP, key sectors etc.;
- Composition of cluster members;
- Information on Cluster Products;
- Information on cluster strategy and priority areas;
- Cluster vision and mission;
- Cluster Actions;
- Cluster Contact Details.

Over the course of the BUTEXCOMP Project, the cluster expert has prepared an Informatory cluster presentation. This power point project can give an idea to CCU and the cluster manager to prepare and update the Informatory cluster power point presentation.

### **9.4. Use of Social Media and Cluster WhatsApp Group**

Active use of social media accounts creates a significant impact on cluster internal and external environment. Through social media channels of LinkedIn and Instagram a wide range of target group Along with the cluster members can be accessed.

Creation of WhatsApp group can also help facilitate communication among cluster members and ensure fast organisation of events and members contribution.

### **9.5. Media Relations**

Media relations have to be established by the cluster coordination unit especially at province level and if possible, at national level. Share and publication of cluster achievements and actions should take place in media including industrial magazines, news and related public media.

### **9.6. Cluster Corporate Identity**

Having a cluster corporate identity is essential to increase effectiveness of cluster visibility and institutional appearance. Cluster has to have its own cluster logo and use of corporate logo and colours in different areas such as cluster web site, business cards, cluster letterhead papers etc.

## **10. Conclusions**

Cluster communication, promotion and visibility is highly important and strategic area to be managed by the cluster coordination unit. It is strongly linked with networking services and activities of the cluster at a wide scope at cluster internally, regional, national and international level. As an integrated and participatory approach communication efforts should be balanced and equal when at the level of cluster members. Once it is set, as part of the cluster development approach, all members have to own the idea and willingness to disseminate and promote the cluster.

Communication, promotion and visibility can be one of the strongest means for contributing promotion of cluster companies, promoting region and the cluster, attract new business and investors and contribute a better future.

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