

# Webinar on 28.04.2020 on:

# The COVID-19 cluster response

# Solutions for dealing with ecosystem supply chain disruptions

By the European Commission, featuring the European Cluster Alliance

# **Summary Report**

The webinar was well attended with over 250 participants representing cluster managers representing specialised SME intermediaries from different sectors, policy-makers and other actors from industrial ecosystems, that deal for instance with health aspects and procurement issues. It featured various examples of bottom-up hands-on experiences on how to respond to COVID-19 demonstrating that cooperation and an active knowledge sharing such as on norms and standards are needed. It showed how clusters have been fast, agile and flexible and in finding solutions to tackle the shortage of personal protective equipment, from which lessons were drawn for dealing with supply chain disruptions elsewhere. The presentations and discussions stressed the importance of shared leadership and partnerships to go beyond the 'usual suspects' and involve all relevant key actors and communities in the industrial ecosystems, including from the Social Economy. It was stressed that actors need to come together to jointly work in an open innovation environment on the prioritisation of efforts and funding as well as on the validation of ideas to find alternative and/or complementary solutions to potential shortages of raw materials, supplies as well as related skills gaps. The need for a common mapping of industrial ecosystems to identify all key actors and the possibility to build upon the European Cluster Collaboration Platform was stressed in this respect. Entering in the next phase of the crisis, Participants flagged out that it is important to critically reflect on the experiences and to shift from emergency response towards a strategic approach for the future.





# 1. Agenda

#### Webinar 28.04.2020

Time	Session
10:30	Introduction
_	Dr. Ulla Engelmann, Head of Unit, DG GROW
10:35	
	COVID-19 and clusters: Introductory remarks by the European Cluster Alliance
10:35	(ECA)
_	Antonio Novo Guerrero – President of the European Cluster Alliance
10:50	Hervé Floch – Vice-President of the European Cluster Alliance
	Mobilization of Advanced textiles & materials clusters for the creation of a
10:50	new mask production supply chain - Lessons learned & perspectives for
_	European Dimension
11:00	Stéphan Vérin - <u>Euramaterials</u>
11:00	
_	Comments by the European Commission and European Cluster Alliance.
11:05	Q&A session.
	Locally distributed models of cooperation emerging in moments of social
11:05	distress
_	Jouke Verlinden – University of Antwerp
11:15	David Cuartielles – <u>Arduino</u>
11:15	Comments by the European Commission and European Cluster Alliance.
_	Q&A session.
11:20	
11:20	Solutions for supply chain disruptions: Logistics and the social economy
_	Ilaria Massari - <u>Reindustria</u>
11:30	
11:30	Comments by the European Commission and European Cluster Alliance.
_	O&A session.
11:35	
	Open live chat discussion on lessons learned for dealing with supply chain
11:35	disruptions across Europe's industrial ecosystems
	Moderated by Carsten Schierenbeck, team leader for industrial modernisation,
12:25	Cluster Team of DG GROW
12.25	
12:25	Wrap-up and next steps
-	Dr. Ulla Engelmann & Antonio Novo Guerrero
12:30	





# 2. Summary of presentations

### Introduction

Moderator: Carsten Schierenbeck (Team leader - DG GROW)

Speaker: Dr. Ulla Engelmann (HoU - DG GROW)

Dr. Engelmann opened the Webinar, welcoming the participants. She provided a brief overview of the webinar and its objectives. In particular, she highlighted that the European Cluster Collaboration Platform (ECCP) is addressing about 1000 industrial clusters. She also emphasised that the current COVID-19 crisis asked for rapid reaction from all stakeholders demanding coordination. The European Commission has therefore joined forces with the European Cluster Alliance to establish on the ECCP a COVID-19 response forum moderated by ECA for ECCP users to connect, solve and save. The forum helps to address both needs and solutions for disruptions in the value chains. Key features in addressing the crisis are shared leadership, boosting collaboration, opening up innovation and tackling COVID 19 in the social economy.

# COVID-19 and clusters: Introductory remarks by the European Cluster Alliance

Speakers: Antonio Novo Guerrero (President of ECA) & Hervé Floch (Vice-President of ECA)

The <u>European Clusters Alliance</u> (ECA) is a young organisation connecting 13 national associations of Clusters representing more than 740 clusters organisations. ECA is closely linked to the ECCP which acts at European and international level. ECA is young, but its members are not. It is thus at the core of industrial clusters and collaborative projects.

At the beginning of the COVID-19 crisis, ECA realised that the situation required rapid responses. Yet, they quickly realised that any meaningful response to the crisis needs to be thought through, coordinated, and draw on all resources available, outside and inside of the industrial clusters.

As ECA stressed, coordination among stakeholders is key. Therefore, within days, ECA created links with other initiatives and mapped as many relevant actors as possible. As it turned out, many initiatives had already been launched, some of them in isolation, some in cooperation with each other. Thus the European Alliance Against Coronavirus was created, an open forum that has been meeting daily from the beginning of the crisis, creating a community of leaders and experts on each one of their fields. The forum brings together actors from civil society, the social economy and industrial clusters, the European Economic and Social Committee and representatives of numerous bodies of the European Commission, with a strong involvement of the DG GROW. All of them sharing leadership. Until end of April, the forum has organised 32 videoconferences with more than 1,000 attendants in total, generating numerous concrete results.

To centralise information and provide an overview of resources and information, ECA and ECCP codeveloped in the form of shared leadership the <u>COVID-19 response forum</u>. The forum provides







interested parties with the opportunity for cooperation. In addition, there are newsletters, mails, and other resources to keep people informed. The forum allows clusters to learn from each other, to link up, to share best practices, ideas, and – most importantly – actions. The three cases highlighted later during the webinar showcase examples of successful cooperation across sectors and stakeholders.

Through these efforts, new networks emerged, that address three important axes of action:

- **key technologies**, including e.g. the supply of products vital for the medical sector, such as masks);
- **policy innovation**, including e.g. where new actors emerge and need to be recognised as such as new actors; and
- a new, more strategic approach.

ECA stressed that the time horizon is another important aspect to factor in. beyond the short-term reaction to the imminent crisis, getting the economy back on track and providing people with the right skills for the time after the crisis are important challenges, yet these challenges provide the opportunity for enhanced cooperation again.

Therefore, a key question that needs to be reflected on in the actions taken is how, what is being done, can be made sustainable and scalable, to ensure the buy in of the economy and success in future.

In addition, ECA invited everyone to participate in their regular open European Alliance Against Coronavirus morning sessions. At least one meeting per week is dedicated to discussions on the social economy and links to other sectors of the economy in the light of the COVID-19 crisis.

#### Brief intervention by the European Commission

In their brief intervention, the European Commission reminded participants of the <u>Joint European Roadmap</u> towards lifting COVID-19 containment measures. This announced the set-up of a "rapid alert function" to identify supply and value chain disruption as well as solutions to tackle them. It highlighted that this should rely on existing networks, such as the Enterprise Europe Network, clusters, chambers of commerce, trade associations, SME Envoys and Social Partners.

Mobilization of *Advanced textiles & materials* clusters for the creation of a new mask production supply chain - Lessons learned & perspectives for European Dimension

Speaker: Stéphan Vérin (General Secretary of EuraMaterials)

<u>EuraMaterials</u> is a chemistry cluster in northern France. Yet, its members are also active in other countries, including Belgium, Austria, and Japan. The innovation cluster includes a business club and building facilities to attract new companies. It focuses on advanced materials, including e.g. textiles, plastics, glass, and other complex structures. The key question the cluster aims to address is how to





improve materials and processes of its members, covering all the value chain from ideas to market development.

The COVID-19 crisis has caused major supply chain disruptions. Yet, the cluster can build on experiences it collected in 2008, during the H1N1 Virus outbreak. Already back then, the cluster took rapid action, and jointly with the companies of the cluster developed a new supply chain for the face mask industry. Innovative products were developed, partly funded by the government, in case that the outbreak would develop into a pandemic. Yet, different from the current situation, the outbreak could be contained. As a consequence, the initiative to produce face masks in northern France stalled, as demand for masks and investment decreased rapidly.

Still, during the current crisis the cluster can build on and benefit from the experiences collected earlier. At the beginning of March 2020, EuraMaterials was invited to participate in a working group led by the General Secretariat for Defence and National Security to address the shortage in the supply of face masks. As the decision was taken to reserve FFP2 masks for the healthcare sector, the key question that needed attention was how to address the need of substitute masks needed. In close collaboration within the working group, EuraMaterials was working with the government to set up the terms of reference for two new types of masks, which did not yet exist in France before (one type of masks for workers in essential sectors in contact with the general public, and the other type of masks one for the general public). The cluster and its members provided their expertise, providing technical as well as analytical support, e.g. by creating a materials database to identify suitable materials. This initiative led to a change in legislation, and has inspired learning across borders, as the Spanish ministry of industry accepted the new French standards in early April 2020.

While the initiative will continue its work, EuraMaterials notes that a key challenge for the future will be to rethink industrial value chains to ensure self-sufficiency in Europe and France. In particular, drawing from experiences collected during the outbreak of H1N1 in 2008, it will be important to reflect on opportunities to make business models sustainable in the medium and long term, extending beyond the imminent crisis.

#### Brief intervention by the European Commission

In their brief intervention, the European Commission pointed out that collaboration is important to trigger innovation. Only cooperation and innovation can help to ensure that alternatives to disruptions and shortages of materials are mitigated. Responding to a comment, the European Commission stressed that it had already loosened the rules on State Aid to facilitate the investment in promising initiatives and to help companies in these challenging time with its Temporary Framework for State Aid measures to support the economy in the current COVID-19 outbreak adopted in March. The European Commission invited participants to visit the ECCP COVID-19 response forum which contains further information on the loosened rule and examples from Member States.







# Locally distributed models of cooperation emerging in moments of social distress

Speakers: David Cuartielles (Co-founder of the Arduino open source company) & Jouke Verlinden (Professor at University of Antwerp)

Mr. Cuartielles started his presentation noting that during a pandemic, civil society is called for action, as top-down approaches are not sufficient to react to the crisis. In the current COVID-19 crisis, governments cannot purchase the equipment required due to high demand, and support for national companies to produce the equipment needed takes time to translate into large-scale production. As a result, a bottom-up movement started to materialise in Spain. By now, more than 15,000 people are active across the country to develop ideas how to respond supply disruptions and to develop solutions.

Mr. Cuartielles provided three examples where close yet not institutionalised collaboration via the *coronavirusmakers* platform between different actors, including medical personnel, engineers, and IT specialists, led to a fast development from experiencing a problem, problem definition, the identification of a solution and the production of this solution in a very short time. These collaborations led to the rapid production of face masks, face shields, and even respirators, building on the commitment, creativity, and dedication of everyone involved.

While these projects have been successful, there are challenges for these bottom-up or 'grass-root' initiatives. Internal coordination has been a challenge, as there was no clear leadership no internal structure present at the beginning of the initiative. In addition, certification procedures are challenging, especially for an initiative with a less clearly defined structure when compared to regular companies. As the initiatives are a direct response to the COVID-19 crisis, fundraising is a challenge, with many volunteers working for free and allocating personal funds. As the crisis will be temporary, many elements of the initiative are likely to disappear in future again, unless efforts will be made to institutionalise the lessons learned.

In his presentation, Mr. Verlinden build on the observations from Mr. Cuartielles. Similar to the efforts of coronavirusmakers in Spain, there have been efforts within the civil society in Belgium to design and produce masks decentralized, making use of 3D printing and open source information. He noted that a key challenge was to familiarise with the standards applicable to masks, as the masks produced should ideally be compliant with key standards for the medical sector. In particular, for non-profit entities or bottom-up initiatives that try to tackle challenges during the COVID-19 crisis, sharing best practices and designs and access to existing (regulatory) procedures present a challenge, as they are designed for institutionalized actors. As a result, certification of the products appears very challenging. Mr. Verlinden therefore calls to reflect on the existing procedures and if there are opportunities to make them more flexible to consider ideas and solutions that civil society can develop. Centralizing information, e.g. on validated or tested 3D designs, procedures, standards and norms, etc. is essential in the coming period, as well as an intermediary body 'translating' information between (lose) civil society organisations and official institutions.

Brief intervention by the European Commission





The European Commission lauded the efforts made in Spain and Belgium to produce equipment urgently needed. The Commission stressed that these examples show how important a thorough mapping of ecosystems is. The mapping needs to get all relevant actors involved, and it should aim at going beyond the 'usual suspects' to ensure that potentials are fully utilised. This applies to funding and the distribution of these funds as well.

### Solutions for supply chain disruptions: Logistics and the social economy

Speaker: Ilaria Massari (General manager of REI)

REI - Reindustria Innovazione, is a regional development agency active in the Lombardy region in Italy. During the current COVID-19 crisis, Lombardy has not only been among the most affected regions in the country. At the same time, the region is part of the economic powerhouse of Italy. As a result, the crisis has hit the region hard, with significant spill-over effects on the Italian economy. The COVID-19 crisis paralysed inbound and outbound logistics.

Yet, companies were able to react to the crisis, as the example of the cosmetics industry showcases. Cooperation happened via the regional cosmetics cluster, which reacted by developing short- and medium-term strategies. At the cluster level, changing needs were mapped, with a focus on the medical sector. As a result, companies adjusted their lines of production to produce hygienic gel and the like. In the medium term, it is expected that the current crisis will lead to a sustainable transformation and adaptation of the cosmetics cluster/ sector to changing circumstances. For example, value chains have already and will need further adjustment to ensure continuity of production lines. In addition, the crisis offers opportunities for innovation, such as touch free and smart labels. Shared leadership with ECA is a key success factor in the success of the cluster's reaction and transformation. In particular, Mrs. Massari pointed out three key values as central for success:

- Free and collective organisation;
- Cross-sectoral collaboration; and
- Multilevel and democratic governance.

Yet, Mrs. Massari notes that structural connections to the social economy are still missing. She therefore calls for efforts at cluster, national, and the EU level to step up efforts by adding a social dimension to (cluster) strategies, enhancing cross-sectoral approaches, and investments in more effective network management.

### Brief intervention by the European Commission

In their brief intervention, the European Commission pointed out that the lessons learned in Lombardy will be important during the period of economic recovery. The Commission stressed the importance of skills and functioning networks in order to implement projects and to revitalise the economy.







# Open live chat discussion on lessons learned for dealing with supply chain disruptions across Europe's industrial ecosystems

Moderator: Carsten Schierenbeck (Team Leader - DG GROW)

Participants raised the following questions that were answered by the panel of speakers:

# Q: Mapping of value chains: do we have ideas how to identify value chains and to identify weaknesses?

A: There is a need to work on this and room to improve. More flexibility is needed in the approach, as several examples showcase, to account for more fluid ecosystems and to map flexible relationships.

#### Q: How can we make use of the SME envoy?

A: The SME envoy network is an important network. From the view of a cluster, one solution would be to encourage SMEs to be connected with at least one or several clusters. There is a large number of SMEs that are not yet very active in clusters or are not familiar with the notion of ecosystems and clusters. Clusters should link with the SMEs envoys network, exchanging information and creating strong collaborative actions.

# Q: What can we learn from the experiences we learned about today for other sectors? Should they change production lines? What have been the obstacles?

A: Changing production lines in these times is risky – it creates costs for companies which cannot be certain about how to recover them. In addition, value chains are highly interconnected and interdependent. Thus, it is not possible for a single company to implement a change of production lines, this always needs to be an integrated approach.

#### Q: How did companies react? Was it easy to adjust production lines?

A1: When talking about shifting production lines, an important question is if it is a temporary or permanent shift. For example, after the H1N1 outbreak, the companies looking into the production of masks did not shift production lines permanently. Yet, they could now build on the experience and call back workers that were working on these production lines back then. It is therefore important to ask companies: Do you want to go further and stay in this market after the crisis is over? If so, cluster need to ask how they can help companies to stay in business even after the immediate crisis is over.

A2: It is not always easy for companies to adjust. For example, there was lots of interest in the automotive sector to reuse their tools and equipment for the production of medical equipment. Yet, they experience challenges, as standards for medical equipment and also the production standards are





very different and sometimes much stricter. Companies lacked an understanding for these different standards and other documentation requirements. So, it is important to explain to companies these differences. There has been a lot of discussion about initiatives to shift manufacturing lines from third countries to the EU again—however, as far as I am aware, there are no success stories yet.

### Wrap-up and next steps

Speakers: Carsten Schierenbeck (Team Leader - DG GROW) & Dr. Ulla Engelmann (HoU - DG GROW)

Mr. Schierenbeck thanked all speakers for their valuable input and examples. He then summarised the key lessons of the presentations:

- A thorough **mapping of ecosystems** is important to identify all key actors. Additional efforts are needed to go beyond the 'usual suspects' and to also include actors from civil society.
- Shared leadership can facilitate exchange and enhance cooperation, as can
- An **open innovation approach** that allows people to provide ideas and collaborate easily.
- All of this is necessary to **find solutions to supply shortages** or value chain disruptions quickly.
- Sharing knowledge and expertise are key. This also includes **knowledge on standards**, procedures, and rules, to facilitate the development of new products.
- With countries now slowly entering a new phase in the crisis, it is important to reflect on the experiences to **develop a more strategic approach** for the medium and long term.

Dr. Engelmann thanked the speakers and stressed the importance of a hands-on approach to counter the crisis. The examples have shown that cooperation is needed. She noted that there is a need to find ways to exchange with each other and make information available to others. Thus, sharing is a key term, be it shared leadership or sharing knowledge and good practices. Once the imminent crisis is over, there will be huge challenges ahead of Europe to ensure the recovery of the economy. She highlighted that this webinar was the start of a series and that the next one would be dedicated to the economic recovery and announced at the European Cluster Collaboration Platform.







# 3. Speakers & moderator

**Ulla Engelmann** is the Head of Unit for Social Economy within DG GROW, the Directorate General being responsible for Internal Market, Industry, Entrepreneurship and SMEs, at the European Commission. Since the beginning of 2017 she covered European Cluster Policy, Social Economy as well as Women Entrepreneurship and Entrepreneurship education. From 1.10.2018 onwards Advanced Technologies including Artificial Intelligence and Digital Transformation for industry have been added to her responsibilities. Previously, she worked at the Joint Research Centre (JRC), the in-house science service of European Commission, for many years in different functions. She started in the JRC in Ispra (Italy) in 1993 as a post-doc in fusion research, and moved on to manage various units (communication, international relations, and others) in Ispra and Brussels. Dr. Engelmann holds a PhD in analytical and radiochemistry completed at the National Research Centre in Karlsruhe.

Antonio Novo combines his training as a technologist and psychologist to develop his professional life around Collaborative Innovation through Industrial Clusters. Antonio is Managing Director of the Cluster IDiA, which brings together 81 Aragonese companies and institutions that collaborate in the development of ICT related projects. He held the presidency of the European Clusters Alliance, joining 13 national clusters networks and 740 clusters, and is also president of the Spanish Federation of Clusters. Antonio is member of the Expert Group on Clusters of the European Commission. He co-led the Smart Digital Ecosystems through Clusters group on TCI Network, the global cluster network.

Hervé Floch is the General Manager of ALPHA – Route des Lasers & des Hyperfréquences (ALPHA-RLH) French competitiveness cluster created in January 2017 and resulting from the merger between the ex-Route des Lasers (Bordeaux) and Elopsys (Limoges) cluster. He also instigated the signature of several inter cluster MoU as with Aerospace Valley (France), Arizona Optics Valley (USA) or Optonique (Canada) and has supported interregional clustering and attended European Cluster Collaboration Platform (ECCP) sponsored matchmaking missions. As the President of the "Europe" Committee of the French Association of Competitiveness Clusters (AFPC. He has been involved into the Phase 2 of the European Cluster Excellence Initiative (ECEI2), launched by the European Commission.

**Stephan Vérin** is acting as General Secretary of EuraMaterials EuraMaterials is a merger between 2 competitiveness clusters: Matikem (bio-based materials, hybrid materials and third generation materials) and UP-tex (high performance textile materials). The merger took place on July 1, 2019. Stéphan Vérin is an Economist with a Master in European Affairs and aMBA in Global Fashion Management Is involved in cluster management & cluster policies since 2005.

**Prof Jouke Verlinden**, Faculty of Design Sciences of University of Antwerp. Jouke is professor at the Department of Product Development, he focuses on Augmented Fabrication, exploring the domains of Mixed Reality and Digital Fabrication for improving human-centred design. Before, he worked 18+ years at TU Delft on various 3D printing and robotics projects, such as a 3D printed steel bridge (MX3D, Starts Prize 2019). He is currently involved in emergency production and validation of Personal Protective Equipment, specifically facemasks (FFP2/FFP3). This involves active correspondence with







peer academic, industrial, and maker communities on solutions that work, challenges in sharing solutions linked to European/WHO norms, and getting proper solutions certified/homologation.

Carsten Schierenbeck is a team leader responsible for cluster policy development with a focus on industrial modernisation, based in the Cluster Team of the 'Social Economy' unit of the European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. He deals with a number of EU cluster initiatives under the COSME and Horizon2020 programmes aiming to connect industrial ecosystems and channel support to SMEs via intermediaries. Building bridges between SME, innovation, industrial and regional policy is at the heart of his work. Previously, Carsten has undertaken research for the University of Birmingham in the UK, worked for the West Midlands regional representation office in Brussels as well as for an SME in property management in Germany. He holds a PhD, an MBA in International Business Administration, a Bachelor of Commerce and a Professional Qualification in Property Management.

**David Cuartielles**, PhD in Interaction Design, and MSc in Telecommunications, is Co-founder of the Arduino open source company, Research Fellow at the Internet of Things and People Group at Malmo University. Currently volunteering at the Coronavirusmakers community in Spain, acting as coordinator for donations and documentarist. David has specialized in the creation of platforms cocreated in the interaction between users and developers.

**Ilaria Massari**, General manager of REI – Reindustria Innovazione, the local development agency active in Cremona province, Lombardy Region (IT), with a major publicly funded capital. She is engaged in building public-private partnerships and managing applied research projects, building bridges between local value chains and research centres / Universities.



