Aerospace & Defence: Cluster activities for a sustainable and resilient ecosystem

Summary

EU Clusters Talks
25 January 2023, 8:30 – 9:45 CET
Aerospace & Defence: Cluster activities for a sustainable and resilient ecosystem

The European Cluster Collaboration Platform organised this EU Clusters Talk on 25 January 2023, 8:30 – 9:45 CET, to discuss the critical challenges for the twin transition in aerospace & defence, the role of clusters to support the transition, and cluster projects and activities that can serve as examples.

Agenda of the meeting
Moderation: Chris Burns
1. News from the European Cluster Collaboration Platform
   Nina Hoppmann, team member of the European Cluster Collaboration Platform
2. From Our Own Correspondent: LEVIATAD Eurocluster
3. Perspectives from the European Commission
   Giancarlo Granero, Head of Unit Coordination & Interinstitutional Relations, DG DEFIS, European Commission
   Catherine Eginard, Deputy Head of Unit Coordination & Interinstitutional Relations, DG DEFIS, European Commission
4. Panel debate: Cluster activities for a sustainable and resilient ecosystem
   Fabienne Daveran, Head of European Office, Aerospace Valley
   Isabelle Tovena Pecault, Director Europe & International, Alpha-RLH
   Krzysztof Krystowski, Managing Director, Silesian Aviation Cluster
5. Funding opportunities
   Nina Hoppmann, team member of the European Cluster Collaboration Platform

Key messages:
- Clusters are encouraged to participate in the public consultation on the Transition Pathway for the Aerospace & Defence ecosystem.
- Support to innovation is key for the twin transition.
- Companies and clusters deal with the challenge in keeping the balance between protecting technologies at home and receiving critical raw materials from outside the EU.
- Photonics is a key enabling technology that has interesting applications for the ecosystem.
- Synergies between civilian and military technologies are needed.
- A barrier that many SMEs are dealing with in the drone industry is the fragmentation of the market. Clusters can help reduce that by matching key actors along the value chain.
- SMEs need to be a stable part of the supply chain in order to be involved in projects led by the big Original Equipment Manufacturers (OEMs).
1. News from the European Cluster Collaboration Platform

Nina Hoppmann, team member of the European Cluster Collaboration Platform

After the introduction by moderator Chris Burns, the following news items were presented:

1. Call for Expression of Interest to host a Clusters meet Regions event. Deadline is 1 April 2023, 18:00 CET.
2. Registration for the C2Lab in Lund on 21-22 March 2023 is open.
3. Invitation to join the ECCP Discussion Groups on LinkedIn
4. Registration for webinar on investing and doing business in Ukraine on 2 February
5. COSME project PRESTIGIOUS published mapping of drone actors in Europe

2. Perspectives from the European Commission

Giancarlo Granero, Head of Unit Coordination & Interinstitutional Relations, DG DEFIS, European Commission

Catherine Eginard, Deputy Head of Unit Coordination & Interinstitutional Relations, DG DEFIS, European Commission

Giancarlo Granero announces that the European Commission is on the verge of launching a public consultation on the Transition Pathway for the Aerospace & Defence ecosystem. It will outline the actions and measures for the green and digital transition and increasing the resilience of the ecosystem. The goal is to transform the business models and value chains, which requires a strategic plan. The development of the Transition Pathway is a standardised process. The first step is the publication of a staff working document, to which the ecosystem can give feedback. The Commission expects the Transition Pathway to be completed by the end of 2023.

Catherine Eginard outlines the envisioned content of the Transition Pathway:

1. Analysis
   a. Main challenges, vulnerabilities in terms of value chains and external dependencies, post-covid impact and impact of war in Ukraine
   b. Strength of the single market
   c. Cross-cutting policies for green and digital transition and resilience
   d. Synergies between the different parts of the ecosystem and technologies
   e. Re- and upskilling of the workforce
2. Resilience
   a. How to reach non-dependent technologies
   b. Dependence on input
   c. How to have a more competitive ecosystem, putting innovation at the centre
   d. Security and how to protect critical infrastructure
3. Green transition
   a. Cleantech
   b. Climate neutrality
   c. Monitoring and provision of data
d. Corporate sustainability

4. Digital transition
   a. Development of new business models
   b. Private investment and sustainable public financing at EU level

She launches several questions to which the Commission would like to receive input from the clusters:

- What is the role of the public authorities on the different levels to address the challenges?
- How to support “made in Europe”?
- What are technology barriers?
- What are technologies to be prioritised?

Closing her presentation, she highlights that we need to put in place actions and measures to reach the goals. It is a co-creation process, so the Commission needs contributions and participation in the upcoming consultation and workshops.

3. Panel debate

The discussion among the panellists focuses on cluster activities for the development of the ecosystem, internationalisation, support for SMEs in the EU market, and important technologies.

Cluster activities and projects

Fabienne Daveran explains that Aerospace Valley’s main activity is support to innovation. They have developed specific programmes to support entrepreneurship and start-ups. They also have a Eurocluster project named METASTARS, which aims to help the ecosystem with the twin transition and resilience. The consortium will establish industrial roadmaps, host a series of workshops to discuss the issues for the transition, and distribute vouchers to SMEs. Moreover, the cluster works on facilitating public procurement for the space down-stream value chain with their HORIZON Europe project PROTECT.

Isabelle Tovena Pecault highlights that we saw the importance of collaboration during the pandemic, which is why she believes the Euroclusters to be a good initiative to build on that experience. Her cluster Alpha-RLH is a deep tech cluster focussing on photonics and electronics. As tech providers for the aerospace and defence ecosystem, they work with actors from the quadruple helix, particularly in creating a knowledge society, research, innovation, and European calls.

Krzysztof Krystowski says that the Silesian Aviation Cluster is one of the 20 key national clusters in Poland, specialised in light aircrafts and aircraft components. Deriving from this specialisation, members started to develop drones. Together with CURPAS in Germany, they have established the European Drone Cooperation, that now gathers 12 clusters active in this sector.

Internationalisation

Isabelle Tovena Pecault stresses that internationalisation activities are in demand. They help start-ups and SMEs to make connections abroad. However, the challenge is keeping the balance between protecting technologies at home and receiving critical raw materials from outside the EU. Work on the
whole life cycle is needed to keep the balance. Krzysztof Krystowski adds that they also help their members with international sales.

**Important technologies**

As a technology to prioritise in the plans, Isabelle Tovena Pecault mentions photonics, which is a key enabling technology but not well known. It is closely related to electronics. Photonics is for example used in communication devices and is linked to quantum technologies, satellites (spectroscopy), and all laser activities.

Especially in the aviation sector, much is moving in the field of Green Tech, e.g., research on new materials, composite materials, the design of aircrafts to decrease fuel consumption, and the design of engines. Catherine Eginard mentions the Alliance for Zero Emission Aircraft as a good example for initiatives working on greener and cleaner technologies. She highlights that we need to create synergies between civilian and military technologies. To push this development in the future, we need both budget and research and innovation.

Fabienne Daveran shares that they organise events on greener defence to discuss the question of how companies can adopt greener technologies and materials.

**Support SMEs in EU market**

To strengthen the European SMEs, Aerospace Valley works closely with national authority for defense on different support schemes at national level. Furthermore, they hold various events to promote the European Defence Fund and they work with their SMEs to answer to the EDF calls.

Isabelle Tovena Pecault and Fabienne Daveran agree that the market needs a well-trained workforce capable of working with these high-level technologies. It is further necessary to promote careers in the defence sector more attractively.

Krzysztof Krystowski announced that they are working on a business-oriented online platform for producers, OEMs, subcontractors, and other entities from the drone sector, which will be open for European entities. A barrier that many SMEs are dealing with in the drone industry is that the market is very fragmented. Many small companies do not know each other. Therefore, the clusters will provide this matchmaking space.

He mentions another issue for SMEs, which is regulation and standardisation. These need to be handled on both local and European level.

To help SMEs reach funding for innovation, European aeronautics clusters have created the Clean Aviation Programme.

Giancarlo Granero adds that in general, the European funding programmes are designed for European players. However, in discussions with the Member States, the practical feasibility is often put into question. We face external competition, which is why EU players should pull together to have a competitive ecosystem.

**OEMs**

Krzysztof Krystowski explains that projects like the Future Combat Air System are typically led by the big OEMs. To be involved in these kinds of projects, the SME needs to be a stable part of the supply
Clusters, which very often keep direct contact with the big players, can help in connecting the SMEs.

**SME representation**

At European level, we should have a place for clusters and associations to represent the SMEs. Krzysztof Krystowski gives the European Aerospace Cluster Partnership (EACP) as an example. Giancarlo Granero confirms that the EC is in regular contact with the ecosystem. The expert group on this ecosystem is big, with both big and small players being represented.

### 4. Funding opportunities

**Nina Hoppmann, team member of the European Cluster Collaboration Platform**

Closing the EU Clusters Talk, Nina Hoppmann shares the following examples of funding opportunities:

1. **Alliances for Sectoral Cooperation on Skills** (implementing the ‘Blueprint’); Deadline: 3 May 2023
2. **SecurIT**: Critical infrastructure protection, disaster resilience and public spaces protection; Deadline: 14 March 2023
3. **AMULET 2nd Open Call**; Deadline: 22 March 2023
4. The SURE 5.0 project - [Acceleration Programme 1](#); Deadline: 1 March 2023