

Civil, Defence & Space: Challenges and innovation in dual-use technologies

Summary

EU Clusters Talks 21 September 2022, 8:30 – 9:30 CEST





EU Clusters Talk "Civil, Defence & Space: Challenges and innovation in dual-use technologies"

The European Cluster Collaboration Platform organised this EU Clusters Talk on 21 September 2022, 8:30 – 9:30 CEST, to discuss:

- the exploitation potential of dual-use technologies, opportunities for SMEs and start-ups across various (civilian) industrial ecosystems, and future trends;
- cross-fertilisation and synergies between civil, defence and space industries to boost innovation, reduce dependencies, and enhance European economic growth;
- support schemes and investments;
- international cooperation and partnerships to work on technology, trade, and standards;
- and the greening of the industry to respond to the energy and environmental challenges.

Agenda of the meeting

Moderation: Chris Burns

- 1. News from the European Cluster Collaboration Platform
- 2. From Our Own Correspondent: <u>Defence Estonia Cluster</u>
- 3. EU actions and examples to boost innovation, cross-fertilisation, and cooperation for the development of dual-use technologies

 Michalis Ketselidis, Senior Expert, Coordination of Foreign, Security & Defence Policy

 Implementation, European Commission
- 4. European Network of Defence Regions (ENDR).

 Paul Anciaux, Policy Officer at the European Commission, DG DEFIS
- 5. Panel debate:
 Matej Gajzer, Managing Director, Slovenian Energy and Environment Partnership in Defence (SiENE)
 Stephanie Renaud, Pole OPTITEC.
- 6. Funding opportunities



1. News from the European Cluster Collaboration Platform

Rosa Hirtzel, team member of the European Cluster Collaboration Platform

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

- 1. Launch of the Advantage Ukraine, the investment initiative of the Government of Ukraine.
- 2. Four <u>EUROCLUSTERS</u> in the Aerospace and Defence ecosystem were launched on 1 September: LEVIATAD, METASTARS, GEMSTONE and PIMAP4Sustainability.

2. From Our Own Correspondent

Defence Estonia Cluster

Defence Estonia Cluster was launched in 2019 and currently has 23 active members including 2 universities. Defence Estonia Cluster is a network for international cooperation and export to enhance the cooperation between Estonian companies, R&D institutions and clients. The aim of the cluster is to promote innovation in the defence and security industry and to develop new and highly competitive products and services for export. The overall visibility of the cluster has increased considerable and this year they have average about one new member per month. The long-term goal is to be double our cluster membership and multiply our member company's turnover.

3. EU actions and examples to boost innovation, crossfertilisation, and cooperation for the development of dual-use technologies

Michalis Ketselidis, Senior Expert, Coordination of Foreign, Security & Defence Policy Implementation, European Commission

Michalis Ketselidis gave and overview of the activities in the European Commission on dual use. In general, there are two areas where the European Commission works. First, the export control and the second area, the support for dual use innovation infrastructure. He focusses his statement on this area of work.

As Michalis Ketselidis explained, the availability of the funding for dual use projects is often limited by legal constraints. There are EU programs that support dual use, for example de Military Mobility Program and the European Structural Investment Funds which allows the support of defence and dual use activities as part of a specialization strategy. However, the most important program is the Horizon Europe which support research and the European Defence Fund (EDF), these programs are not allowed to support dual use. Michalis Ketselidis underlined that this needs to change. Because of that, in three Commission's communications since February 2021, the European Commission inform that they will proceed with possible amendment to the framework of dual use research and innovation.

After this statement, he explained how they are going to proceed. There are two threats, one in the long term, probably for the next Financial Framework to allow legislation to support dual use. But also, in the short term, trying to straight out to the maximum that EU have. In case of the European Defence Fund (EDF) there is a defence innovation program with about 2 billion \in that will support defence innovation and as a part of that there is a dual use incubator. In case of the European Investment Bank, it is announced a 6 billion euros program of dual use.



Ending his statement, Michalis Ketselidis highlighted that there are many areas of dual use innovation and he wanted to focus on the case of drones. The European Commission in November will present a communication on drones, named Drones Strategy 2.0.

4. European Network of Defence Regions (ENDR).

Paul Anciaux, Policy Officer at the European Commission, DG DEFIS

Paul Anciaux presented the European Network of Defence Regions (ENDR). The European Network of Defence Regions was launched in 2016, with the aim of bring together regional organizations and clusters to exchange good practices. They inform how integrate dual use elements into the regional development strategies and in particular smart specialization strategies. The European Network of Defence Regions also keeps the regional organizations and clusters informed about the defence related funding, so that they can internally share the information with their ecosystems. Finally, he highlighted that the network is a great tool to promote regional clusters of excellence.

Currently, the European Network of Defence Regions is formed by 44 members from 19 different Member States. Until last year, all the activities of the network were funded by the COSME Program but now this has been taken over by the European Defence Fund. The main platform is their website, the information on the website is available to any visitors. It is an opportunity for the members to increase their visibility, to share best practices, exchange information and also to promote their events. Precisely, for the European Network of Defence Regions, the events are the key activity of their network, they regularly organize events that take place in the regions. Paul Anciaux announced that the next event will take place in Málaga, Spain on the 17th and 18th of November and it will be focus on dual – use technologies, cybersecurity and digital applications in defence.

Ending his statement, Paul Anciaux explained that the ENDR European Conferences is under preparation, they will announce more details in the coming weeks and months. He highlighted the different themes, one event in France where they will talk about Greener Defence, next in Portugal where they will talk about important role of SMEs in the defense supply chain and the opportunities and challenge related to that and finally one event in Czech Republic related to defence innovation.

5. Panel Debate

Before the presentations of the panelists, Chris Burns asked Matej Gajzer a question about examples of civilian technologies in defence. Matej Gajzer gave examples of civilian applications of dual use, as he said there are many examples of dual use technologies such as artificial intelligence, drones etc. But he focussed on the energy related technologies. He explained that there are many technologies related on green transition that are applying in the civilian sector and that can be apply on dual use, the question is how we can use these technologies in dual use.

Before the beginning of the discussion, the two panellists introduced themselves and their organisations:

Stephanie Renaud, Pole OPTITEC.

KETs4DualUse2.0 is a project focus on the SMEs as a key actor to generate innovation. They support SMEs to internationalize targeting the countries that are particularly interested in them through webinars and trainings. The KETs4DualUse2.0 project is formed by 5 European clusters.

After her presentation, she explained that to find private funding you need to focus on long-term partnerships for instance for research part.



Matej Gajzer, Managing Director, Slovenian Energy and Environment Partnership in Defence (SiENE)

Matej Gajzer is the managing director of <u>TECES</u> and <u>president of the Slovenian Energy and Environment Partnership in Defense</u>. One of them main objectives is to apply the green technologies that are used in the civilian sector for dual use. They identify opportunities to use dual use technologies related to the green transition and energy environment. Matej Gajzer underlines that they have established a Slovenian energy environment partnership in defense.

Open Dialogue

Matej Gajzer highlighted the great job that the European Commission is doing in this matter, promoting and strengthening collaboration. The announcement of the new measures and instrument from the European Commission will help to the dual use sector. He also mentioned that the dual use sector is very unknown sector for the civilian sector, due to this, he highlighted the significance of promoting the business opportunities.

Talking about the creation of a cluster focus on dual use, Matej Gajzer explained that the clusters are usually connecting with different stakeholders as industry sector, government, research organizations etc. And in the case of dual use technologies also the Minister of Defence or armed forces. First step, it should be to discuss with the stakeholders and decide the business model.

Later, Paul Anciaux explained that the European Regional Development Fund has been used by several actors to set up defence-related clusters. He recommended to contact with their regional development authorities and see if there is a program in the region that could help to create a cluster.

Regarding where the investment comes from in dual use, Stephanie explained that it depends on the technology. The most dynamics technologies, like drones, the funding can come from the private sector easily. But it is not simple to find fundings if the application of the technology is not well defined. Matej Gajzer underlined the relevance of foster collaboration between partners.

Alexander Yurchak presented the Ukrainian Cluster Alliance, which is formed by 37 clusters of Ukraine, nine of them are related to engineering, space technology and drones, in these clusters there are some enterprises which provide dual use technologies. They have relationships with the Ministry of Defence and organizations of defence but he explained that there are many regulatory limitations. In Ukraine there are many volunteers, initiatives and enterprises that are trying to produce products to help the army.

Addressing a question about the application in the logistic sector, Matej Gajzer underlined that the competent solutions should be integrated in a specific solution.

Regarding the green transition in the dual use, Matej Gajzer explained that the defence sector is one of the main consumers of energy and the infrastructure rely on fossil fuels and it is transported by land, sea, or air transport. The main idea is how to be more independent, to decrease dependency on fossil fuels and produce energy locally. Other principal point that he wanted to point out is how to consume less or consume energy more efficiently. Stephanie Renaud stressed that thanks to technological advances, energy can be motorized, and more efficient consumption can be achieved.

She underlined that the sector has an important role not only as consumers, but also as providers of solutions and data intelligence that could be a key for the ongoing transition.

Michalis Ketselidis explained certain sectors that could join dual use. For example, cyber security sector, the European Commission will present in November a Cyber Defence Policy. He added Space, as a good example. They hope that with the new regulation framework will announce new ideas.

As final comments, Matej Gajzer underlined the challenge of the lack of skills and competent experts in dual use technologies and people who really understand the sector.

Stephanie Renaud stressed out that she was fully agreed with him. The scientific skill in the sector is the key to innovation and for the future of the sector.



5. Funding opportunities to strengthen resilience

Rosa Hirtzel, team member of the European Cluster Collaboration Platform

Closing the EU Clusters Talk, Rosa Hirtzel presented the following funding opportunities:

From the European Commission:

- 1. <u>Smart and multi-functional textiles to set of equipment adapted to defence applications.</u>
 Deadline to apply is 24 November 2022.
- 2. <u>Packaging technologies for critical defence components</u>. Deadline to apply is 24 November 2022.
- 3. <u>Non-thematic research actions targeting disruptive technologies for defence.</u> Deadline to apply is 24 November 2022.
- 4. <u>Non-thematic development actions by SMEs.</u> The funding opportunity encourages the driving role of innovative SMEs to turn technology and research results into defence products. Deadline to apply is 24 November 2022.

From cluster partnerships:

5. GALATEA Coaching services open call. Deadline to apply is 30 September 2022.