Proceedings of joint EDA-Commission workshop

Regional Smart Specialisation for the EU Defence Sector

28 January 2013 – EDA

Welcoming participants, **Peter Scaruppe**, Industry and Market Director at the European Defence Agency (EDA), remarked that the workshop is a way of opening a practical discussion with industry, institutions and Member States on ways to enhance Europe's defence industry and military capabilities. The EDA and European Commission have jointly organised this workshop to help stimulate greater innovation in the defence sector and to share best practices and lessons-learned on smart specialisation and defence-related regional clusters.

Stressing the importance of such initiatives in light of the European economic crisis, **Slawomir Tokarski**, Head of Unit of Aeronautics, Defence and Maritime Industries at the European Commission, stated that the Commission is looking at a variety of ways to support the industrial aspects of defence in the Member States. This is a new area of work for the Commission and it needs to learn more about finding synergies between civil and military sectors, and how best it can gear its regional policy tools accordingly. The border line between defence and civil technologies and industries is becoming increasingly thin and this opens up new business opportunities.

Because of the critical need for economic growth and creating jobs, **Eleni Marianou**, Secretary General of the Conference of Peripheral Maritime Regions, explained that the defence sector will play an increasingly important role in financial crisis exit strategies. The defence sector plays an essential industrial role and it has a contribution to make in meeting the Europe 2020 Strategy objectives. Regions are interested in the defence sector as it conducts high-level research and innovation (R&I) and can lead to technological spin-offs that are of great benefit to regional development. This workshop is a good way to identify entry points for European support and to enhance cooperation across sectors, concluded Marianou.

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Panel Discussion 1 – Research and innovation strategies: key tools to increase cross-fertilisation between military and civil sectors

The speakers on this first panel agreed that small medium-sized enterprises (SMEs) are key to the European defence sector. They also agreed that smart specialisation and the maintenance of regional clusters are essential to the success and sustainability of Europe's defence SMEs and the European Defence Technological and Industrial Base (EDTIB).

Tanya Armour, Assistant Director Industry at the EDA highlighted that there had been a steady increase in the role of SMEs in the defence supply chain, emphasising the importance of Centres of Excellence. But that more needed to be done to improve SME's access to defence market. To address this, EDA had launched an exploratory study on European defence-related Centres of Excellence.

Drawing on the findings of the EDA study, **Anas Hanan**, Senior Project Manager at Roland Berger strategy consultants, presented how SMEs play an increasingly important role in the development of technological innovation. Hanan explained how the 103 defence-related

clusters identified in the study - 75% of which are located in seven European Union (EU) countries - provided evidence that the dual-use nature of emerging technologies was increasingly important to the defence sector and to SMEs. The contractor recommended measures to support the creation and development of the defence-related CoEs, noting that EDA could act as a catalyst .

Luisa Sanches, Policy Analyst in Innovation and Smart Specialisation at the European Commission, remarked that the economic crisis in Europe will make regional Research and Innovation (R&I) strategies key to growth and jobs. Adding that clusters need to be further integrated if Europe is to retain its world-class industries, **Tanya Armour** stressed that cluster strategies are an important part of efforts to strengthen the EDTIB (European Defence Technology and industrial base). Underlining this point, **Slawomir Tokarski** stated that Smart Specialisation is not only a precondition for funding but it can also be used as strategic tool to assist SMEs to internationalise business and to move into new markets. Clusters represent a good vehicle for promoting collaboration within and across economic sectors, added **Christophe Guichard**, Policy Officer on Clusters and Support for SMEs at the European Commission.

While stating that Smart Specialisation is not something immediately achievable, **Sanches** explained how it takes a long time to match R&I assets to business needs, to prioritise specialisations and to integrate into international value chains. The key to any Smart Specialisation strategy is an alignment between stakeholders, available resources and local and regional strategies. This was something elaborated on by **Manuel Palazuelos Martinez**, Scientific and Technical Project Officer at the Institute for Prospective Technological Studies - Joint Research Centre. Any Smart Specialisation strategy, he stated, must be built on an analysis of the regional context and potentialities; on the local and regional governance structures in place; a common vision for the future and putting in place the right policy mix and roadmap to achieve it; a prioritisation of resources and value added sectors; and on monitoring and evaluating the strategy at all phases of its evolution.

Touching on the European Commission's cluster strategy, **Guichard** stated that a key element in working with SMEs and clusters is the provision of training and the implementation of a benchmarking procedure so as to maintain high standards. This is why the Commission has supported training modules for cluster managers, funded pilot projects, organised study trips and incentivised striving for excellence through a cluster benchmarking system. The Commission has been keen to help European clusters find international partners in countries such as Japan, India, Brazil, Korea, Tunisia and Morocco as a way to help speed up international cooperation.

However, the panelists highlighted some of the restrictions facing the defence sector. **Hanan** stated the EDA commissioned study had shown that to develop and improve European regional clusters a number of measures would be useful, including the promotion of complementarity between EU instruments, cross-border cluster cooperation and the provision of training and data on the existing cluster landscape. Furthermore, having surveyed a full list of European regional clusters, the study concluded that cluster managers find it difficult to access, and time consuming to apply for, EU instruments. These managers expressed the need for a single entry point for EU initiatives, concluded Hanan. **Armour** highlighted that EDA would strengthen links with Commission work in the area of CoE and SMEs, including the regional specialization approach; create a forum/portal for defence related CoE to improve access to information and encourage communication/interaction between them.

Building on the issue of EU initiatives, **Sanches** stressed that while SMEs would increasingly benefit from financing mechanisms such as the European Regional Development Fund

(ERDF) and the European Social Fund (ESF), no direct funding can be given to defence firms unless they are investing in products that have dual use applications or that are reinforcing economic, social and territorial cohesion. Sanches did however state that the defence sector could undertake a number of its own initiatives citing the development of technologies for dual use and the regeneration of military brownfield sites as examples.

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Panel Discussion 2 – The contribution of regional civil – military clusters to growth and jobs: Good practices from within and outside the EU

The second panel focused on examples of civil-military clusters from within and outside the EU. The examples were a way to show the opportunities delivered by these clusters, and their importance as a source of growth and jobs for local and regional economies. **Christian Breant,** Research and Technology Director at EDA, said it was essential that we learnt from best practice in existing clusters particularly how they contribute to growth and jobs and that we understand the role of national and regional policy in cluster development. We need to learn from practical examples of how defence and civil activities can cross fertilise each other.

Edwige Avice, Associate Director of BIPE S.A. (France), remarked how clusters have an agglomeration effect by facilitating competition and cooperation and that they serve as a "social glue" that holds different local and regional actors together. Clusters are also a means to encourage product diversification and to build trust between SMEs and large firms stated **Hélène Morin**, European Project Manager at Bretagne Développement Innovation (France).

The panelists agreed that the key to maintaining a sustainable civil-military cluster is the proximity of research and training centres and large firms and SMEs, plus committed funding from local, regional and national authorities. Indeed, the case studies pointed to the important logic of having in place sustainable public-private partnerships. **Thomas Baptiste**, President of the National Center for Simulation in Orlando, Florida (United States), explained how Orlando's civil-military cluster would not now be US$ 5 billion a year venture or home to more than 1,000 companies and 27,000 employees without it first having a sustainable public-private partnership in place. **Avice** underlined this point by stating that private-public finance directly contributed to the 120,000 jobs produced by the aerospace valley clusters based in the Midi-Pyrénées and Aquitaine regions.

Turning to the critical ingredients involved in the development of a civil-military cluster, all speakers agreed that achieving the right balance between research, industry and public authority involvement was fundamental. Drawing on a case study from the Bretagne region, **Morin** stated that the regional cluster comprised universities, research teams, training colleges and industry actors and this made it possible to develop electronics, shipbuilding, aerospace, telecommunications and sensors. The major factor behind the cluster's success was the combination of human and industrial capital and networks.

This was also the Orlando experience, stated **Baptiste**. Indeed, Orlando owed its success to the initial agreement by the city, county and state governments to construct a business park next to the University of Central Florida. Building on this was the decision to develop the cluster further for the purposes of military simulation and research, which encouraged the US Navy and other military services to come to Florida. Part of the ongoing success of the simulation centre was that it had capabilities which could be marketed to the civil sector (medical etc). Added to this were consistent US Department of Defence contracts and local,

county and state government spending, which encouraged further companies to settle in the area.

Education is another key element to developing successful civil-military clusters, agreed the panelists. **Baptiste** was of no doubt that the number of graduate programmes dealing with cutting-edge research and training was greatly beneficial to the military services operating in the Orlando cluster. Drawing on his region's experiences, **Steve Richards**, from the Swindon & Wiltshire Local Enterprise Partnership (UK), underlined the fact that military personnel hold a host of technical skills and are highly motivated to work, which can be of great service to the civilian sector when these individuals leave military service. **Morin** stated that the question was not just about having a highly-skilled labour force, however, because in many regions there is a skills shortage for more basic jobs such as metal working.

Turning to the challenges facing civil-military clusters, most panelists agreed that funding was a critical issue. **Richards** illustrated this with the example of the 8,000 military personnel to be cut by the British armed forces by 2015. This, he continued, will undoubtedly have a big impact on the local economy and reduced defence orders will hit local supply chains.

The panelist's agreed that to overcome reduced defence-spending the key was to adapt clusters to meet changing circumstances. **Richards** remarked how the use of existing skills in the local economy was a key asset in this regard. Drawing on Orlando's experience, **Baptiste** stated that the key value added of the cluster is that it produces a great deal of spin-off products for sectors such as transport, healthcare and homeland security. A challenge for any civil-military cluster is whether it can commercialise its technology. **Morin** underlined this point by stating that the Bretagne cluster recognises the importance of dual-use products, and this is why the cluster is concentrating on developing products such as marine renewable energies. A difficulty for clusters, added Morin, was being able to cooperate with clusters in other regions and areas.

Madame Arnould, Chief Executive of EDA, intervened to state that the agency was committed to help civil CoE overcome the barriers to operating on defence activities. There was an important role to be played in facilitating better access to information, encouraging European wide cluster partnerships and in providing incentives for co-operation. EDA would be advocating more collective action from Member States to support these important centers of innovation and productivity.

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Panel Discussion 3 – The way ahead: prospects for supply chain of defence related SMEs

Chairing the session, **Scaruppe**, remarked that defence supply chains and SMEs are essential ingredients in maintaining the EDTIB. The panelists agreed that supply chains embodied key assets such as skilled workforces, technological resources and industrial processes. **Trevor Martin**, Director of Global Gallium Nitride Strategy at IQE Group (UK), illustrated how defence supply chains are complex and interconnected, and that they represent a mix of SMEs and large firms that are geographically dispersed across Europe.

There was agreement that among the key drivers of defence supply chains is greater synergy between military and civilian markets, high capital investment and long-term funding commitments. **Krzysztof Samp**, Business Development Director of ITTI (Poland), stated that one key driver for his SME was the ability to bring together different parts of the supply chain, to remain flexible to the needs of both civilian and military actors, to invest in training over the longer-term and to retain a high-level of interdisciplinary expertise. **Thomas Knape**, Head of Research and Development (R&D) at Data Fusion International (Ireland), explained that R&D

projects are beneficial to the growth of SMEs as they allow them to gain knowledge and develop partnerships with larger firms.

The plan in Bordeaux, remarked **Denis Guignot**, Board Chairman of Aerocampus Aquitaine (France), is to create a cluster that benefits the whole supply chain process, all the way from large firms down to SMEs. The Bordeaux venture is aiming to put expertise, R&D and production processes together in a centralised way, and to go beyond military productive development, such as Rafael M38 jet engines, to also develop dual-use products and services such as on helicopter engines.

Knape explained that the mark of success for any SME is to remain flexible and respond to market niches, and to maintain a mix of civilian and military technical expertise. He added that assistance from national and regional authorities greatly assists SMEs, as does support from the EDA and the EU framework programmes.

The panelists then turned to the key challenges facing SMEs and defence supply chains. **Martin** stated that untangling the range of EU funding initiatives slowed the R&I process. He also added that different skills and customers are involved in each element of the supply chain, and so enhancing communication between all segments is essential. Projects aimed at looking at the impact of all segments of the supply chain would be very useful. Another challenge was to create synergies across the supply chain and to integrate large firms, subcontractors and SMEs, remarked **Guignot**.

Underlining these challenges, **Samp** stated how attaining authorisation from national authorities for civil-military projects can be time consuming, and there are a number of costs involved in preparing proposals to partake in EU projects. Samp explained that while projects such as the EDA's Joint Investment Programmes are of great assistance, there is significant entry work for civilian companies trying to access the military market – even those with extensive expertise to offer the military sector.

While **Guignot** remarked how the different supply chains and clusters located in places such as Bristol, Manching and Bordeaux are a value added for the EDTIB, **Samp** explained that for SMEs in Poland it is difficult to benefit from clusters because this concept is still in its infancy in the country. Continuing the discussion on the challenges, **Knape** stated that finding contacts in the larger firms is sometimes difficult; as is finding one's way into international supply chains. The panelists agreed that communicating with the military sector can sometimes be difficult.

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Concluding remarks

Concluding the workshop, **Tokarski** remarked how it is important to build relations between the civilian and military sectors. Interaction between these two sectors has to proceed on a pragmatic basis and the need for practical exercises on how to integrate the needs of the defence industry into Smart Specialisation processes is important. Tokarski specified the importance of working with the military sector to identify initiatives it could undertake for economic growth and jobs, and working on a single entry point for defence SMEs to a host of EU tools and initiatives. Echoing similar sentiments, and before thanking participants, **Scaruppe** stated that the EDA would like to build on such workshops with further initiatives in the future. EDA and the Commission saw the workshop as the start of work on an area that held great promise to develop and strengthen Europe's industrial base.