

European Defence Agency

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I am delighted to have the opportunity to address the UAS community through this yearbook of UVS-International. UAS have been identified as one of the priority areas by the Ministers of Defence and EDA is determined to support relevant activities to enable a wider use of UAS in support of current and future missions.

The European Defence Agency is a young institution with an enormous agenda to cover. The EU Member States who created this new body gave us a very broad mandate with four major tasks:

- to work for a more comprehensive and systematic approach to defining and meeting the capability needs of European Security and Defence Policy;
- to promote more effective use of defence R&T resources in Europe;
- to promote equipment collaborations, both to contribute to defence capabilities and as catalysts for further restructuring of the European defence industry;
- to work for an internationally competitive European Defence Equipment Market and a strong Defence Technological and Industrial Base.

All of these functions relate to improving Europe's defence performance by promoting coherence in place of fragmentation. While there is still a long way to go, the Agency has already started to make a real difference. In the field of UAS, the EDA has already initiated several studies to assist Member States and industry in assessing some of the critical technology areas.

- A study on line-of-sight/beyond line-of-sight was finalised in February 2007. The study was intended to consolidate and analyse the available information on the LE-UAS operational environment, integrate the outcome of known efforts undertaken in the area of data links, recommend a specific, realistic and feasible solution and propose a way ahead for future standardisation, technology and regulatory efforts.
- Also in February 2007, EDA launched a new study for a common UAS simulation test bed that could be used as a benchmarking and common experimentation tool for both large industrial parties and small and medium-sized enterprises. The goals of this study are:
 - To promote European collaboration in the UAS field in requirements definition, development, certification, training and possibly procurement of UAS systems, leading to a more efficient use of funds compared to a pure national approach.
 - To encourage development of innovative (sub-) components for UAS systems by small and medium sized enterprises.In the course of 2008 the consortium will demonstrate a scalable, modular and geographically dispersed UAS simulation test bed using currently available systems and technology.
- In January 2008, EDA launched a project with an even larger potential impact, focussing on UAV traffic insertion. The project aims to encourage European

stakeholders such as airworthiness authorities, air traffic management bodies, procurement agencies, industry and research institutes to develop a joint agenda for common European UAS activities, leading to specific projects addressing security and commercial — as well as defence — uses of UASs.

- This major project will be able to take advantage of another study completed in November 2007 on possible short and medium term solutions for sense-and-avoid for UASs. Once mature, sense-and-avoid technology will undoubtedly have its impact on manned aviation too.

Current and past experiences in Iraq and Afghanistan, but also ESDP operations such as that in the Democratic Republic of Congo, have demonstrated again and again the potential value of UAS. The Agency hopes to add value by encouraging collaboration in research projects to develop the technologies required for such systems and possible joint programmes when the time comes to build and procure them. A European approach should strengthen the companies involved in such projects and provide opportunities for small, innovative firms to contribute, thus strengthening the European technological and industrial base.

A break-through in the field of traffic insertion will enable wider use of UAS although it is evident that not all UAS will be able to integrate seamlessly with manned air traffic. The dialogue between regulators, industry, potential customers and the wider public will result in a better understanding of what can be solved technically and what needs to be addressed on a wider scale. As current aviation regulations primarily look at aviation safety from the perspective of passengers, UAS will trigger a wider discussion how unmanned and manned systems in the air (or on the ground) need to evolve to achieve public acceptance. The use of UAS by security forces (police, armed forces, customs etc) will push the boundaries of what is currently accepted. The wider goal however is to create a safer environment for citizens.

As the EDA is busy in all of these fields, it is inevitable that we will get involved in discussions in many areas such as *h a r m o n i s a t i o n*, certification, continued airworthiness and air traffic management. I look forward to a fruitful and mutually beneficial relationship with the non-defence sector, with the wider goal of strengthening Europe as a major player in this global arena.

