

UVS International conference 2009

“UAS Air Traffic Insertion - A strategic view of the European Commission & the European Defence Agency”

Block C: Unmanned Aircraft Systems (UAS): Needs and challenges

Subject: Integrating UAS into the Global ATM system.

Time: 11:30 – 12:30

Timeslot: Total 14' (DG TREN 7' + EDA 7'),

- Mr. Peter Bombay, EC Representative to ICAO, replacing Mr. Luc Tytgat, Head of Unit Single sky and modernization of air traffic control (ATC) — European Commission (EC)
- and Maj.Gen. Carlo Magrassi, Deputy Chief Executive Strategy — European Defense Agency

Bullet Points:

- It is a pleasure for me to address this broad international panel today. My intention is to provide you with some of the European Commission's views and ongoing activities regarding the integration into the airspace of Unmanned Aircraft Systems (UAS). When preparing this event, we decided with the European Defence Agency to intervene jointly to provide a combined civil and military European perspective on UAS. This is not just an organizational “gimmick” – it is prove of our commitment to integrate from the start the civil and the military views and necessities into consideration. Because UAS and the regulation of its airspace use is so new, we have an opportunity to develop things in partnership, and this is an opportunity we should not miss, if we want to avoid the problems we are facing until today because of the separate development of civil and military use of airspace for manned aviation.
- For the air transport sector, Unmanned Aircraft Systems (UAS) is a rather new domain of interest, as most of the activities we have covered until now were mainly related to “manned” aircraft.

- Unmanned Aircraft Systems (UAS) have been used by the military for some considerable time. But UAS are now finding applications for non-military usage in the civil environment and it is obvious that they could highly contribute to reduce human life exposure in long, dull, dirty or dangerous air missions, while providing potential economic savings and environmental benefits with less fuel consumption, less CO2 emission, and less noise than manned aircraft.
- The production of UAS implies the use of a number of high-level technologies in the field of "sense and avoid", on-board surveillance capabilities, advanced communication systems, and 'green' flight capabilities. This requires from the industry developing such systems a large spectrum of knowledge and the ability to combine all those constituents.
- The development of unmanned aircraft may also greatly contribute to the improvement of manned systems, in particular in support of single pilot operations and for the development of anti-collision systems, and shall be a valuable enabler for testing and implementing new technologies and procedures for the aviation industry as a whole.
- The full and seamless integration of specific constituents like UAS is not only an essential issue to be addressed and resolved at European level, but also worldwide. The full scale UAS market is unlikely to exist, and the potential governmental applications shall not be fully used, if the access to the airspace issue is not fully resolved, and if appropriate legislation and regulatory material are not developed, in particular for flights conducted in non-restricted airspace.

- With the Single European Sky, and the SESAR Programme as its technical arm, Europe has established an overarching framework for enabling the safe access to the airspace to all users without any discrimination. This includes without any doubt the insertion of specific constituents like **UAS**.
- The European Commission is currently considering its possible contribution to facilitate the insertion of UAS in a more and more constraining airspace environment. The intention is to favour a holistic methodology based on a multidisciplinary, multicultural, and civil-military approach. It shall aim at catalysing and federating all the work done in the field of legislation, certification, research and development, radio spectrum availability and environment.
- While our experience in the field of UAS is still limited, activities have already been initiated to identify specific requirements and the current existing obstacles to the insertion of civil and military UAS in non restricted airspace.
- This approach aims to make best use of the civil and military resources available in Europe, by coordinating the respective efforts, while ensuring the involvement of all relevant civil and military stakeholders of the sector under the legal frameworks of these entities.
- The first essential objective of the European Commission is to ensure the political and societal awareness regarding the use of UAS and their potential benefits for the citizens. In parallel, the intention is to elaborate a consolidated European UAS Policy with clear strategic objectives and identified milestones. Finally, the European Commission is looking at the synergies between transport and defence authorities from the outset of UAS developments in order to ensure a dual approach of the sector.

- For this reason the European Commission has decided to hear the various segments of the UAS sector, in order to better understand their specific requirements, the current obstacles encountered for their development and the potential solutions that might be developed at European level.
- The first of such hearings took place on 08th October 2009, and was dedicated to **Light UAS (In Europe unmanned aircraft with a mass of less than 150 kilogram)**. We started with this sector because it is here where use for civil or semi-civil tasks is actually already taking place. The hearing demonstrated the large spectrum of missions already performed, in particular by States (fire-patrol, observation, traffic control,...), which however take place most of the time outside the context of a legal framework. The Light UAS community indicated the importance of developing an appropriate regulatory framework, and the hearing clearly brought forward that a single approach shall not fit all UAS types and requirements.
- The next key action in Europe for the UAS sector will be the first High Level European Conference on UAS that shall take place in Brussels on 27 January 2010. The aim of this Conference is to raise awareness of high political authorities regarding the importance of the European UAS Industry, as well as of the potentialities offered by UAS for governments and citizens. My colleagues in Brussels working on this issue have good hope that the conference will already trigger first decisions on the actions which will be conducted in order to support the expansion of the UAS industry and UAS usage in Europe. Again, the fact that the Conference is co-organised with the European Defence Agency is a sign that we think the topic should be addressed through a transport-defence partnership.

- After the Conference further hearings will have to focus on other sectors of the UAS community.
- The overall idea behind these initiatives is to elaborate in Europe the appropriate measures or, when deemed necessary, the regulations, which can enable the emergence of new markets, but with the guarantee that the highest standards of safety shall be ensured. Our hope is to be able to provide the civil and military UAS stakeholders, within a reasonable timeframe, with the possibility to operate UAS in non-segregated airspace under certain conditions. Thus approach should create a positive environment for industry that shall then be able to invest and build business plans taking advantage of the market opportunities provided by the prospect of accessible airspace.
- **I would like to thank you for your attention and pass the floor to Carlo Magrassi from the European Defence Agency.**

Intervention of Carlo Magrassi **EDA**