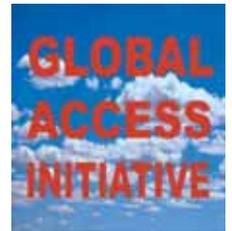


The Global Access Initiative

By Peter van Blyenburgh



It is becoming clearer every day that in order to introduce unmanned aircraft systems (UAS) into non-segregated airspace, it is imperative for nations having an adequate UAS industry and/or user base to form a national UAS vision. Such a national vision should be elaborated in coordination between the national industry, and the national military and regulatory authorities. However, as European UAS will have to operate in the Single European Sky (SES), it also becomes imperative that a European UAS vision is agreed upon.

Similarly, a North American UAS vision (Canada & USA, and possibly Mexico) is required, just as multi-national regional visions in other parts of the world e.g.: China, India, Russia, South Africa, South Korea, the Australia & New Zealand & Papua New Guinea zone, and the Indonesia & Malaysia & Singapore & Thailand zone.

In this context «Vision» should be interpreted as a consensual approach formally agreed on by the regulatory authorities, the military establishment and industry in the respective countries.

In Europe, the certification of unmanned aircraft with a mass of more than 150 kg are the responsibility of the European Aviation Safety Agency (EAS). However, the certification of unmanned aircraft systems comprising aircraft that weigh less than 150 kg are the responsibility of the European national civil aviation authorities. The European national UAS visions should encompass both classes of UAS (below & above 150 kg). Certification requests relative to small UAS have been received by the civil aviation authorities in a number of countries now (Canada, Italy, Netherlands, Spain, Sweden, UK), and it is becoming apparent that it would not be efficient, and actually be counter-productive, if the certification activities in European countries relative to unmanned aircraft with a mass of less than 150 kg are not co-ordinated, which would permit European harmonization.

The European and North American UAS visions would be the core contributions towards a Global UAS Vision. In order to make the transition from individual national visions to a single European one, and subsequently to a global one, as seamless as possible, the national visions in Europe (the 41 ECAC⁽¹⁾ countries) should not be elaborated in isolation from each other, but should be closely co-ordinated from the onset with the objective of European harmonization. This European co-ordination should involve regulatory authorities, military authorities, standardization bodies, all relevant stakeholder groups, current and future UAS users & service suppliers, industry and academia on a national and pan-European level.

In turn, the European UAS Vision should be co-ordinated and harmonized with the North American UAS Vision, as well as the UAS visions of other diligent countries (e.g. Australia, Canada, Japan, New Zealand, Singapore, South Africa, South Korea, U.A.E.). With the objective to contribute to accomplishing the aforementioned, the Global Access Initiative was instigated by UVS International in August 2005. The purpose of the Global Access Initiative is to:

- Encourage independent national UAS system industry organizations, associations or working groups to form, and contribute to creating national visions, and to subsequently collaborate on an international scale;

- Encourage information exchange between these organizations, associations and working groups;
- Provide a channel permitting the the widest possible dissemination of the aforementioned information;
- Contribute to the co-ordination & promotion of international non-competitive industry actions and initiatives;
- Reach out to all relevant stakeholders on an international scale;
- Building on the UCARE initiative, endeavour to compile and make all relevant documents and information pertaining to the work being undertaken internationally relative to the introduction of UAS into non-segregated airspace available to all;
- Contribute to international consensus forming relative to UAS issues;
- Contribute to international standardization of UAS-related terms and definitions by continuing its work in this area and making it available to the global UAS community;
- Contribute to promoting the international harmonization of UAS system-related standards, rules & regulations at the earliest possible stage.

It is within the framework of the Global Access Initiative, that UVS International contributed to the creation of the EUROCAE WG 73 on UAS and actively participates in this working group.

One of the most important contributions of UVS International to the Global Access Initiative is its extremely extensive database containing more than 14.000 persons in 68 countries who are actively involved with UAS. In the spirit of the Global Access Initiative, and making use of this database, wide dissemination of the following documents has taken place:

- French Ministry of Defence, Flight Test Centre's USAR document;
- EUROCAE's call for participation in Working Group 73 on unmanned aircraft systems;
- EASA's A.NPA and the request for comments on it;
- EUROCONTROL's Specifications for the Use of Military Unmanned Aerial Vehicles as Operational Air Traffic Outside Segregated Airspace and the request for comments on it.

Initially in co-ordination & co-operation with the persons who were driving the now cancelled Access 5 initiative in the USA, and more recently in co-ordination & co-operation with the persons driving RTCA SC203, and with the objective to widen general awareness of UAS and the ongoing international UAS-related regulatory activities, UVS International:

- Participated in a panel session at the ATCA Annual conference, and exhibited at this event jointly with Access 5 (Dallas, TX, USA, (30 Oct-2 Nov 2005);
- Participated in the organisation of a regulatory workshop during the UAS conference in Banff, Alberta, Canada, which was orchestrated by UVS Canada, in cooperation with Aviation Alberta (Nov 15-18, 2005) and organized a meeting which resulted in a consolidated Canadian reply to EASA's A.NPA;
- Participated in a panel discussion at the AFS400 Workshop organised by the FAA (Arlington, VA, USA, Nov 29-Dec 1, 2005);
- Gave a back-to-back presentation with Access 5 at the

CANSO annual conference taking place in Maastricht, The Netherlands on February 13, 2006 to increase UAV system awareness with the international air navigation service providers community;

- Gave a back-to-back presentation with Access 5 at the ATC 2006 conference, and exhibited there jointly with Access 5 (Maastricht, Netherlands, February 13-16, 2006);
- Gave a presentation, together with EUROCONTROL at the Avionics 2006 conference in Amsterdam, The Netherlands on March 9, 2006 in order to create awareness with the international avionics community on the business potential that UAS offer;
- Participated in the first informal meeting called by ICAO on UAS that took place in Montreal, Quebec, Canada in May 2006;
- Gave a presentation at the UAV DACH symposium at the ILA (Berlin) Air Show in May 2006;
- Gave an education seminar on UAS for United Nations weapon inspectors on May 23, 2006;
- Gave a presentation to the SESAR Executive Committee in Brussels, Belgium on August 30, 2006;
- Gave a presentation to the Belgian Chapter of the Royal Aeronautical Society at EUROCONTROL headquarters in Brussels, Belgium on September 26, 2006;
- Gave a presentation at the TAAC 2006 conference in Albuquerque, NM, USA on December 4-7, 2006 that was organized by NMSU-PSL-TAAC, in order to inform the attendees on the UAS regulatory work going on in Europe;
- Participated in and gave a presentation at a regulatory workshop during the UAS conference in Montebello, Quebec, Canada, on November 7-10, 2006, which was organized by UVS Canada in order to inform the attendees on the UAS regulatory work going on in Europe;
- Participated in the organization of and gave a presentation at the 1st Trans-Atlantic UAS Summit in Washington, DC, USA on November 13, 2006, which organized by the European Institute;
- Participated in the 2nd informal meeting on UAS called by ICAO that took place in Palm Coast, FL, USA on January 11-12, 2007;
- Gave a presentation at the plenary session of the Aero India conference in Bangalore, India on February 5, 2007 in order to inform the attendees on the UAS regulatory work going on in Europe and the USA;
- Gave a back-to-back presentation with RTCA SC203 at the Civil Military Air Traffic Management Summit (CMAC) (Bangkok, Thailand February 26-March 1, 2007);
- Gave a back-to-back presentation with RTCA SC203, EUROCONTROL, EUROCONTROL Experimental Centre at the Avionics 2007 conference (Amsterdam, The Netherlands, March 7-8, 2007);
- Gave a presentation, and a presentation for RTCA SC203, at the UTAR WG 27 conference in Brisbane, Australia informing the attendees on the UAS regulatory work going on in Europe and the USA;
- Chaired two sessions and gave a presentation at the UAS Slovenia conference in Maribor, Slovenia on May 31-June 2, 2007 that was organized by the Euro-Atlantic Council of Slovenia;
- Gave a presentation at the GovSec conference in Brussels, Belgium on June 6 & 7, 2007 in order to highlight the potential applications of UAS for security applications and the required regulatory requirements;
- Gave a presentation at the the MAV2007 international micro UAS competition in Toulouse, France on September 18, 2007;
- Gave a presentation at the Civil Applications for UAS (CAUAS) conference in Boulder, CO, USA on October 2 & 3, 2007;
- Gave a presentation at the Airtec UAS conference in Frankfurt, Germany on October 24, 2007;
- Gave a presentation at the UVS Canada conference in St.

John's, NL, Canada on November 6, 2007;

- Contributed to the organization & participated in the Trans-Atlantic UAS Roundtable organized by the European Institute in Washington, DC, USA on November 12, 2007;
- Gave a presentation at the Innovation in UAS conference in Madrid, Spain on November 12, 2007;
- Gave a presentation at a restricted technology conference organized by the French Ministry of Interior in Paris, France on January 24, 2008;
- Gave a presentation at the UAS Symposium organized by EASA in Paris, France on February 1, 2008;
- Gave a back-to-back presentation with RTCA SC203 at the Avionics conference in Amsterdam, The Netherlands on February 15, 2008;
- Gave a presentation at the UAS ATM Integration Workshop organized by EUROCONTROL in Brussels, Belgium on May 7 & 8, 2008;
- Gave a presentation at the ATMA conference in Paris, France on June 4, 2008.

Other actions by UVS International that should be seen in the light of the Global Access Initiative are:

- Organization of the Workshop on Small UAS (<150 kg) during the UAV 2007 conference;
- Participation in the USEP Study, which was undertaken by the Conseil Général de l'Armement, France;
- Publication & wide distribution of the UVS News Flash;
- Publication & even wider distribution of the upcoming UVScope;
- Participation in the organization of the ESCO-UAS competition;
- Start-up of the generic UVS web site www.uvs-info.com, which is now the largest web site of its kind in the world;
- Participation in the promotion of MAV2007 and EMAV2008 conferences on micro UAS & competitions;
- Teaming with the European Institute to contribute to the organization of the 3rd Trans-Atlantic UAS Roundtable;
- Partnership with EUROCONTROL Experimental Centre to promote its annual technical conference in Bretigny-sur-Orge, France;
- Partnership with NMSU-PSL-TAAC to promote the TAAC 2008 conference in Santa Ana Pueblo, NM, USA;
- Partnership with COGES to organize the UVS Forum (tactical UGVs & UAS) at the Eurosatory Exhibition (June 16-20, 2008);
- Participation in the ICAO UAS Study Group;
- Instigation and leadership of the Interim Working Group on Light UAS;
- Instigation & organization of the International Coordination Council;
- Continued work on UAS-related terms and definitions;
- Continued efforts to help interested entities to establish independent national UAS working groups or associations;
- Continued outreach to all aviation stakeholders;
- Organization of its annual UAS conference;
- Annual publication of the UAS Yearbook.

The world is at the dawn of a new aviation era, and it is up to industry, in close coordination with the relevant government and regulatory authorities, as well as all relevant stakeholders, to make it become a reality.

In the interest of all, a co-ordinated international industry effort is required to bring the future nearer. With co-ordinated government and industry action, it may be possible to have global open skies for civil, commercial and military unmanned aviation within the decade.

Opening the airspace frontier to unmanned aircraft systems is a societal imperative, which can be accomplished, if we all collaborate.