CONTRIBUTING STAKEHOLDERS

UVS International

By Peter van Blyenburgh, President

UVS *

Introduction

UVS International is a non-profit association registered with the Chamber of Commerce in The Hague, The Netherlands and operates out of offices in Paris, France. It represents manufacturers of unmanned vehicle systems (UVS), and manufacturers of sub-systems and critical components for UVS and associated equipment, as well as companies supplying services with or for UVS. In this context, UVS should be understood as re-useable and expendable unmanned air, ground and naval vehicle systems, as well as non-reusable unmanned air, ground and naval target systems.

UVS International has over 250 corporate, academic and institutional members in 37 countries & 10 international organizations on 5 continents, namely:

Argentina	Australia	Austria	Belgium
Botswana	Brazil	Canada	China
Czech Rep.	Denmark	Finland	France
Germany	Greece	Hungary	India
Indonesia	Israel	Italy	Japan
Latvia	Luxembourg	Netherlands	New Zealand
Norway	Portugal	Russian Fed.	Singapore
Slovenia	South Africa	South Korea	Spain
Sweden	Switzerland	Turkey	UK USA
The list of corporate members can be found on the association			
web site: www.uvs-international.org.			

In general terms, UVS International's objectives are to:

- promote unmanned vehicle systems (UVS) and their future applications;
- provide the UVS community with a voice on a global level;
- provide a means to obtain international consensual views on topics of importance to the international UVS community;
- provide a channel for information exchange between industry, governmental authorities, civil aviation authorities, academia, civil & military R&D organizations, and ministries of defence;
- provide a forum to identify and examine business opportunities & areas of interest for the benefit of the international UVS community.

More specifically, UVS International endeavours to:

- promote the establishment of UAV system-related standards, airworthiness, certification & air traffic management (ATM) norms on national, pan-European and international levels, and to co-ordinate the various national efforts on a global level, in order to work towards an early harmonization of the diverse national approaches;
- instigate and co-ordinate international UVS promotional efforts (conferences, workshops, exhibitions);
- promote and instigate international industrial co-operation;
- co-ordinate relations with existing national, pan-European & international organizations for the benefit of the members and the entire UVS community;
- provide a forum for potential users to present their requirements;
- centralise UVS-related information & reference documents;
- keep members informed on international UVS developments;
- promote the future civil & commercial use of UVS systems;
 promote co-operation between industry and R&D

- organizations & academic institutions;
- promote awareness of unmanned aircraft systems with the relevant stakeholders and the general public.

Background & Milestones

UVS International originally started its activity as EURO UVS, which was instigated in June 1995, as an initiative to federate the European UVS industry. EURO UVS initially functioned as a loose federation of corporate entities without any official legal structure. Then in May 1998 it was incorporated in Paris, France as a French registered association. It rapidly became apparent that the French association structure and French law would not allow the association to develop in the desired direction and take on the activities it was aiming for, and it was decided to terminate the existence as a French registered association and found a new one with the same name in The Netherlands. EURO UVS was registered with the Chamber of Commerce in The Hague, The Netherlands in January 2000. The French registered association ceased to exist in May 2000.

Starting at its original inception, the association has endeavoured to have a significant number of honorary members; these honorary members are all representatives of national civil aviation authorities or serving military officers directly involved with unmanned systems. The intent of this category of members was to create an international network, which would permit the honorary members to contact each other and discuss UVS matters of mutual interest as association members, instead of having to go through official channels, thereby making the circulation of information much faster, and at the same time creating beneficial relationships. The list of the current honorary members can be found on www.uvs-international.org.

Starting in 1999, the association started to instigate the formation of national UAS working groups consisting of industry, and in some cases government and military representatives, to deal with UAS-related airworthiness, certification and air traffic management issues on a national level, and to exchange information amongst each other. This initiative resulted, directly or indirectly, in the formation of national associations:

- AVBS, Czech Rep. .
- Japan UAV Association
- Korea UVS AssociationUAV DACH, Germany
- UAS NorwayUAVS, UK
- UVS Canada
- UVS France

UAV DACH, a multi-national German language UAV Working Group (Austria + Germany + Netherlands + Switzerland), was instigated by UVS International in 2000 and became a national association in 2010.

Since December 2009, UVS Canada is called Unmanned Systems Canada.

1st Increase of Voting Rights

In December 2002, the General Assembly decided to extend voting rights to include corporate members with their registered headquarters and principal place of operations in an ECAC country, namely: Albania, Armenia, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep., Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy,

Latvia, Lithuania, Luxembourg, Macedonia, Malta, Rep. of Moldova, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovak Rep., Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and such other countries as the association's Board of Directors could unanimously agree on.

Name + Statute Change & 2nd Increase of Voting Rights

In early December 2003, the EURO UVS General Assembly decided by unanimous vote to modify its statute by granting voting rights to all corporate members, irrespective of the country in which they are established and where they deploy their principal activities, and to change its name to UVS International, in order to better reflect the association's global character and outreach. As not all members with voting rights were present at the General Assembly, it was decided to inform all members with voting rights and permit them to cast their vote by email. The deadline of this email ballot was on January 16, 2004, and all votes cast, but one, were in favour of the proposed statute amendment.

In February 2004, EURO UVS changed its name to UVS International and the association's new statute was approved by the Board of Directors. The new statute now permits the corporate member representatives from all countries (except those on the United Nations and/or the European Union blacklist) to submit their candidacy for a position on the association's Board of Directors. The association's Statute can be found at www.uvs-international.org

Organization & Management

As already indicated, UVS International is a Dutch legal entity registered in The Hague, The Netherland. However, most of its activities are deployed from offices in Paris, France, which are put at its disposal by the French registered company Blyenburgh & Co. This company has been contractually entrusted by the UVS International Board of Directors with the day-to-day management of the association. Blyenburgh & Co has also been entrusted with the responsibility of creating and maintaining the association's web site and organising all UVS International conferences & exhibitions, symposiums and workshops, which are all organized without any financial risk to UVS International, or its members.

The Board of Directors

The members of the Board of Directors are elected by the association's General Assembly for a two year term.

In January 2006, the General Assembly voted to increase the number of Board of Director members. In February 2008, the UVS General Assembly, followed by an Extra Ordinary General Assembly in April 2008, voted to again increase the number of Board of Director members and to modify the association's statute in order to make this possible.

Board of Director Observer status can be granted by the Board of Directors to a deserving individual. Observers do not have voting rights on Board of Director Matters, but participate in all board deliberations. The transition from Observer to full board member is decided by the General Assembly.

The current composition of the UVS International Board of Directors is indicated on following page.

International Coordination Council

In March 2008, the UVS International Board of Directors decided to establish the International Coordination Council (ICC). The ICC is an advisory group without a legal structure, which functions as a working group. The following types of organizations are eligible to join the ICC:

- · National associations;
- · National centres of excellence;
- · National & multi-national working groups;

- National competence centres;
- · European technology platforms.

The general goals of the ICC, which should be seen within the framework of UVS International's Global Access Initiative, are:

- Contribute to increasing international awareness of UASrelated matters:
- Give national and multi-national working groups the possibility to make their voice heard globally;
- Increase the dual-directional flow of information in all fields between all ICC members;
- Be instrumental to organize and supply national inputs to international working groups, or other UAS-related international efforts (see below).

The scope and activities of the ICC are the following:

- ICC members <u>supply</u>, on a <u>voluntary</u> basis, the UVS International Board of Directors with:
- Recommendations on policy to be followed and/or actions to be taken by UVS International;
- Recommendations on new activities to be initiated by UVS International;
- Information for dissemination to the international UVS community.
- ICC members <u>receive</u> from UVS International:
 - Information for dissemination to its members;
 - Support to organize national conferences, symposiums, workshops, etc;
 - Support to internationally promote national events;
 - The UVS News Flash and are allowed to redistribute it to their organization's members;
 - Aspecial section in the UVS News Flash for announcements by their organization;
 - The possibility to supply technical and opinion papers for insertion in the UVS News Flash and/or UVScope (international technical informative electronic magazine which will be launched in the near future);
 - Hard copies of annual UAS Yearbook (for distribution to their organization's members) & electronic copy of this publication for posting on their organization's web site and/ or intranet.

Two of the basic objectives of the ICC are to:

- Bring the international UAS community together without any single organization dominating an other, and increase the flow of information to all;
- Promote international coordination, cooperation & understanding.

One of the drivers to create the ICC was to put up a structure that would permit the international Light UAS community to contribute in a significant way to the ongoing standards work concerning Light UAS (<150 kg) in EUROCAE WG73 SG4. The start-up of the ICC was coordinated with the Joint Authorities for Rulemaking on Unmanned Systems (JARUS).

The final report produced by the Interim Working Group on Light UAS (IWHLUAS), instigated & lead by UVS International, was supplied to EUROCAE WG73 during its plenary meeting at Eurocontrol headquarters in Brussels, Belgium on 14 February 2008. These recommendations stated that the required work packages defined by EUROCAE WG73's Sub-Group on Light UAS should be dealt with on a national basis in the national language by national associations or working groups. These national associations, or working groups, are then to produce national opinion papers in English, and submit these national opinion papers to EUROCAE WG73's Sub-Group 4 on Light UAS, where the required harmonization will take place.

The report recommended that a limited number of representatives of each of the ICC members supplying the inputs should be active members of Eurocae WG73 SG4 on Light UAS and meet at Eurocontrol headquarters to endeavour to harmonize the received inputs, and work towards a consensually agreed document.

2010 UVS International Board of Directors



Peter van Blyenburgh Blyenburgh & Co, France President (1st year - 7th mandate)



Jean Caron EADS DS, France Treasurer (1st year - 5th mandate)



Kenneth Douglas Davis NMSU-PSL, USA Secretary (1st year - 1st mandate)



Ian Glenn ING Engineering, Canada (1st year - 2nd mandate)



Ole Vidar Homleid Robot Aviation, Norway (1st year - 1st mandate)



Eduardo Carrillo Boeing R&T Europe, Spain (1st year - 1st mandate)



David Kershaw BAE Systems, UK (1st year - 2nd mandate)



Alexander Koldaev Irkut Corporation, Russia (1st year - 2nd mandate)



Simo Mäkipaja Patria, Finland (1st year - 1st mandate)



Gérard Mardiné Sagem DS, France (1st year - 1st mandate)



Steve May General Atomics AS, USA (1st year - 2nd mandate)



Nick Miller Thales Aerospace, UK (1st year - 4th mandate)



Itai Toren Elbit Systems, Israel (1st year - 2nd mandate)



Robert Veenhuizen CybAero, Sweden (1st year - 2nd mandate)



John Walker The Padina Group, USA (1st year - 3rd mandate)

This solution would make it possible for the small & mediumsized companies, which form the mainstay of the Light UAS industry, to actively participate with their expertise, in their native language, and without having to spend time & money to attend all the working meetings in Brussels.

The current ICC members and representatives are:

AVBS, Czech Republic
European Air Sports Assn.
Korea UVS, South Korea
PLATINO, Spain
RCAPA, USA
UAS Norway, Norway
UATAR WG27, Australia

Martin Balda
Graham Lynn
William Park
Manuel Mulero
Patrick Egan
Ole Vidar Homleid
James Mellor

UAV DACH, Germany
 Bernhard von Bothmer

UAVS, UK
 UVS Canada, Canada
 UVS France, France
 John Moreland
 Eric Edwards
 Christophe Gyr

Organization of Conferences & Workshops

Conferences, either with or without associated exhibitions, and workshops are an important activity for the association. Most conferences organized by UVS International are technical and non-commercial and strive to bring the international unmanned systems community together.

The annual UAS conference in Paris has without any doubt become not only the largest UAS-related conference in the world, but also the prime international forum focusing on UAS-related standards, airworthiness, certification and air traffic management issues. It is the only event of its kind where UAS policy is discussed.

The excellent relations that UVS International maintains with a large number of European and non-European Ministries of Defence, national civil aviation authorities, EASA, European Defence Agency, Eurocontrol, FAA, ICAO, JAA, NATO and numerous stakeholder groups, make it possible to have significant regulatory authority, government and military participation at these events.

Since its inception, UVS International has organized or contributed to the organization of a significant number of conferences and workshops in Europe, Africa, Asia, Australia, and North America.

Speaking Engagements

Within the framework of its Global Access Initiative, UVS International representatives give numerous presentations all over the world. A list of all the presentations given by UVS International in 2006, 2007, 2008, 2009 and 2010 can be found on www.uvs-info.com, and in the article on the Global Access Initiative in this publication.

UVS International News Flashes

Starting in January 2005, UVS International initiated a news flash service for its members. By means of this service, UVS International supplies information (articles, press releases, etc) on unmanned vehicle systems (air, ground, naval) by email to its members once every two weeks.

This service has now been extended to also include all government representatives (civil & military), as well as representatives of national civil aviation authorities, international regulatory authorities, air navigation service providers, international organizations, the diplomatic corps and academia that figure in the UVS International database.

UVScope

In 2010, Blyenburgh & Co will start the publishing of a quarterly technically informative electronic magazine called UVScope. This publication will contain first-time articles (no republications) from various sources on ongoing developments

and technical matters pertaining to unmanned aircraft, ground & naval vehicle systems (at system & sub-system levels), their current & future use, as well as relevant regulatory issues. Each issue will also feature company profiles and technical papers proposed by international academia.

It is the intention to institute a peer review board, which will permit the authors of academic submissions to obtain the sought after credits and make this publication attractive to the academic community.

The initial circulation will be approximately 13.000 in 68 countries. This publication will be supplied free-of-charge to all persons in the UVS International database.

Persons desiring to receive UVScope are advised to log on to www.uvs-international.org or www.uvs-info.com. They will subsequently automatically receive UVScope. For information on the advertising opportunities in the highly targeted UVScope, contact UVS International or Blyenburgh & Co.

UVScope will also be available on-line on www.uvs-info.com

World's Largest Generic UVS Web Site

In 2006, the www.uav-info.com web site address was changed to www.uvs-info.com. This generic web site, developed by Blyenburgh & Co for the benefit of UVS International and the international UVS community in general, has two distinct sections:

- · unmanned aircraft systems (UAS);
- · unmanned ground vehicle (UGV) systems.

Amongst other things, the UAS section contains the complete 2003, 2004, 2005, 2006, 2007, 2008 & 2009 editions of the UAS yearbooks, photo reports of UAS deployments, probably the world's largest on-line UAS photo library, UAS specifications (that can be added to on-line by all UAS producers), a review of unmanned vehicle system-related R&D projects, UAS-related terms & definitions and abbreviations, the world's largest collection of international UAS-related regulatory documents, manufacturer's UAS brochures & datasheets (>800), and probably the world's largest collection of UAS-related links.

The UGV Section contains more than 300 technical specification forms from 140 companies in 27 countries, a UGV photo and datasheet library, a similar R&D project review section as in the UAV Section, generic UGV documents (studies, national roadmaps, programme overviews) and UGV system brochures. This web site also features:

- unmanned vehicles system-related brochures (systems & sub-systems) (air, ground, naval) provided by the association's corporate members, and non-members;
- · downloadable & printable UAS and UGV posters;
- web links to the web sites of all UVS International corporate members, national civil aviation authorities, international regulatory authorities, aviation stakeholders, and partner organizations.

Special Web Site Feature for Academia & Researchers

The R&D project review section on www.uvs-info.com has been specifically created to permit academia and research organizations in all countries to publish their past and ongoing UVS-related research on-line, using a standardized format. All submitted and accepted research project definitions with all contact details are posted alphabetically by country & submitting entity, as well as by submitting entity & country. The posted research projects are searchable by 18 key words.

The objective is to make it possible for the research organizations to find out what their international counterparts have already done, or are currently undertaking, with the goal to avoid needless duplication of effort and wasting scarce resources. This system will also permit the research organizations to search for teaming partners, and should be of interest to industry.

The UCARE Programme

The international UCARE (UAVs: Concerted Actions for Required REgulations) Programme was initiated with the objective to create the basis of an organization to develop recommendations with the aim to facilitate the establishment of rules and regulations allowing the introduction of military and civil/commercial UAS into civil managed airspace, regardless of borders.

The basic strategy was to federate the international UAS community behind a common goal, and within a dedicated framework create the required basis for issuing recommendations for a consensual policy and competence standards.

There were two levels of participation: Participants & Contributors. Participants were representatives of corporate UVS International members, industry associations, and international organizations (Eurocontrol, FAA, JAA, NATO) that tok on specific work tasks. The Participants were organized on a national or multi-national basis under a national coordinator. UCARE had Participants in Australia, Austria, Canada, France, Germany, Israel, Italy, Japan, The Netherlands, South Africa, Spain, Sweden, Switzerland, UK, USA.

Contributors were representatives of non-corporate entities and international organizations (civil & military government organizations, Eurocontrol, FAA, JAA, NATO, national civil aviation authorities, government R&D organizations, universities), which contributed significantly by supplying documents and studies.

The UCARE document library has been migrated to www.uvs-info.com, which now offers the world's largest publicly available library of documents & opinion papers relating to airworthiness, certification and air traffic management issues pertaining to unmanned aircraft systems.

Joint JAA/Eurocontrol UAV Task Force

On April 3, 2002 the Joint Aviation Authorities (JAA) agreed to set up the Joint JAA/Eurocontrol UAV Task Force. The terms of reference of this Task Force, agreed on by the JAA Executive Board and Eurocontrol, were subsequently presented during the UCARE Symposium part of the UAV 2002 conference in Paris, France in June 2002.

The first meeting of the UAV Task Force took place at JAA headquarters in Hoofddorp, The Netherlands on October 9 and 10, 2002.

In accordance with the Terms of Reference, the «concept» approach proposed by JAA, addressed the design, manufacture and maintenance of UAS, the operations of UAS (in particular the approval of operators), the Rules of the Air and various security-related issues. The concept was to be based on:

- Identification of current & budding UAS technologies and their possible applications;
- · Creation of UAS categories;
- Identification of lower mass limit(s) for regulations at European level:
- Review of existing documents (draft standards, research studies);
- Consideration & evaluation of the use of a total system approach.

Particular attention was paid to operator qualification & approval, legal issues in relation to the ICAO Convention Art. 8, and terminology issues; the composition of the UAV Task Force was established in accordance with JAR-11 (JAA Regulatory & Related Procedures) and Eurocontrol's requirements for stakeholder involvement. UVS International fulfilled the Task Force's secretariat function.

The joint JAA/Eurocontrol UAV Task Force, was the first initiative of its kind in the world. The Task Force's final report can be found on www.uvs-info.com.

EASA's A.NPA

On October 18, 2005 UVS International, in anticipation of the upcoming A.NPA, organized a presentation of the policy section

of the A.NPA by Yves Morier, EASA to European industry and interested government representatives at the Belgian Aeronautical Museum in Brussels, Belgium. This meeting had as principal purpose to permit EASA to explain the background and intention of the A.NPA and to allow European industry representatives to request clarification of certain sections of the A.NPA text, which had been made available to all attendees several days prior to the meeting. The draft A.NPA had undergone internal EASA consultation and had also been supplied to FAA for commentary.

EASA's A.NPA (Advance Notice of Prior Amendment) was published on November 7, 2005. The complete text of the A.NPA is posted on www.uvs-info.com. The A.NPA can be seen as the follow-on to the widely applauded Joint JAA/Eurocontrol UAV Task Force's Final Report that came out in June 2004. The A.NPA concerns aircraft with a MTOW of more than 150 kg and addresses, amongst others, the following issues: the procedure for UAV system certification, type certification, selection of the manned airworthiness code reference, the tailoring of the reference manned airworthiness code, UAV system safety objectives & criteria, special conditions & interpretative material, continued airworthiness.

UVS International, with inputs from the Euro UAV ICB members, observers and corporate observers, supplied a federated European commentary to the A.NPA. UVS International also instigated a coordinated Canadian commentary to the A.NPA.

European UAV Industry Consultation Body

In anticipation of the publication of the final report of the Joint JAA/Eurocontrol UAV Task Force, UVS International instigated the formation of this Industry Consultation Body (ICB) in April 2004. The vision of the Euro UAV ICB was to have operators of qualified civil, commercial and military UAV systems able fly their UAS routinely, safely and reliably in non-segregated European airspace. The Euro UAV ICB gave itself the mission to be the European industrial focal point for all European authorities (civil & military, including NATO FINAS), and to take a pro-active European industry position concerning the development of recommendations relative to requirements and procedures that are necessary to make its vision reality. These recommendations were to encompass, but not be limited to, requirements & procedures in the following categories:

- Airworthiness
- · Safety & Security
- Maintenance
- CNS/ATM
- Legal Considerations
- System Certification
- Flying Operations
- Training
- Aerodrome Interface

The companies participating in the Euro UAV ICB agreed to federate their expertise & pool their resources in order to attain their objectives

The Euro UAV ICB was officially established in February 2005 and functioned as an independent entity with its own finances, and in accordance with the Statute of UVS International. The secretariat function was entrusted to UVS International.

In February 2007 the companies participating in the Euro UAV ICB concluded that, in order to take their initiative to the next stage, a more formal structure was required. Furthermore, they wanted to participate in a proposal to the European Defence Agency concerning a study contract. They decided to combine their forces with those of several other companies, which were not participating in the Euro UAV ICB (Alenia Aeronautica, BAE Systems, EADS CASA), and to unite within a UAS working group under the banner of ASD (European Aerospace & Defence Manufacturers Association), of which most were a member.

ASD and UVS International are currently engaged in discussions on how best to combine their complementary expertise for the benefit of the entire European UAS community.

International Civil Aviation Organization

On June 27, 2005 the International Civil Aviation Organization

(ICAO) issued a consultation with selected States and international organizations with regard to UAS and concerning:

- present and foreseen international civil UAS activities in civil airpsace;
- procedures to obviate danger to civil aircraft posed by UAS systems operated as State aircraft; and
- States' procedures for the issuance of special operating authorizations for international civil UAV operations.

Furthermore, it was requested, in view of the limited resources at the disposal of ICAO, and in order to enable the Air Navigation Commission to determine an appropriate level of priority for UAS-related issues compared to other tasks on the work programme, to supply as much detail, copies of, or web links to, national regulations or guidance material.

UVS International was one of the two international organizations consulted, and formulated its reply in consultation with the Euro UAV ICB, and with inputs from Japan, New Zealand, South Africa. After receipt and evaluation of the replies, ICAO invited the representatives from the States who had replied, and UVS International, to participate in an exploratory meeting on UAS. This meeting took place at ICAO headquarters in Montreal, Canada in May 2006. At this meeting a small core group was formed to produce a guidance document for ICAO; UVS International was part of this core group.

Subsequently, a second meeting took place at the FAA facilities in Palm Coast, Florida, USA, where this core group presented their guidance document to ICAO. The guidance document was subsequently presented to the ICAO Council and the green light was given in October 2007 by the ICAO Council to start up an ICAO UAS Study Group (UASSG). The ICAO UASSG had its first meeting at ICAO headquarters in April 2008.

UVS International continues to participate in and contribute to the work being accomplished by the ICAO UAS Study Group. UVS International is proud to have been invited to participate in the ICAO UAS Study Group activities.

External Relations

UVS International is internationally recognised by numerous government authorities (civil & military) and a significant number of other organizations as an impartial representative and advocate of the UAS industry.

The association currently maintains relations of various natures with the following stakeholder organizations:

- · Aerospace Industries of America, USA;
- Air Navigation Services Providers in numerous countries;
- Air Traffic Control Association (ATCA), USA;
- American Institute of Aeronautics & Astronautics (AIAA), USA;
- ANFR (French National Frequency Agency);
- · Association of Chief Police Officers (ACPO), UK;
- · Atlantida Consortium, Spain;
- Australian Certified UAS Operators Association (ACUO);
- Australian Research Centre for Aerospace Automation (ARCAA), Australia;
- Australian UAS Academy, Australia;
- ASD European Aerospace & Defence Manufacturers Ass.
- · ASTM International, USA;
- · ASTRAEA, UK;
- ATCA Air Traffic Control Association, USA;
- AVBS Unmanned Systems Manufacturers Ass., Czech Rep.;
- Bordeaux TechnoWest Technology Centre, France
- British Model Flying Association, UK;
- CANSO (Civil Air Navigation Services Organization);
- Civil aviation authorities in numerous countries;
- COGES, France (organizers of the Eurosatory exhibition);
- Conseil Général de l'Armement (CGArm), France;
- Council for Scientific & Industrial Research, S. Africa (CSIR);
- · DFS, Germany;
- Europe Air Sports Association, The Netherlands;
- European Aviation Safety Agency (EASA);
- EUROCAE, France;
- European Cockpit Association (ECA);

- · European Commission;
- European Defence Agency (EDA);
- European Group of Institutes of Navigation (EUGIN);
- · European Micro UAS Competition;
- European Space Agency (ESA);
- EUROCONTROL, Belgium;
- EUROCONTROL Experimental Centre, France;
- The European Institute, Washington, DC, USA;
- Federal Aviation Administration (FAA), USA;
- Flemish Institute for Technological Research (VITO), Belgium
- FRONTEX, European Union Agency for Border Protection;
- International Federation of Air Traffic Controllers Associations (IFATCA), Canada;
- International Federation of Airline Pilots Associations (IFALPA);
- INTELI, Portugal;
- International Civil Aviation Organization (ICAO), Canada;
- Japan Aerospace Exploration Agency (JAXA), Japan;
- · Japan UAV Association (JUAV), Japan;
- Joint Authorities for Rulemaking on Unmanned Systems (JARUS);
- · Korea Aerospace Research Institute, South Korea;
- Korea UVS, South Korea;
- MIDCAS Consortium, Europe;
- Ministries of Defence & Ministries of Interior in many countries;
- · NAMSA, Luxembourg;
- NASA Dryden Flight Research Center, USA;
- National Oceanic & Atmospheric Administration (NOAA), USA;
- NATO C3 Agency;
- NATO FINAS:
- NATO Joint Air Power Competence Centre:
- · NATO Joint Capability Group on UAV;
- NATO Research & Technology Organization;
- NMSU-PSL-TAAC, USA:
- Norwegian Research Institute (NORUT);
- · Pégase Regional UAS Competence Centre, France;
- · PLATINO Consortium, Spain;
- Remote Control Aerial Photography Association, USA;
- · Royal United Services Institute, UK;
- RTCA Special Committee 203, USA;
- SAE International, USA;
- UAS Norway, Norway (national association);
- · UATAR, Australia (national working group);
- UAV DACH (German-language association), Germany;
- UAVS Association, UK (national trade association);
- · Universities & academies in numerous countries;
- Unmanned Systems Canada (national trade association);
- UVS France (French trade association), France;
- · Welsh Assembly Government, UK.

All these stakeholders receive the fortnightly UVS News Flash.

USEP - European Inter-Governmental Initiative

In 2003 the Conseil Général de l'Armement (CGArm), a French Ministry of Defence think-tank reporting directly to the French Minister of Defence, mandated a study on the future of UAS, for intelligence & combat missions (UCAV) within the European military context. This study, designated «U(C)AV Systems» was finalised in 2004.

The follow-on to the aforementioned study, designated USEP (Unmanned Aircraft Systems for Security & Environmental-related Purposes), was instigated by CGArm in September 2005 and concerns the potential use of UAS for security and environmental-related, as well as various other civil (commercial & non-commercial) purposes in Europe.

The objective of the USEP initiative was, in co-ordination with the participating government authorities, and with non-competitive inputs from industry, to:

- Create, or increase, the awareness with national governmental entities (ministries & related agencies & departments) of the potential offered by UAS within the framework of their respective tasks;
- Form three working groups and co-ordinate a European drive

to jointly identify, document and evaluate:

Operational Needs

- description of needs (scenarios, geographical coverage, timing, data precision);
- global European market assessment (over the coming 15 years);

Technical Issues

- synergy with defence UAS and equipment solutions;
- communication link bandwidth requirements and frequency allocation:
- R&T update, incl. deployment in non-segregated airspace; Organization & Strategy
- equipment or service acquisition;
- relevant ongoing national activities and recommendations for the future (co-operation within nations and within Europe).
- Identify and evaluate, the necessary funding required to make it possible to use State and non-state owned UAS for purposes with societal benefits in European airspace.

UVS International was invited by CGArm to contribute to the USEP study and to help establish it as a transparent and federated pan-European initiative, and act as the channel of communication and its symposium organizer. A report on the conclusions of the USEP study was featured in the 2007 UAS yearbook, and can also be found on www.uvs-info.com.

EDA Study Contracts

In July 2006, UVS International received a contract from the European Defence Agency (EDA) to conduct a study relative to the possible future use of UAV systems for security & environmental purposes in Europe. This study concerned the potential for non-military government applications of all classes of UAS (by ministry of interior, ministry of the environment, ministry of transport, ministry of agriculture, etc) for roles such as homeland security matters (crowd surveillance/control, border patrol, illegal immigrant control, anti-terrorism, drug & weapons control, anti-crime, anti-piracy), surveillance of inland & coastal waters, sea lane surveillance, dike inspection, inspection of bridges & historical monuments, search & rescue, fishery control, peacekeeping operations, forest fire detection/surveillance, traffic management, shipping surveillance/monitoring, natural disaster area survey, (nuclear) crisis management, emergency communication networks, crop monitoring, meteorological applications, atmospheric measurements, glacier & ice cap monitoring, pollution monitoring, etc. This study was concluded in September 2006.

In 2007 UVS International received a study contract from EDA relative to UAS payloads; this study was successfully concluded that same year.

Interim Working Group on Light UAS (IWGLUAS)

The Interim Working Group on Light UAS (IWGLUAS) was instigated by UVS International in September 2007 with the objective to produce a guidance document for EUROCAE WG73 on how the issue of Light UAS (<150 kg) was to be dealt with by EUROCAE WG73's Sub-Group on Light UAS.

The members of the IWGLUAS were: The CAAs of Austria, Belgium, The Netherlands, Sweden, UK; Eurocontrol; and industry representatives from Belgium, Czech Rep., France, Italy, Netherlands, Slovenia, Sweden, UK.

The working group's final report was presented to the EUROCAE WG73 plenary session in February 2008.

UVS International Awards

The Catherine Fargeon Award

In 2003 UVS International instigated the Catherine Fargeon Award. This award, which carries the name of the first person who received it in 2003 (Dr Catherine Fargeon, French Ministry of Defence, Conseil Général de l'Armement), is presented to persons in recognition of their personal commitment &

contribution to promoting the insertion of unmanned aircraft into non-segregated airspace and/or the general promotion of the future use of unmanned aircraft.

In 2010, this award is granted to the following persons:

- André Clot, EuroUSC, UK;
- · Zdravko Kolev, FRONTEX;
- MajGen Carlo Magrassi (rtd), European Defence Agency;
- · Rune Storvold, Northern Research Institute, Norway;
- · Martin Stoussavljewitsch, European Defence Agency;
- Luc Tytgat, European Commission, DG MOVE.

Earlier recipients of this award are:

- Michael Allouche, IAI-Malat, Israel (2008);
- Gilbert Amato, EUROCAE (2005);
- · Jeff Bauer, NASA DFRC, USA (2006);
- LtCdr Geoff Bowker, CAA-DAP, UK (2007);
- · Leslie Cary, ICAO (2009);
- · Jim Christner, AAI Corp., USA (2009);
- · Doug Davis, FAA UAV Program Office, USA (2006);
- Cdt Régis Brigaud, DGA-DCE-CEV, France (2005);
- · Roland Decuypere, RMA (rtd), Belgium (2007);
- · Gilles Fartek, European Commission, DG TREN (2009);
- Vince Galotti, ICAO, Canada (2007);
- Ken Geiselhart, Lockheed Martin, USA (2009);
- Ian Glenn, ING Engineering, Canada (2008);
- Cdt Christophe Gyr, DGA-DE-CEV, France (2006);
- · Alex Hendriks, Eurocontrol (2005);
- · Serge Lebourg, Dassault Aviation, France (2006);
- Gerhard Lippitsch, Austrocontrol, Austria (2008);
- Gérard Mardiné, Sagem Défence & Sécurité, France (2008);
- Douglas Marshall, University of North Dakota, USA (2009);
- Holger Matthiesen, EUROCONTROL, Belgium (2007);
- · Yves Morier, European Aviation Safety Agency (2005);
- Fred Pease, Department of Defense, Policy Board on Federal Aviation, USA (2007);
- Nick Sabatini, FAA, USA (2005);
- WgCdr Mike Strong, EUROCONTROL, Belgium (2007);
- · Giuliana Tamburro, ENAC, Italy (2005);
- · Karen Tarr, Transport Canada, Canada (2008);
- Ron van de Leijgraaf, IVW (CAA), The Netherlands (2008);
- John Walker, JSWalker Group, USA (2006);
- · Cliff Whittaker, CAA, UK (2008);
- Klaus Wohlers, Rheinmetall DE, Germany (2006).

UVS International Award for Awareness Creation

In 2007, UVS International gave a special award to Ken Munson [[Jane's Information Group, UK (rtd)] in recognition for his long-standing personal commitment and contribution to promoting awareness of UAS.

The UAS Pioneer Award

In 2008, UVS International instituted the «UAS Pioneer Award» in order to honour and thank individuals for their exceptional and dedicated life time services to the international UAS community. The first recipients of this award are:

- Filippo De Florio, ENAC, Italy (rtd);
- Malcolm Walker, CASA, Australia (rtd).

This award is now called the De Florio/Walker Award.

The De Florio/Walker Award

The first recipient of the De Florio/Walker award (2009) was:

Giuliana Tamburro, ENAC, Italy († 2009).

UAS Photo Competition

In 2009, UVS International organized its forth international UAS photo competition. This competition is open to all persons from all countries and it is not a requirement to be a member of UVS International. The winners of the 2010 photo competition, and the winning photos are published in this edition of the UAS Yearbook. All information relevant to the 2011 UAS photo competition (including the photo categories, technical details & submission

deadlines) can be found on-line at: www.uvs-international.org government authorities of the countries involved. & www.uvs-info.com

Global Access Initiative

UVS International's Global Access Initiative has as objective to make UAS-related information (regulatory, technical, commercial) available to all. Detailed information on the Global Access Initiative can be found on www.uvs-info.com.

EUROCAE Working Group 73

UVS International strongly contributed, in close co-ordination with Eurocontrol and EASA on the European side, and the FAA and RTCA on the American side, to the start up of EUROCAE (European Organization for Civil Aviation Equipment) Working Group 73 on unmanned aircraft systems in April 2006.

UVS International continues to be strongly involved in this very important initiative and its president is member of the leadership team in the capacity of standing adviser to WG73.

UAS Terms & Definitions + Abbreviations & Acronyms

Blyenburgh & Co has created for UVS International, and the international UAV community, a list of English language UASrelated abbreviations & acronyms, their explanation and origin, as well as a list of UAS-related terms and definitions (where possible mentioning the source document). The purpose of this task was to create an educational reference document for persons who are not native English speakers, and to contribute to the international harmonisation of UAV terminology, which is imperative, if internationally acceptable standards, airworthiness rules and certification norms are to be defined.

The 7th edition of these documents is freely available at www.uvsinfo.com. These are living documents and will continue to grow. The international UAV community is encouraged to supply additions for both of these documents by email to UVS International.

UAS Categorization

UVS International has drawn up a categorization of unmanned aircraft systems, which permits to slot in all existing systems, as well as UAS that are currently under development. It should be noted that this categorization has not been designed for certification purposes. Its main purpose is to come up with a universal system of cataloguing UAS, combining various parameters, for reference purposes.

ACTIVITIES IN 2008

UAS 2008 Conference

The 10th edition of UVS International's annual conference. UAS 2008 (70 speakers), took place at the Docks Event Centre in Paris, France on 10-12 June 2008. A photographic review of this event, as well as the presentations given, are posted on www.uvs-info.com

Arctic Observation with UAS

In June 2008, discussions started with the National Oceanographic & Atmospheric Agency, USA relative to global climate change and the potential concerted use of Light UAS by the Arctic Council countries (Canada, Denmark, Finland, Iceland, Norway, the Russian Fed., Sweden, USA) for Arctic monitoring purposes. From these discussions emerged a progressive UVS International advocacy and awarenessincreasing strategy, which included the association's implication in UVS-Tech 2009 in Moscow, the 4th Trans-Atlantic UAS Roundtable in Washington, and a special session on this topic at the UAS 2009 conference in Paris. These activities will be continued and will be coordinated with the scientific &

EUROSATORY 2008

In 2008, UVS International was, for the second time in a row, partnered with COGES, the organizers of Eurosatory, the world's largest army equipment & aviation exhibition, which took place in Paris, France on 16-20 June 2008. The UVS Forum, organized by UVS International at this world class event, featured exhibition booths, a briefing section and a meeting area. The UVS Forum focused attention on micro, mini & tactical UAS, as well as unmanned ground vehicles (UGV). The UVS Forum also featured the indoor demonstrations of UGV systems (<150kg) on a dedicated indoor area equipped with an obstacle course, which had been designed and organized by the French Ministry of Defence (DGA). The UGV demonstrations were one of Eurosatory's largest crowd gatherers (250-430 persons per day).

1st UAS Conference in China

With the intent of contributing to maintaining safety in Chinese airspace, and within the framework of its Global Access Initiative and international harmonisation, UVS International accepted an invitation from International Aviation Group, China to co-organise and chair UAS China 2008, the 1st national Chinese UAS conference. As contribution to the organization of this event UVS International endeavoured to make it possible for the Chinese regulatory authorities and UAS community to be made aware of the ongoing international regulatory work pertaining to UAS. UVS International's goal was to contribute to motivating the CAA of China to recognise that they have start preparing for admitting UAS into Chinese non-segregated airspace.

The 2-day UAS China 2008 conference took place in Beijing. China in September 2008 and drew 423 delegates. Half of the speakers (regulatory authorities, researchers & industry) were brought on board by UVS International. UVS International gave 3 presentations, including one on behalf of EUROCAE. International Aviation Group and UVS International plan to organise the second edition of this event in September 2010.

Strategic Partnership Agreement with China

During the UAS China 2008 conference in September 2008. UVS International signed a strategic partnership agreement with International Aviation Group, China. Within the framework of this agreement the parties will jointly strive to:

- implicate the Chinese authorities in the regulatory initiatives being undertaken by the global UAS community;
- · improve awareness within the Chinese UAS community (government & industry) concerning the ongoing international activities relative to UAS-related standards, rules & regulations;
- promote active Chinese industry implication in these activities;
- · work towards goals of common interest relative to unmanned systems.

International Test Range Directory

In October 2008, UVS International instigated the International Test Range Directory initiative. This initiative has as objective to create a new open and free access web site, which will reference the world's flight test and evaluation ranges. In cooperation with several ranges, a very comprehensive test range description and categorization form has been produced and is posted on www.testranges.org. This web site has as purpose to not only reference test ranges, but also to make it possible to compare their facilities and the services they offer.

Regulatory Workshop at UVS Canada Conference

UVS International organized & chaired a regulatory workshop at the UVS Canada 2008 conference in Ottawa, Canada on 4-7 November 2008.

Award Received from UVS Canada

During its 2008 conference, UVS Canada presented UVS International, in recognition of its UAS-related organizational activities, with its 2008 Organizational Award.

Study Contract Received from French Ministry of Interior

On November 6, 2008 the French Ministry of Interior, Direction Générale de la Police Nationale, Services des Technologies de la Sécurité Interieur, notified (subsequent to a tender) the award of a study contract to UVS International. This study concerned the analysis of the French legal framework relative to the use of Light UAS (<150 kg) by the French Homeland Security forces. This study included the following:

- A detailed analysis of the existing legal framework and the proposal of a solution that will permit the operation use of Light UAS by the French Homeland Security forces;
- Technical guidelines on how to deploy a Light UAS and be in conformity with the current French regulations;
- A proposal concerning the adaptation of the current French regulations in the medium term in order to permit generalization of the operational use of Light UAS by the French Homeland Security forces.

UVS International, the prime contractor, conducted this study in cooperation with UAS Consulting & Services, France, as subcontractor. UVS International is proud to have been selected by the French Ministry of Interior to conduct this study.

Trans-Atlantic UAS Roundtable

Within the framework of its Global Access Initiative, UVS International organized, together with The European Institute, and participated in the 3rd Trans-Atlantic UAS Roundtable in Washington, DC, USA on 10 November 2008. The theme of this event was «Security-related UAS Applications». The purpose of this on-invitation-only annual event is to improve high level trans-Atlantic understanding and forge trans-Atlantic links.

2008 UVS News Flash

During 2008 and within the context of the Global Access Initiative, 19 editions of the UVS News Flash and 5 special editions were published (in total 944 pages) and sent out by email. All are posted on www.uvs-international.org & <a href="https://www

ACTIVITIES IN 2009

UVS-Tech 2009 Conference & Exhibition in Russia

In September 2008, UVS International was invited by the Ministry of Industry & Trade of the Russian Federation, through Expo-Ecos Ltd, to contribute to the organization of the UVS-Tech 2009 conference by organising presentations concerning international UAS-related regulatory work and research applications. This successful national event took place in Moscow on 27-29 January 2009. A photographic report & the presentations given English can be found on www.uvs-info.com

Spain - ISR 2009 Conference

Within the framework of the Global Access Initiative, UVS International accepted an invitation to give a key note address at ISR 2009, the 40th International Symposium on Robotics. This event was organised by AER-ATP, Spain and took place in Barcelona, Spain on 10-13 March 2009.

France - Export Regulations Symposium

On 17 March 2009, UVS France organized, in co-operation with UVS International, and with the participation of all the relevant

competent French governmental authorities, a symposium dealing with French export regulations pertaining to unmanned systems in Paris, France.

In the morning session the French authorities presented and explained the French export regulations relative to unmanned systems (air, ground, naval) at systems & sub-systems & critical component level, as well as services for & service with unmanned systems. The afternoon session was dedicated to generic case studies with which the participants could identify. The objective of this event was to inform French small & medium-sized enterprises on the existing export regulations & the upcoming changes, and increase their awareness of the legal risks of not complying with these regulations. The presentations given are posted (in French) on www.uvs-info.com

Switzerland - 1st Swiss UAS Day

On 27 March 2009, the Ecole Polytechnique Fédérale of Lausanne organized the 1st Swiss UAS Day. This event brought together the majority of the Swiss companies involved with UAS at system and sub-system level. Within the framework of the Global Access Initiative, UVS International participated in this symposium.

India - 1st National UAS Conference & Exhibition

In May 2008, UVS International was invited by the Indian Ministry of Defence, Defence Research & Development Organization, Aeronautical Development Establishment, to coorganize the 1st national Indian UAS conference. The ICAUV 2009 conference & exhibition took place at the Eagleton Golf Resort in Bangalore, India on 3 & 4 April 2009. This event celebrated the Aeronautical Defence Establishment's 50th anniversary and was organized by the Indian Min. of Defence, Defence Research & Development Organization (DRDO), Aeronautical Defence Establishment (ADE), in partnership with UVS International. A photographic report & the presentations can be found on www.uvs-info.com

Abu Dhabi - Middle East UAS Summit

UVS International supported & chaired the 1st UAS Summit Middle East 2009, which took place at the Meridien Hotel, Abu Dhabi, United Arab Emirates on 19-20 April 2009. The presentations given are posted on www.uvs-info.com

France - UAS 2009 Conference, Workshop & Exhibition

The 11th edition of UVS International's annual UAS conference & exhibition took place in Paris, France on 9-12 June 2009. With 105 presentations by speakers from 18 countries, UAS 2009 is now the world's largest conference dedicated to UAS. UAS 2009 featured a special 1-day plenary session on regulatory matters, a special half day session on Arctic observation using UAS, and a 1-day workshop on Light UAS (<150 kg).

Survey on Light UAS Non-Military Applications

In June 2009 UVS International was requested by the European Commission (EC), Directorate General Transport & Energy to conduct a world-wide survey on the current non-military applications of Light UAS (<150 kg). The results of the survey were officially presented to the EC at the Hearing on Light UAS that was organized by the EC in Brussels, Belgium on 8 October 2009. These results are posted on www.uvs-info.com

European Commission Hearing on Light UAS

The EC's first-ever hearing on Light UAS took place in the offices of Directorate General Transport & Energy in Brussels, Belgium on 8 October 2009. The purpose of this hearing, which was attended by 49 representatives of the European Light UAS community, was to make the EC aware of the size and broad

span of the European Light UAS community and the currently ongoing Light UAS Operations. In the morning, 12 testimonials were given by current Light UAS operators. During the afternoon the way forward was discussed, and questions from floor were replied by the EC representatives. The EC's conclusions and recommendations are posted on www.uvs-info.com.

UVS International is proud to have been requested by the EC to contribute to the organization of this historic event.

European Commission's UAS Conference

The European Commission, Directorate General (DG) Mobility & Transport is organizing, in co-operation with the European Defence Agency, and in co-ordination with DG Enterprise and DG Research this high level UAS conference. This event has as purpose to create high level European political awareness of the technologies relative to unmanned systems and their importance for the future. The conference is scheduled to take place in Brussels, Belgium on 1 July 2010 (see: http://ec.europa.eu/transport/air/uas_en.htm). UVS International is proud to have been invited by the EC to be member of the organising committee and contribute to the organization of this historic event.

ICAO's Global ATM Forum on Civil/Military Co-operation

UVS International was invited by the International Civil Aviation Organization (ICAO) to participate and support the first Global Air Traffic Management Forum on Civil/Military Cooperation, which took place at ICAO headquarters in Montreal, Canada on 19-21 October 2009. This was the first time in ICAO history that ICAO hosted a civil military plenary meeting, and it was the first time that UAS were an official agenda item at an ICAO plenary meeting. UVS International is proud to have been part of the organizing team and to have been invited to be the moderator of the session on UAS.

Austria - UAS: Towards Civil Applications

On 10 November 2009, the Austrian Ministry for Transport, Innovation and Technology organized this first Austrian national UAS conference at the Joanneum University in Graz, Austria. This event, which was supported by UVS International, brought the Austrian UAS community together for the first time and discussed the potential opportunities and best way forward. UVS International had been invited to give a keynote address on international UAS activities and the Global Access Initiative.

UVS International's Presence at Milipol

UVS International had the privilege of sharing a stand with the Eurosatory organizers at the 25th Milipol exhibition, one of the world's largest homeland security exhibitions, which took place in Paris. France on 17-20 November 2009.

Norway - UAS Nordic 2009 Conference

This successful national conference was organized by Flight Operational Forum and UAS Norway with the support of UVS International and took place at the Quality Hotel Gardermoen in Oslo, Norway on 8 November 2009. It brought the entire Norwegian UAS community (governmental & non-governmental) together and focused on current & future UAS activities. UVS International was invited to give a keynote address on international UAS activities and the Global Access Initiative.

2009 UVS News Flash

Within the context of the Global Access Initiative, 16 editions of the UVS News Flash and 4 special editions (in total 753 pages) were published and sent out by email in 2009. All are posted on www.uvs-international.org & www.uvs-into.com

ACTIVITIES IN 2010

Micro Companies - New Membership Category

In March 2010, the UVS International Board of Directors unanimously agreed to create a new membership category specifically for micro companies (< 3 employees & annual turnover < Euro 100.000). Micro companies are very often university spin-off companies with substantial technical expertise. This decision was taken in light of the European Commission's «Vision 2020 for the European Research Area» (see UAS Info Section on www.uvs-info.com). The intent is to give these micro companies a means of expressing themselves, and communicating to the larger companies in the field of unmanned systems technology.

New Web Site Structure

The UVS International web site (<u>www.uvs-international.org</u>) is being totally overhauled; a new operating system has been put in. This new site will make updating much simpler and will give the site additional features and functionalities.

Singapore - Defence Summit Asia 2010

Within the framework of the Global Access Initiative, UVS International was partnered with K2B International, Singapore, which organized, with the support & participation of UVS International, the 1st international conference on military robotics Singapore on 2-4 March 2010.

Spain - UNVEX'10 Conference

Within the framework of the Global Access Initiative, UVS International was partnered with IDS, Spain, which organized, with the support & participation of the Spanish Ministry of Defence, Asociacion Espanola de Empresas Tecnologicas de Defense, Aeronautica y Espacio, the 2nd national Spanish UAS conference & exhibition in Madrid on 2-4 March 2010.

Czech Rep. - AVBS Conference on UAS

Within the framework of the Global Access Initiative, UVS International was partnered with AVBS, the Czech unmanned systems manufacturers association, to organize the 1st national Czech UAS conference in Prague on 17 & 18 March 2010.

Russia - UVS-Tech 2010 Conference & Exhibition

UVS International has again partnered with Expo-Ecos Ltd, to coorganize the UVS-Tech 2010 conference and exhibition, which will take place in Moscow, Russian Fed. on 30 June-4 July 2010.

France - UVS Forum at Eurosatory 2010

Subsequent to their successful partnerships in 2006 & 2008, UVS International has once again entered into a partnership with COGES, the organisers of Eurosatory, the world's prime land forces & army aviation & homeland security equipment exhibition, which takes place at the Paris-Nord Villepinte exhibition center (just north of Paris, France) once every two years. The Eurosatory Exhibition takes place on 14-18 June 2010.

Within the framework of this partnership agreement UVS International and Eurosatory co-organized the UVS Forum. The UVS Forum was dedicated to unmanned aircraft systems (UAS) and unmanned ground vehicle (UGV) systems, as well as sensors & other related sub-systems applicable to either type of system, and will be an official part of Eurosatory 2010. The UVS Forum was located on one of the exhibition's main isles in one of the two main exhibition halls, and included:

- 2 fully equipped & soundproofed conference halls (500m² each);
- a food & beverage & social gathering area, including an open

air patio for smokers, for the exclusive use of the conference delegates;

 a combined UAS & UGV exhibit area, which will be readily accessible to all Eurosatory visitors.

UVS International organized UAS 2010, this year's edition of its annual international conference on unmanned aircraft systems and related sub-systems on the UVS Forum at Eurosatory 2010. The UAS 2010 conference had two tracks, which will ran in parallel; in total 73 presentations were given. The conference was concluded by two inter-active workshops. The UAS 2010 conference was an official part of the Eurosatory activities.

The UVS Forum was the largest technology cluster at Eurosatory and brought unmanned aircraft systems & unmanned ground vehicle systems to the attention of many of the more than 52.000 anticipated visitors military, homeland security, and industry representatives.

Brazil - 1st South American UAS Conference

UVS International is in discussion with DCA-BR to co-organize, with the support of Brazilian governmental authorities, an international 3-day UAS conference in Brazil (November 2010).

India - 2nd National UAS Conference - 2011

UVS International will again be partnered with the Indian Ministry of Defence, Defence Research & Development Organization, Aeronautical Development Establishment, to co-organize the 2nd national Indian UAS conference in 2011.

Event Organization Assistance

UVS International welcomes enquiries from associations, organizations and government authorities interested to discuss collaboration relative to the organization of national unmanned systems related events (conferences & exhibitions).

The Future

UVS International's primary focus is currently very clearly on UAS-related airworthiness, certification and air traffic management issues. As indicated earlier on, the problems associated with these issues should not be seen only on a European, American, Australian, South African or Japanese level, but on a global one.

The association is striving to play an international advocacy and federating role in order to tackle the problems associated with inserting UAS into non-segregated airspace and to be instrumental to making it possible to harmonise the various national & international approaches at the earliest possible stage.

Unmanned Ground Vehicle Systems

In addition, UVS International is now endeavouring to undertake steps to federate the international unmanned ground vehicle (UGV) systems community.

There is also the intention to bring out a UGV Yearbook (UGV Systems: The Global Perspective). The UGV Info Section on www.uvs-info.com gives an overview of the work that has already been accomplished in preparation for this publication.

Continued Outreach to the International UVS Community

In the context of the aforementioned, and within the framework of its Global Access Initiative, UVS International will continue to reach out, to all stakeholders, associations and organizations dedicated to furthering unmanned systems and their safe utilisation.

Access to the Web Sites

To gain access to www.uvs-international.org, as well as to

www.uvs-info.com, visitors are to complete the on-line web site registration form. When doing this, the visitor is to define his own password; this password will be confirmed to the visitor by email after his registration has been validated.

The same password is valid for both sites. Hereafter the visitor can access each web site by entering only its email address and password in the applicable boxes after having logged on.

Advantages of UVS International Membership

UVS International provides its corporate members with:

- Voting rights at the General Assembly relative to the election of the Board of Directors;
- Preferential attendee & exhibitor rates at its annual conferences;
- Preferential attendee & exhibitor rates at various international conferences & exhibitions;
- Opportunities to participate in consolidated exhibits at prime international exhibitions at preferential rates;
- · Receipt by email of the fortnightly UVS News Flash;
- Access to all the archived UVS News Flashes posted on www.uvs-international.org & www.uvs-info.com (not accessible to non-members);
- The opportunity to supply their UVS-related press releases for insertion in the UVS News Flash;
- UVScope, a quarterly electronic technically informative magazine which will be started up in 2010;
- The opportunity to contribute with technically informative articles for UVScope;
- Opportunities to network with key international industry, government and regulatory authority figures;
- Opportunities to work on government & regulatory authority programmes;
- Free listing of product/services brochures & product datasheets, on <u>www.uvs-international.org</u> & <u>www.uvs-info.com</u> (accessible to all registering visitors - members & non-members);
- Access to the product/services brochures & product datasheets of non-members that are posted on <u>www.uvs-info.com</u> (not accessible to non-members);
- Direct hyperlink from the UVS International web site to the members' web sites;
- Free copies of the annual UAS & UGV yearbooks (quantity is in function of the membership category);
- Participation in & contribution to the Global Access Initiative;
- Free listing of member's company name, postal address and web site in the annual UAV & UGV yearbooks;
- Free distribution of members' press releases by email to the international UVS community & the international press;
- World-wide access to the UVS International web site (<u>www.uvs-international.org</u>);
- World-wide access to the UVS Info web site (<u>www.uvs-info.com</u>) (UAS & UGV sections);
- The possibility of participating in funded study contracts;
- Assistance in finding teaming partners and suppliers (a significant number of successes have been booked);
- Assistance with the setting up of independent national working groups or associations (our track record speaks for itself);
- · Access to valuable international market information;
- · International recognition.

All employees of corporate members having registered on www.uvs-international.org or www.uvs-info.com have access to the web site sections reserved for members, and automatically receive the UVS News Flash & all UVS International notifications.

For Additional Information

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