



EVENTS & ACTIVITIES

2015 REVIEW



**Federating
The Global RPAS/Drone Community**

**Promoting
International Coordination & Cooperation**

**Advocating
Harmonised Rules & Regulations
Information Dissemination
Awareness Creation**

Issue Date: 15 May 2016

New National RPAS Associations Join UVS International

During 2015, the following national RPAS associations joined UVS International as members:

APEVANT, Peru	ARPAS-HK, Hong Kong
ARPASA, Argentina	AUVSC, China
LARPAS, Latvia	RPAS Finland, Finland
UAAI, Ireland	UAS Sweden, Sweden

UVS International Award Recipients

In 2003 UVS International instored 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 remotely piloted aircraft into non-segregated airspace and/or the general promotion of the future use of remotely piloted aircraft systems. The photos of the 4 recipients of this award in 2015 are indicated below.



Nigel Dunkerley
Transport Malta, Malta



Denis Koehl
SESAR JU, EU



José Maria Ramirez Ciriza
AESA, Spain



Sam Twala
CAA, South Africa

In total, 63 awards have been granted since 2003. The names, affiliations & photos of the award winners can be found on <http://uvs-international.org/index.php/about/award-winners-2003-2015>

Creating of Stakeholder Groups

During 2015, preparatory work was undertaken by UVS International to start-up various RPAS stakeholder groups:

- Light RPAS Manufacturers Stakeholder Group (Light RPAS: MTOM < 150 kg), with sub-groups by RPA MTOM in order to better represent the manufacturers' community along competence & operational requirement lines (< 2, 2-7, 7-15, 15-25, 25-150, > 150 kg).
- Aerial Work - Commercial RPAS Operators (sub-devided by RPAS application category)
- Aerial Work - Non-Commercial RPAS Operators (non-governmental: academia & researchers)
- Aerial Work - Corporate RPAS Operators (sub-devided by RPAS application category).
- European Police and other non-military authorities involved with enforcing the law pertaining to illegal RPAS flights.

- Remote Pilot Training & Qualification (RPAS flight schools – theoretical & practical).
- RPAS Autopilot Validation Tool Definition Group.
- Detect & Avoid for BLOS Very Low Level RPAS operations.
- Geo-fencing and related matters.

Improving Awareness & Understanding

In many segments of the civil RPAS community there is a lack of awareness and/or misunderstanding of a significant number of "required basic knowledge" topics, namely:

- What constitutes the aviation community and how it functions;
- Awareness of RPAS operators that they belong to the aviation community;
- Understanding what "belonging to the aviation community" brings with it as obligations;
- Unfamiliarity with the "rules of the air".
- Unfamiliarity with aviation terminology (in English, as well as in the relevant national languages);
- Understanding of the difference between flying toys, model aircraft, and RPAS (from a legal, operational, responsibility, liability & insurance, privacy & data protection point of view);
- What an aviation stakeholder group is & what its purpose is;
- The roles of the various existing aviation community stakeholders (who are they a what do they do);
- The responsibility & liability of RPAS operators;
- The understanding by RPAS operators relative to insurance matters (and their specific coverage limitations);
- The understanding by RPAS operators relative to privacy & data protection matters;
- The role of ICAO and how it functions;
- The role of the European Commission & its agencies, and how they function;
- The role of JARUS and how it functions (and its interaction with EC DG Mobility & Transport, SESAR JU, and regional (EASA, EUROCONTROL) & national aviation authorities (in & outside of Europe).
- How national & regional rules & regulations are established.
- How European regulation will influence national regulation.
- The importance of proportionality, and what it means.

Within the context of its Global Access Initiative, UVS International started a drive to correct this situation.

UVS International Speaking Engagements

Within the context of the Global Access Initiative, UVS International accepted speaking engagements at the following national events in 2015:

- General Assembly of the FPDC (French RPAS national ass.)
Paris, France 14 January 2015
- BeUAS New Years Reception
Brussels, Belgium 21 January 2015
- From Magic Carpets to Drones Exhibition
Brussels, Belgium 17 March 2015
- JARUS Plenary Meeting
Dublin, Ireland 16 April 2015
- Haut Comité Français de la Défense Civile
Paris, France 24 April 2015
- Noordzee Drones Vlaanderen RPAS Promotion Class
Koksijde, Belgium 9 May 2015
- EBACE 2015
Geneva, Switzerland 19 May 2015
- Kabinetsstandpunt Drones
The Hague, the Netherlands 28 May 2015
- Commercial Unmanned Systems
Singapore 30 June 2015
- UAS Development & Innovation Forum
Beijing, China 17 September 2015
- EC Joint Research Centre Symposium
Brussels, Belgium 3 November 2015

- RPAS Inter Tech
Paris, France 3 November 2015
- China Trade Fair on International Unmanned Vehicle Systems
Shenzhen, China 18 November 2015
- RPAS Mini Symposium
Delft, The Netherlands 10 December 2015

Events Organized by UVS International in 2015

- RPAS 2015 - 17th edition
Brussels, Belgium 22-25 June 2015
- RPAS CivOps - 4th edition
Brussels, Belgium 1-3 December 2015
(Security considerations forced postponement to Jan. 2016)
- UVS International General Assembly
Brussels, Belgium 1 December 2015
(Security considerations forced postponement to Jan. 2016)

Events with UVS International Participation in 2015

- FPDC's General Assembly
Paris, France 14 January 2015
- European Commission's High Level Conference on Civil RPAS
Riga, Latvia 5-6 March 2015
- ICAO's Global RPAS Symposium
Montreal, Canada 23-25 March 2015
- RPAS Roadmap Implementation Coordination Group
Brussels, Belgium 17 July 2015
- EUROCAE Strategy Meeting
Paris, France 23 October 2015
- RPAS Roadmap Implementation Coordination Group
Brussels, Belgium 9 December 2015
- ICAO RPAS Panel Meeting
Montreal, Canada 14-18 December 2015

Information Dissemination Activities

During 2015, UVS International undertook information dissemination activities on request of:

- EASA - European Aviation Safety Agency
- EC - European Commission
- EUROCAE
- ICAO - International Civil Aviation Organization
- ICC - International Criminal Court
- JARUS - Joint Authorities for Rulemaking on Unmanned Systems
- Presidency of Latvia
- SESAR Joint Undertaking

Europe - RPAS Roadmap Implementation Coordination Group

At a meeting called by the European Commission (EC) Directorate General Mobility & Transport and that took place in the offices of SESAR Joint Undertaking (SJU) in Brussels, Belgium on 22 January 2015, the terms of reference of the European RPAS (Roadmap Implementation) Coordination Group were agreed upon. The tasks of this group are to:

- Manage the interdependencies between the RPAS Roadmap implementation and regulatory and technical streams.
- Identify and overcome possible blocking issues in the implementation process.
- Identify and ease cooperation with non-European Union implementing projects.

The group is chaired by the EC and co-chaired by European Aviation Safety Agency (EASA) and SJU. As indicated in the EC communication issued in April 2014, the members of the group are representatives from EASA, JARUS, EUROCONTROL, SJU, European Defence Agency (EDA), European Space Agency (ESA), ASD (representing large manufacturing industry), and UVS International (representing micro, small & medium-

sized manufacturers and RPAS operators). The group has been founded for an indefinite duration.

Europe - Riga Conference & Declaration

On 5-6 March 2015, the «Remotely Piloted Aircraft Systems: Framing the future of Aviation» conference took place in Riga, Latvia. This event was organised by the Ministry of Transport of Latvia and the Civil Aviation Agency of Latvia, in cooperation with the European Commission, during the Latvian Presidency of the Council of the European Union. The event was built on the orientations given in the EC Communication on opening the Remotely Piloted Aircraft Systems (RPAS) market [EC COM(2014)207 – A New Era for Aviation – Opening the aviation market to the civil use of RPAS in a safe and sustainable manner].



In the presence of Anrijs Matīss, the Latvian Minister for Transport, the conference was kicked off by flight demonstrations by:

- Aerialtronics, The Netherlands
- Clear Flight Solutions, The Netherlands
- Cyberhawk Innovations, UK
- Helico Aerospace Industries, Latvia
- RC-Carbon, Latvia
- Royal Military Academy, Belgium (on behalf of the ICARUS consortium)

The two-day conference was opened by Anrijs Matīss, Minister for Transport of Latvia and the scene for the conference was set by Joao Aguiar Machado, Director General of Directorate General Mobility and Transport, European Commission. The event brought together the main players involved in the RPAS industry's development in Europe (Members of the European Parliament, European Commission representatives, Directors General of civil aviation authorities of the EU Member States Data Protection Authorities and leaders of the manufacturing and service supplying industry) and found broad agreement on the main principles to guide the regulatory framework to allow civil RPAS operations throughout Europe from 2016



onwards. These principles are summarized in the Riga Declaration on Civil RPAS (Drones), which was made public at the end of the conference by Violeta Bulc, European Union (EU) Commissioner for Mobility and Transport, in the presence of Margus Rahuoja, Director for Aviation and International Transport Affairs, Directorate General Mobility and Transport, European Commission.

The main principles listed in Riga Declaration on Civil RPAS (Drones) involve the necessity to ensure clear rules for manufacturers and potential users, high levels of safety, security & data protection requirements, as well as RPAS operators' responsibility and effective information exchange. These main principals are:

- Drones need to be treated as new types of aircraft with proportionate rules based on the risk of each operation.
- EU rules for the safe provision of drone services need to be developed now.
- Technologies and standards need to be developed for the full integration of drones into the European airspace.
- Public acceptance is key to the growth of drone services.
- The operator of a drone is responsible for its use.



Press conference by Violeta Bulc, European Union (EU) Commissioner for Mobility & Transport, and Anrijs Matīss, Minister for Transport of Latvia

The event was concluded by a press conference. The Riga Declaration, as well as links to the videos of the entire event, can be found on www.rpas-regulations.com

UVS International contributed to the organisation of the flight demonstrations, the conference programme, the promotion of the event, and organised the attendance of a UVS International member delegation.

MILIPOL Advisory Committee

On 6 March 2015, UVS International was invited to become a member of the MILIPOL Advisory Board. MILIPOL is the world's largest state security exhibition, which takes place annually, alternatively in Paris, France and Singapore (uneven years) and Doha, Qatar (even years). The objective is to contribute to the positioning of RPAS at these events, creating understanding of their applications and awareness of existing best practices, as well as applicable rules and regulations.

Europe - EASA Publishes «Concept of Operations of Drones»

On 12 March 2015, the European Aviation Safety Agency (EASA) published an 8-page document entitled «Concept of Operations for Drones». This document introduced the agency's 3 pillar operation category concept:

- 'Open' category (low risk): safety is ensured through operational limitations, compliance with industry standards, requirements on certain functionalities, and a minimum set of operational rules. Enforcement shall be ensured by the police.

- 'Specific operation' category (medium risk): authorisation by National Aviation Authorities (NAAs), possibly assisted by a Qualified Entity (QE) following a risk assessment performed by the operator. A manual of operations shall list the risk mitigation measures.
- 'Certified' category (higher risk): requirements comparable to manned aviation requirements. Oversight by NAAs (issue of licences and approval of maintenance, operations, training, Air Traffic Management (ATM)/Air Navigation Services (ANS) and aerodrome organisations) and by EASA (design and approval of foreign organisations).

This document, as well as a brochure explaining it, can be found on under «Reference Documents» on www.rpas-regulations.org

Europe - EASA Publishes Opinion No 01/2015

On 13 March 2015, the European Aviation Safety Agency (EASA) published Opinion No 01/2015 (24 pages), which supports a European Commission policy initiative whose aim is to improve the performance of the European Union (EU) aviation system. To this end, this Opinion identifies the most appropriate ways to update Regulation (EC) No 216/2008 (the EASA Basic Regulation), in order to make it best respond to changes in the aviation environment and subsequent challenges to its safety. The Opinion is based on a variety of established, high-level policies and technical deliberations that took place over the last years and identified current issues and possible areas for improvement. Recent accidents underline the need to further strengthen the EU aviation safety system.

To this end, the aviation community was invited to contribute to both a European Commission public consultation and the parallel EASA public consultation via the Advance Notice of Proposed Amendment (A-NPA) 2014-12. Inputs to this A-NPA were reflected in this Opinion.

In line with the approach presented in the A-NPA, this Opinion remains at high, generic policy level and, therefore, does not contain any draft legal text. It addresses the areas of potential change, which were presented in the said A-NPA.

The Opinion concludes by suggesting a variety of changes to the respective technical fields. However, many of those technical fields, while being significant and important — like the performance-based approach, safety training, and environmental protection —, will lie mainly outside the scope of the Basic Regulation.

In the narrow sense of the revision of the Basic Regulation, the Opinion suggests proceeding with the most significant changes with the aim to further streamline and 'defragment' the existing framework, where necessary, in the following domains:

- General Aviation changes according to the General Aviation Road Map results,
- Optional and partial inclusion of State services,
- Annex II adjustments,
- Security aspects subject to existing EU competency,
- Provisions to be addressed to Ground Handling Service Providers,
- Consolidation of role in Single European Sky matters,
- Role in research coordination,
- Efficient use of available resources & sustainable funding solutions.

International - ICAO - Global RPAS Symposium - 1st Edition

The first global RPAS symposium organised by ICAO took place at its headquarters in Montreal, Canada on 23-25 March 2015. UVS International had been invited to contribute to establishing the conference programme and had an active presence at this



ICAO's 1st RPAS Symposium

event, including an exhibit where the 2014 edition of the RPAS Yearbook was made available to all participants.

608 delegates representing the international RPAS community from 80 countries convened at ICAO headquarters in Montréal, Québec, Canada to attend the symposium. During the first day, the event took place as a plenary meeting in ICAO's Assembly Hall and was opened by Dr. Olumuyiwa Benard Aliu, President of the ICAO Council, 3 keynote speeches were given (FAA, USA; European Commission DG Mobility & Transport; Google, USA) and 14 presentations were given in 3 themed sessions (RPAS: What is the world doing & What is needed; Setting the Scene; ICAO RPAS Panel).

Day 2 presented 4 concurrent threads during which 72 presentations were given in 10 themed Workshops (Airworthiness; Operations; ATM Integration; Civil/Military; Technology; National Regulations; Licensing; Safety Management; Security; Legal Matters). On Day 3, the delegates attended a plenary session on Integration, which was moderated by Nancy Graham, Director Air Navigation Bureau, ICAO & Stephen Creamer, Appointed Director, Air Navigation Bureau, ICAO. This very successful symposium was concluded by a plenary session in which Stephen Creamer presented the next steps and the symposium conclusions. The symposium delegates received access to the electronic edition of the newly published ICAO RPAS Manual.

The presentations given at this symposium can be found under the «Community Info» tab on www.rpas-regulations.org

At this event, Small RPAS were not only acknowledged, but they were omni-present. During the coffee breaks and lunch periods, flight demonstrations were performed in a large netted cage by three UVS International corporate members: Aerialtronics, The Netherlands; DJI, China; SenseFly, Switzerland (on behalf of Parrot, France). In addition, the 18 gram Black Hornet helicopter was flown in the general assembly hall on 23 & 25 March 2015 by UVS International corporate member ProxDynamics, Norway, and life video captured by this miniscule aircraft was beamed in real-time on to the two large projection screens.

On the third day, Jon Resnick of DJI, China presented Nancy Graham, on behalf of ICAO, in plenary session & with the on-stage presence of the workshop moderators, with a Phantom RPA for inclusion in ICAO's collection of aircraft, that is on display in the public areas of the ICAO building.

Multiple speakers referred to the important role that JARUS (Joint Authorities for Rulemaking on Unmanned Systems) was now expected to play relative to producing recommendations for harmonised regulations for all aspects of RPAS operations relative to Small RPAS (operational, personnel, technical, organisations). The strong growth of JARUS membership was highlighted (current members: Australia, Austria, Belgium, Brazil, Canada, Czech Rep., Colombia, Denmark, EASA, Estonia, Eurocontrol, Finland, France, Germany, Greece, Ireland, Israel, Italy, Latvia, Malta, Netherlands, Norway, Poland, Qatar, Romania, Russia, Singapore, South Africa, Spain, Sweden, UK, USA - and additional countries are in the process of joining). JARUS also indicated its intention to contribute to regional and



ICAO RPAS Symposium - Remittance of Phantom RPA to ICAO by Jon Resnick, DJI, China

global rulemaking efforts. It was also indicated that JARUS is at the heart of the European Union's performance based approach to integrate RPAS into European airspace and that it was evaluating how to actively implicate industry in its work. The first step in this direction was to be taken at the JARUS Plenary Meeting in Dublin, Ireland on 16 April 2015.

Acknowledgement

CybAero, Sweden sponsored UVS International's participation in the ICAO RPAS Symposium.

Europe - EUROCAE WG93

During the second quarter of 2015, EUROCAE WG93 submitted its report to the EUROCAE General Secretariat for review and subsequent submission to the EUROCAE Council for approval. On the date of publication of this current document, EUROCAE had still not published the WG93 report.

Ireland - JARUS Plenary Meeting

On 13-17 April 2015, a JARUS Plenary Meeting took place at the Irish Aviation Authority in Dublin, Ireland; it was attended by 62 JARUS member representatives from 23 national aviation authorities, who approved the new JARUS Terms of Reference.

Within the context of JARUS' outreach to industry with the intent to permit industry representatives to be actively involved with the JARUS work, UVS International was invited to attend the JARUS meeting on 16 April 2015, as representative of its members, the national associations that it federates and their members, as well as SMEs/SMLs and non-military RPAS operators, and was requested to table what it sees as the priorities that JARUS should deal with. These priorities were defined by UVS International in the context of the Riga Declaration, EASA's recently published «Concept of Operations of Drones», and the conclusions of the ICAO RPAS Symposium.

The presentation given by UVS International can be found on www.rpas-regulations.com, in «Community Info» under the JARUS heading. In addition, presentations were given by the following organisations: AIA, USA; ASD, Europe; AUVSI, USA; AVA, Europe; CANSO, International; Europe Air Sports, Europe; IAOPA, International; sUAS Coalition, USA.

France - Haut Comité Français de la Défense Civile (HCFDC)



On 24 April 2015 the French High Committee for Civil Defence organised a televised technical panel discussion on the topic «The security market for drones», which was broadcast live.

UVS International participated in this panel discussion, which was moderated by the HCFDC, and included representatives of the French Ministry of Interior, ASD (Aerospace & Defence

Industries Association of Europe), and FPDC, the French national RPAS association.

Switzerland - EBACE 2015

On 19-21 May 2015, the European Business Aviation Association organised this year's edition of the European Business Aviation Convention & Exhibition (EBACE) in Geneva, Switzerland. The event featured over 500 exhibitors on more than 40 000 m² of exhibition space.

At this event, a panel session, moderated by UVS International, was dedicated to RPAS. The panel session, which lasted one and a half hours, included representatives of EASA, SESAR JU, JARUS, ASD, Paul A. Lange Law Office (USA), and SenseFly, Switzerland. The purpose of this event was to improve understanding of RPAS-related matters with the General Aviation community.

The Netherlands - Kabinetsstandpunt Drones



On 28 May 2015, the Dutch Ministries of Safety & Justice, Infrastructure & Environment, and Economic Affairs, organised a working conference relative to a recently published joint report reflecting the cabinet's view on RPAS.

The purpose of this event was to comment the report, and with inputs of the attendees, prepare the way ahead. The event, which was attended by 150 Dutch policy makers and industry & research representatives, took place in The Hague, The Netherlands, a few days prior to the first Dutch RPAS regulation coming into force.

UVS International gave the opening speech at this important national event.

France - Conseil pour les drones civils

The first meeting of the "Conseil pour les drones civils" (Council for Civil Drones), took place on 4 June 2015, under the chairmanship of Patrick Gandil, the director general of the French civil aviation authority. At this meeting a review was made of the work accomplished within the framework of the first phase of the French government's "New Industrial France" initiative. The "Conseil pour les drones civils" consists of representatives of the national professional drone federation (FPDC), the national aeronautical and space industry trade association (GIFAS), various aeronautical industrial groups, operators, public utility companies, agricultural cooperatives, academia, competence clusters, and governmental authorities from various ministries & agencies. It makes recommendations on behalf of the French RPAS community.

The "Conseil pour les drones civils" has adopted a set of action plans encompassing three themes:

- Operations, Regulation & Use: To collectively identify future

markets, frequency protection, remote pilot qualification, define the regulatory evolution necessary for the rational incremental development of the use of drones;

- Technology & Security: To draw up a roadmap permitting to identify the most promising technologies and to coordinate the research efforts required to develop them (incl. test facilities);
- Support & Promotion: To facilitate the development of the national civil drone community (export, communication & education, access to financing, insurance, data protection & privacy, general acceptance).

In each of these domains, it is the objective, by means of a pragmatic approach, to coordinate all national efforts at all levels and involve all players, in order to support the multiplication of the usage of civil drones and the development of civil dronerelated innovative technologies and services.

With the support of the "Direction générale des entreprises" (an agency of the French Ministry of Economy, Industry & Digital Matters, responsible for the development of the competitiveness & growth of industrial & service enterprises), the Council for Civil Drones watches over the correct integration of its action plan with the solutions of the second phase of the national "New Industrial France" initiative, namely "Transport of Tomorrow", "Intelligent Objects" and "Digital Confidence", and in particular the technological projects identified by its technical roadmap.

The current French civil RPAS community consists of:

- > 2300 companies
- 2147 RPA operators deploying 3851 RPA;
- 140 approved RPAS producers;
- 398 granted RPA type certificates;

and the economic activity associated with this budding community already represents several hundred million Euros per year. (Note: *Quantities valid on Nov 2015*).

The rapid development of the French drone community is the fruit of the conjunction of a balanced regulation, a dense network of very innovative small & medium-sized companies, a long national aeronautical tradition, and visionary agricultural users and public utility companies. It is to be hoped that other countries will adopt a similar integrated national approach to RPAS.

Belgium - RPAS 2015 - 17th Edition

The 17th edition of the association's annual conference, which has become the international RPAS policy forum, took place at the Royal Military Academy in Brussels, Belgium on 22-25 June 2015.

RPAS: The Global Perspective - 13th Annual Edition

The 2015 edition of the RPAS Yearbook was published in June 2015 and the first hardcopies were made available to the RPAS 2015 conference attendees.

ISO Launches Technical Sub-Committee 16 on UAS

ISO/TC 20/SC 16 is a technical subcommittee of the International Organization for Standardization (ISO) Aircraft and Space Vehicles technical committee responsible for developing and maintaining standards for unmanned aircraft systems (UAS). The scope of the subcommittee is the standardization of materials, components and equipment for construction and operation of the UAS, which consists of the unmanned aircraft, the remote pilot station and the radiocommunication links connecting them, as well as equipment used in the servicing and maintenance of these systems & operational standards. The secretariat is held by United States. SC 16 convened its inaugural meeting in June 2015 with delegations from five

countries in attendance and more signing on as "Participant" and "Observer" members during and following that meeting.

Singapore - Commercial Unmanned Systems Show

On 30 June & 1 July 2015, Terrapinn Singapore, in partnership with UVS International, organized this event at the Suntec Singapore Convention & Exhibition Centre. It consisted of conferences and an exhibition, and was dedicated to informing on the use of RPAS in the domains of agriculture, mining, pipeline, infrastructure, environmental monitoring, and border security.

UVS International chaired the first day of the conference and was instrumental in organising a focus on regulatory matters with the participation of representatives from ICAO, EASA and JARUS.

Europe - RPAS Roadmap Implementation Coordination Group 2nd Meeting

On instigation of SESAR Joint Undertaking, the second meeting of the RPAS Roadmap Implementation Coordination Group took place at the offices of EC GD MOVE in Brussels, Belgium on 17 July 2015. In view of the many events that have taken place since the first meeting in January 2015, the meeting was very dense.

The principal topics of discussion were: approval of the group's Terms of Reference; Europe's RPAS-related R&D agenda; the current European regulatory agenda; and the requirement for improved coordination. As a member of this group, UVS International participated.

Europe - EASA's A-NPA 2015-10

On 31 July 2015, the European Aviation Safety Agency (EASA) published its Advance Notice of Proposed Amendment (A-NPA) 2015-10 concerning the introduction of a regulatory framework for the operation of drones. Following this consultation, which ended on 25 Sept. 2015, EASA was to submit a technical opinion to the European Commission before the end of 2015.

To ensure a safe, secure and environmentally friendly development, and to respect the citizens' legitimate concerns for privacy and data protection, EASA had been tasked by the European Commission - following the Riga Conference and its associated Declaration - to develop a regulatory framework for drone operations as well as concrete proposals for the regulation of low-risk drone operations.

The A-NPA reflected the principles laid down in the Riga Declaration. It followed a risk- and performance-based approach and was progressive- and operation-centric. It introduced three categories of operations as already proposed in «Concept of Operations for Drones» published by EASA in March 2015.

This regulatory framework encompasses European rules for RPAS in all weight classes. The amendments to Regulation (EC) No 216/2008, which were already under way will reflect the above. This change will be part of the «Aviation Package» legislative proposal that was to be issued by the European Commission in November 2015.

International - International Criminal Court

In August 2015, UVS International was solicited by the International Criminal Court in The Hague, The Netherlands to assist with the drawing up of technical & performance specifications of an RPAS for which it had an urgent operational requirement.

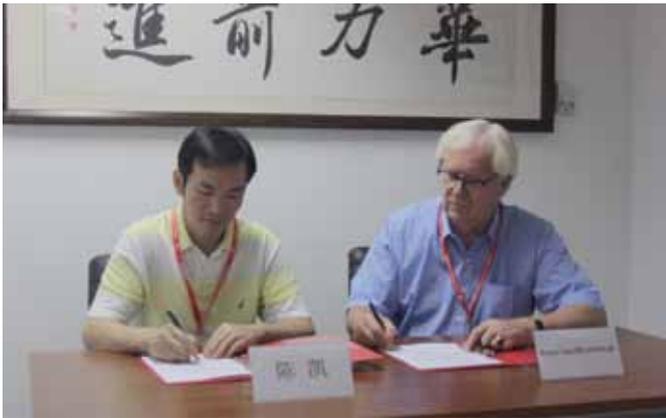
Once this task was accomplished, UVS International disseminated

the requirement through its network to the European RPAS community, collected the replies to the call for interest and forwarded them to the International Criminal Court for follow-up by this organisation and negotiations with the selected candidates.

Europe - RPAS InEx Network

In Sept. 2015 UVS International instigated the creation of the European RPAS InEx Network, which proposes to group European non-military governmental representatives involved with RPAS [municipal, regional & national police, customs authorities, coast guard, border guards, authorities involved with policing illegal RPA flights and prosecuting offenders, as well as fire brigades (municipal & regional)]. The purpose of the network is information sharing between the participants.

China - Strategic Partnership Agreement



On 16 Sept. 2015, Peter van Blyenburgh, on behalf of UVS International, and Kevin Chen, on behalf of China Aviation Promotion Ltd (CAP) - a subsidiary of the AVIC Group - signed a strategic partnership agreement, based on terms that had been agreed on between the parties in July 2015 in Beijing, China.

The general purpose of this agreement is to better implicate China in the initiatives of the global RPAS community and improve the awareness of the Chinese RPAS community of the international activities in the field of RPAS applications and related (product safety) standards, rules and regulations, and to strive towards goals of common concern relative to aviation safety.

Under the terms of this agreement, the two organisations will collaborate to disseminate civil RPAS-related information, and in particular regulatory information, to the Chinese RPAS community, and to jointly undertake efforts to promote the establishment of internationally acceptable product safety standards in China relative to professional, recreational and personal drones, and a related quality control scheme at the manufacturing level.

China - UAS Development & Innovation Forum 2015

The China UAS Development & Innovation Forum 2015 took place on 17 Sept. 2015 within the framework of the China Aviation Expo 2015 in the China National Convention Center in Beijing, China (16-18 Sept. 2015).

UVS International was, for the 5th consecutive time, invited by the organisers, China Aviation Promotion, to contribute to the conference programme by organising the international section of the symposium programme, and giving a keynote address.

Belgium - EC JRC Symposium

On 1 Oct. 2015, the European Commission Joint Research Centre (JRC) organized a symposium entitled «The Innovative Potential

of Drones from the EU Perspective» in Brussels, Belgium. The objective of this event is to present innovative ways of using civil RPAS and to identify their potential to support and accelerate EU policy implementation, as well as market opportunities for European Union industry.

The symposium was linked to the annual conference «Building a Resilient Europe in a Globalised World» that was co-hosted by the JRC and the European Political Strategy Centre (EPSC). UVS International was invited to give the keynote speech at this event.

Europe - DroneRules Project

The DroneRules project, which started on 1 Oct. 2015 and has a duration of 24 months, aims at building a comprehensive and high quality online presence in order to create THE reference web portal in the European Union (EU) (+ Norway and Switzerland) with the purpose of increasing awareness and facilitating understanding of the legal environment and constraints in relation with light RPAS operations (safety, privacy and data protection, insurance, etc.), and with a focus on non-commercial operators (incl. hobbyists). The project will also facilitate access to the European market for commercial operators intending to use RPAS in their home country, or in other EU countries, and will showcase the opportunities for economic and job market growth that RPAS represent for entrepreneurs and Small & Medium-sized Enterprises (SMEs).

The project's three principal objectives are:

- Design online educational and training material intended to increase awareness and knowledge of commercial and noncommercial operators about the regulatory framework applicable to the use of light RPAS in the European airspace, as well as informing them on the potential safety, liability and privacy risks associated to RPAS operations.
- Collect, elaborate & monitor information from all EU Member States (+ Norway & Switzerland) to present the requirements related to Light RPAS operations in the areas of privacy & data protection, operational safety, liability & insurance requirements.
- Develop & deploy a comprehensive, engaging and accessible web library that will act as a one-stop-shop for the RPAS community (existing stakeholders and potential new entrants). The portal will be available in the five main EU languages (English, French, German, Italian, Spanish) with country-specific information on RPAS rules and regulations translated in the language of the concerned Member State. The portal will also showcase success stories and best practices, so as to increase the uptake of RPAS technologies by small & medium-sized enterprises (SMEs) in new entrepreneurial ventures, as well as their acceptance by civil society. In order to maximise the impact of the project, the Consortium will actively promote the platform by organizing training sessions and promotional events.

The consortium partners (incl. 5 UVS International mbrs) are:

- BHO Legal, Germany
- Blyenburgh & Co, France
- EuroUSC International, UK
- GOPAcom, Belgium
- Global Aerospace, France
- SpaceTec Partners, Belgium
- Trilateral Research & Consulting, UK

The DroneRules project is the result of the call for proposals «COS-RPAS-2014-2-03: Facilitating access to regulation for Light Remotely Piloted Aircraft Systems (RPAS)» launched by the European Commission Executive Agency for Small- and Medium-sized Enterprises (EASME). See «Community Info» on www.rpas-regulations.com

Europe - RAVT Initiative Is Kicked Off

On 14 Oct. 2015, the RPAS Autopilot Validation Tool (RAVT)

initiative was kicked off at a meeting hosted by SESAR Joint Undertaking in Brussels. The objective of this initiative, initiated by UVS International and bringing together 20 corporate entities from 12 countries on 3 continents, is to define the functionalities of a tool that can interface with RPA autopilot systems, subject to a series of input scenarios, and to measure their outputs. The tool will be hosted on a laptop computer using standard industry interface protocols and development software.

RAVT is envisaged to interrogate the autopilot in virtual flight, introducing various failure modes scenarios, monitoring the outputs, and give the autopilot a performance grading, which may be used as the basis for according a European product safety quality label (€E) to the relevant autopilot. RAVT is destined to be used on autopilots for RPA with a maximum take-off mass (MOTM) up to 25 kg. The RAVT initiative conclusion will be submitted to SESAR Joint Undertaking for consideration as the subject matter of a call for tender to develop and produce RAVT.

Europe - EUROCAE Strategy Meeting

This meeting took place at EUROCAE headquarters in Paris, France on 23 Oct. 2015 and had as purpose to permit the leadership of EUROCAE Working Groups 73 and 93 to express their opinions on the best way forward for each working group to the EUROCAE Secretariat, which would subsequently produce a report for the EUROCAE Council.

At this meeting, the subject of merging both working groups was debated. The WG93 leadership, as well as UVS International (the instigator of both WG73 & WG93), opposed the idea of merging both groups. It was also pointed out that the backbone of WG93 consisted of Small- and Medium-sized Enterprises (SMEs), which would not accept to become full (paying) members of EUROCAE, in order to obtain the privilege of being able to contribute with their expertise and time and money. It was also pointed out that the standard EUROCAE work methodology was not really geared to SMEs. Consequently, special arrangements for SMEs were requested.

International - JARUS Web Site

After having created the JARUS web site in 2012 and having administered it since its inception, UVS International transferred the ownership of the domain name to EUROCONTROL (without any financial compensation). Starting on 1 Nov. 2015, EUROCONTROL now administers the JARUS web site.

Europe - European Parliament

Late Oct. 2015, the «Report on the safe use of remotely piloted aircraft systems (RPAS), commonly known as unmanned aerial vehicles (UAVs), in the field of civil aviation», produced by the Transport Commission of the European Parliament, was adopted by the European Parliament. UVS International had been invited to supply detailed comments on this document. The report can be found on www.rpas-regulations.com

Belgium - EC Security & Safety Symposium

On 3 Nov. 2015, the European Commission Directorate General Human Resources & Security hosted the 10th annual Security & Safety Symposium in Brussels, Belgium.

This event brought together over 300 participants with security responsibilities from the various European Institutions and Agencies, as well as from the National Security Authorities and



EC Security & Safety Symposium

Member States Permanent Representations based in Brussels.

UVS International was invited to give a keynote presentation on the current RPAS situation in Europe at this event.

France - RPAS Inter Tech Conference

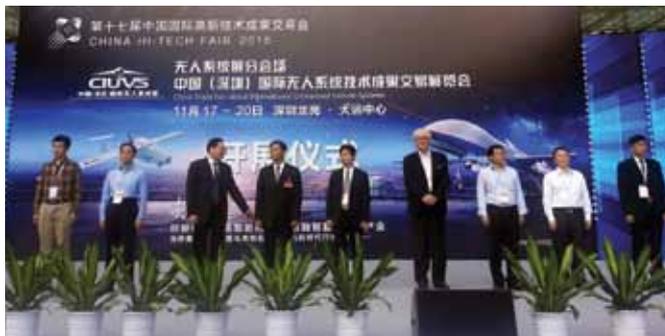
This technical conference took place Aviation Museum in Paris, France on 3 & 4 November 2015 and focused on RPAS-related research and technologies that will be instrumental to facilitate the insertion of civil RPAS into civil-managed airspace. It was organised by ASTech, France, in coordination with UVS International, and the French aeronautical competence centres Aerospace Valley & Pégase, as well as EUROCONTROL Experimental Centre and SESAR Joint Undertaking, which were all also members of the programme committee. See www.uvs-info.com

EUROCAE WG93 Leadership Meeting

This meeting, which took place at EUROCONTROL headquarters in Brussels, Belgium on 4 Nov. 2015, was called subsequent to the EUROCAE strategy meeting that took place on 23 Oct. 2015 in Paris, France.

The main purpose of this meeting was to once again debate the merging of WG73 & WG93. It was made known that a communication by the EUROCAE Council had indicated that WG93 had to follow normal EUROCAE procedures starting Nov. 2015, that any special arrangements had to be formally approved by the EUROCAE Council, and that WG93 was requested to supply a list of possible special arrangements. In addition, the preliminary draft of new Terms of Reference for WG93 and its work programme were discussed.

China - CIUVS - 1st Edition



The first edition of the China Trade Fair on International Unmanned Vehicle Systems (CIUVS) took place in Shenzhen, China on 18-20 November 2015. This event was organized by the Association for Unmanned Vehicle Systems of China (AUVSC) - which groups companies from the private sector

- in cooperation with the China Council for the Promotion of International Trade and the People's Government of Longgang District Shenzhen City.

UVS International had been invited by AUVSC to give the only opening keynote address given by a non-Chinese entity, met with local government officials and granted 15 interviews with Chinese television & written press representatives, during which emphasis was placed on the importance of China participating in the ongoing and/or upcoming international standards development efforts (specifically «product safety» related standards), as well as the importance for the Chinese private RPAS sector community to start acting as a cohesive entity and to interact with the international RPAS community.

Representatives of ARPAS-HK, the recently created Hong Kong RPAS association, as well as industrial representatives from Taiwan, attended the event. A photographic review of the products that were exhibited can be found on www.uvs-info.com

Belgium - RPAS CivOps 2015 - 4th Edition - Postponed

The association's annual conference dedicated to RPAS operations, planned to take place at the Royal Military Academy in Brussels, Belgium on 1-3 December 2015, was postponed, because of the high level of the security threat in Brussels, to 19 & 20 January 2016 (see 2016).

UVS International - General Assembly 2015 - Postponed

The association's General Assembly for 2015 was planned to take place at the Royal Military Academy in Brussels, Belgium at 14.00-17.00 on 1 December 2015. Because of the high level of the security threat in Brussels, the decision was taken to postpone it to 20 January 2016 (see 2016).

USA - JARUS Special SCB Meeting

On 1 & 2 December 2015 a Special Stakeholders Consultation Body (SCB) meeting was organized by JARUS at the offices of the Aerospace Industries Association (AIA) in Arlington, VA, USA. UVS International could not attend this meeting and was represented by ASD (Aerospace & Defence Industries Association of Europe). The purpose of this meeting was to lay the foundation for the SCB. Unfortunately, no minutes of this meeting, nor an attendees list, has been received.

Apparently, the meeting was attended by a limited number of stakeholder representatives. Nevertheless, as was indicated by Eric Sivel (JARUS chair) in his presentation at the RPAS CivOps conference on 20 Jan. 2016, the election of the SCB chairman took place. However, UVS International is now led to believe that this actually concerns the election of an «interim» chairman, whose task it is to structure the SCB in coordination with the stakeholders.

At this meeting, it appears that the following 10 Communities of Interest and correspondent representative organisations were decided as constituting the SCB:

<u>Community of Interest</u>	<u>Representative Organisations</u>
1 RPAS Producers	AUVSI, European Small UAS Coalition, Small UAS Coalition, UVS International
2 RPAS Operators	AUVSI, European Small UAS Coalition, Small UAS Coalition, UVS International
3 ANSPs & Controllers	CANSO, COCESNA, IFATCA, regional organisations
4 General Aviation	IAOPA, IBAC, regional organisations
5 Aerospace Industry (manufacturers)	AIA, ASD, regional organisations
6 Aerospace Industry (operators)	AIA, ASD, regional organisations

7 Commercial Aviation	IATA, IFALPA, regional organisations
8 Standards Bodies	ASTM, EUROCAE, ISO, RTCA, SAE
9 At Large Members	Communities still to be determined
10 At Large Members	Communities still to be determined

Each of the communities of interest is now to define a leader, and acceptable terms of reference, as well as procedural arrangements relative to contributing to the JARUS work are to be agreed upon.

International - Meeting of ISO SC16

On 2 & 3 Dec. 2015, the 2nd meeting of ISO SC16 on UAS took place at the offices of the Ministry of Transport in London, UK under the guidance of chairman John Walker (Padina Group, USA) and secretary Courtney Robinson (AIA, USA).

Europe - Aviation Package

On 7 Dec. 2015, as part of the European Commission's Aviation Strategy to Enhance the Competitiveness of the EU Aviation Sector, The European Commission adopted a new Aviation Strategy. This Aviation Strategy proposal consisted of two documents:

- A communication on Common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and repealing Regulation (EC) No 216/2008 of the European Parliament and of the Council (23 pages);
- Annexes 1 to 10

Note: Annex VI addresses «Essential Requirements for Qualified Entities» and Annex IX addresses «Essential Requirements for Unmanned Aircraft».

The European Aviation Strategy includes a proposal for a revision of the Aviation Safety Regulation to equip the EU's aviation safety system for future challenges; this includes a legal framework for the safe use of RPAS to pave the way for our industry's success in this promising market. Strangely enough, the terminology used is not always correct.

On 7 Dec. 2015, the European Commission also published an accompanying Staff Working Document on the European aviation strategy, a «Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions». RPAS are addressed on pages 96-98.

These documents can be found on www.rpas-regulations.com Additional information can be found on http://ec.europa.eu/transport/modes/air/aviation-strategy/index_en.htm

In the course of Dec. 2015, Violeta Bulc, EU Commissioner for Transport, presented the European Aviation Strategy to the European Parliament and the Council. It is estimated that the implementation will take 18 to 24 months.

Europe - RPAS Roadmap Implementation Coordination Group 3rd Meeting

This meeting took place at the EASA offices in Brussels, Belgium on 9 Dec. 2015. The current status in the following areas were reviewed: European regulatory agenda (3 priorities: RPA registration, RPA identification, geo-fencing), European R&D agenda.

The European Commission Directorate General Mobility & Transport (EC DG MOVE), which had chaired the group from its inception, expressed the desire that the European Aviation Safety Agency now takes leadership of this coordination group.

The Netherlands - RPAS Mini Symposium

On 10 December 2015, Matthijs van Miltenburg (NL), shadow rapporteur of the European Parliament, organised a mini

symposium on RPAS at the Technical University of Delft, The Netherlands. The purpose of this symposium was to bring the Dutch RPAS community together and inform them on the European regulatory state of affairs and related regulatory matters in Brussels, and to give the Dutch RPAS community the opportunity to express their preoccupations on national and European level.



On invitation of Matthijs van Miltenburg, UVS International was invited to give a keynote speech explaining the current state of affairs and make a call for more direct involvement by the Dutch RPAS community during the Dutch presidency of the European Union (1 Jan.-30 June 2016).

International - ICAO - RPAS Panel - New Chair & Vice-Chair

During the ICAO RPAS Panel plenary meeting that took place at ICAO headquarters in Montreal, Canada on 14-18 December 2015, the new panel Chairman (Mike Gadd, CAA, UK) & Vice-Chair (Randy Willis, FAA, USA) were voted into office. Furthermore, it was decided that these two appointments would now be for a periode of two years (instead of one).

In a side-meeting during the RPAS Panel meeting, UVS International, in view of its longstanding efforts in the domain, was invited by the ICAO Secretariat to play an active awareness creation and information dissemination role relative to the use of the correct RPAS-related ICAO terminology in regulatory documents by all members of the international RPAS community.

Acknowledgement

CybAero, Sweden sponsored UVS International's participation in the ICAO RPAS Symposium.

Europe - EASA's Technical Opinion

On 18 Dec. 2015, the European Aviation Safety Agency (EASA) published its Technical Opinion, which was based on its «Concept of Operations for Drones» (March 2015) and its subsequent Advance Notice of Proposed Amendment 2015-10 (A-NPA 2015-10), which reflected the principles laid down in the Riga Declaration and followed a risk- and performance-based operation-centric approach. The Technical Opinion included 27 proposals for a regulatory framework and for low-risk operations of all unmanned aircraft, irrespectively of their maximum certified

take-off mass and indicated three categories of operations, as already proposed in the published EASA Concept of Operations for Drones (published in March 2015).

The purpose of EASA's Technical Opinion is to:

- Lay the foundation of future work, notably the development of the necessary implementing rules in accordance with the Agency's rulemaking process;
- Illustrate the articles and essential requirements on unmanned aircraft included in the draft revision of the Basic Regulation that was issued by the European Commission as part of the Aviation Strategy on 7 December 2015;
- Serve as guidance for MS that have no rules for small unmanned aircraft or plan to modify their existing ones to ensure consistency as much as possible with the intent of the future EU rules;
- Provide a road map presenting the steps to be taken in the future.

The principals of the «Technical Opinion» are reflected in the Aviation Strategy (formerly called 'aviation package') legislative proposal submitted by the European Commission to the European Parliament and European Council early December. EASA's Technical Opinion can be found under the tab European Matters on www.uvs-info.com, under the Community Info tab on www.rpas-regulations & on <https://easa.europa.eu>

Europe - SESAR RPAS Demonstration Programme

During 2015, the SESAR co-funded (€ 4,2 million) RPAS demonstration programme (initiated in 2013) was concluded. In total, nine RPAS demonstrations were conducted by nine different consortia; these demonstrations supplied valuable inputs for the shaping of SESAR's ATM Master Plan.

Europe - Countries with RPAS Regulation

On the date of publishing of this document (15 May 2016), the following 18 European countries had an RPAS regulation in place:

Austria	Belgium	Czech Rep.	Germany
Denmark	Estonia	Finland	France
Ireland	Italy	Latvia	Malta
Netherlands	Norway	Poland	Romania
Sweden	UK		

Note:

There is no RPAS regulation in Switzerland, but a significant amount of commercial & non-commercial RPAS activity takes place under «adapted» model aircraft rules.



ICAO RPAS Panel
December 2015 - Montreal, Canada



UVS INTERNATIONAL & ITS INTERNATIONAL RPAS COORDINATION COUNCIL

THE FEDERATION OF THE GLOBAL RPAS COMMUNITY

REPRESENTING OVER 3000 COMPANIES & ORGANISATIONS IN 44 COUNTRIES

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www.arpasa.com.ar

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www.acuo.org.au

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www.beuas.be

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www.unmannedsystems.ca

CHINA



www.auvsc.com

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www.artccolombia.org

FINLAND



www.rpas.fi

FRANCE



www.federation-drone.org

GERMANY



www.uavdach.org

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IRELAND



www.uaai.ie

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