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ICAReS Task Force Group Regulations - Business plan



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“Developing a network of regulatory bodies, government, and RS sector associations regarding regulation and legislation”

ICAReS

Common challenges

Within the 2 Seas area the three major sectors (agriculture, nature and water) constantly face important challenges which require innovation to help tackle them. Greater use and development of remote sensing (RS) and data processing methods will help provide this innovation, and both will create and support new solutions to face these challenges. Moreover, it will greatly improve the efficiency of these sectors.

However, there are obstacles in the way when looking at remote sensing. For example, there is a lack of knowledge and awareness of the possibilities remote sensing can bring; there is a lack of suitable testing and demonstration locations for companies to further innovations; and the policy on legislation and the use of drones for remote sensing is unclear.

From this the following challenges need to be addressed: the aggregation of sector demands, communication with RS companies and knowledge institutions, creation and advertisement of sites for demonstrating new remote sensing applications, harmonisation of legislation and regulations and finally the formation of a durable cluster to work together on these issues.

Overall Objective

The overall object of the ICAReS project is:

To develop a cross-border innovation cluster and create the necessary conditions for innovation in the field of remote-sensing and advanced data-communication and -processing, based on the needs of the priority sectors: nature, agriculture and water & infrastructure.

A durable cluster will result in some key benefits. There will be cross-border collaboration within the sectors allowing the demands to be aggregated and jointly tackled. The innovation of remote sensing products and services will accelerate. This will allow business operations to improve through the increased use of remote sensing. Finally, the cluster will bring clarification of different national legislations and a joint lobby for better regulations to create business opportunities.

Summary Work Package 2

A second important issue for innovation is the development of facilities and services so that partners in the cluster can find each other, get a good picture of the demands and have appropriate facilities to test innovative applications. The main services and facilities for the RS innovation cluster are: well-equipped test- and demonstration sites including a kind of central organisation that coordinates demo flights, an office or virtual desk for demands, aggregation of demands and transferring demands to research institutes and SMEs and a (virtual) desk or info point for questions about regulation and legislation in the different countries. In this work package the majority of the ICAReS partners will participate in workshops to outline and describe the conditions for these 3 facilities/services. They will also make an inventory of existing and planned test sites in the 2Seas region and describe the facilities of those sites, including what is missing.

In this work package all Project Partners and Observer Partners are involved. Based on these descriptions the partners LP, and PP2 will (further) develop the test- and demo-sites in their area. The LP will develop a central organisation to coordinate demo flights. The branch organisation PP10 will develop (virtual) offices/desks together with the branch/sector organisations in the other countries. In this activity PP10 will get support from LP, PP5, PP7 and PP11.

Activity A 2.3 – Task Force Group on legislation and regulations

The goal of the Task Force Group (TFG) is getting the correct information on actual drone rules in the different MS for those who need to know it. (eg. SMEs; end-users like farmers). This TFG will give full support to existing (EU) structures that are under way to reach goals alike (e.g.: national Civil Drone Councils and relevant public/private partnerships with similar objectives; dronerules.eu). The TFG develops a business model to continue their activities for a longer period. LP, PP6, PP7, PP10, PP11 and observer branch organisations are involved; activity is led by PP10.

D.2.3.4 - This Report

The Task Force Group Regulations/Legislation (TFG-RL) on drones is a group set up by the partners of the Interreg 2Seas ICAReS project to contribute to the harmonisation of legislation within the EU, to create a level playing field within the EU drone market, and to stimulate innovation and drone usage in the EU. The Task Force Group will use, support, and build on existing EU structures (e.g. national Civil Drone Councils & relevant public/private partnerships with similar objectives; dronerules.eu) to achieve its objectives.

This document firstly describes the objectives of the group, secondly lists the members of TFG-RL and lastly expands on future actions related to the sustainability of the group in terms of organisation and business model.

Objective

The objective of the TFG-RL is to get the correct information on actual drone-related rules in the different member states and inform those who need to know it (e.g. SMEs; end-users like farmers). Also, the TFG-RL receives information from the demanding sectors regarding operational and legislative needs concerning airspace usage and data processing. This information can be used in contacts with regulatory bodies to try to expand the possibilities of using drones for professional purposes.

Roles and responsibilities

The Task Force Group consists of the following members:

- Gemeente Woensdrecht (LP):
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DARPAS is the coordinator of the group. The other members contribute and represent the following territories:

- Netherlands: Gemeente Woensdrecht, GeoInfra, ZLTO and DARPAS.
- United Kingdom: Skeye/Terra-Drone
- Belgium: ILVO
- France: DARPAS and ILVO

The Task Force Group is responsible for the deliverables as stated in the application form of the Interreg 2Seas ICAReS project (A.2.3), which are repeated below. In case of discrepancies, the latest version of the application form is leading.

Action

To achieve its objectives, the TFG-RL will engage in activities such as the organisation of meetings, conferences, and workshops, and will analyse and report on the development of EU and national rules and regulations. Also, a durable business model for the TFG-RL, aimed to be applicable in similar sectors will be developed in the process. The activities listed below can be adapted after approval by DARPAS and Gemeente Woensdrecht.

Organisational activities

A TFG-RL will meet 4x per year coordinated by DARPAS. DARPAS has the possibility to delegate the hosting of such a meeting to the partners. The meetings can be joined by electronic means (e.g. Skype). During this meeting at a minimum the following items will be discussed:

- a. Activities undertaken in each member state
- b. Progress on objectives and deliverables
- c. Developments in regulation
- d. Communication to the Quadruple Helix
- e. Any other matters.

DARPAS has been assigned as the delegation of the TFG-RL to attend conferences/meetings. Examples are:

- Meetings of the International Civil Drone Council (ICDC) that has been set up by UVS International (now referred to as Drone REGIM).
- European Commission workshops
- EASA workshops
- EUROCONTROL requests for consultation
- UVS International conferences
- NL National meetings like contributing in the Expert Groups, national Civil Drone Council (or organisation alike)

The goal is to achieve harmonised implementation of new EU-drone rules into MS regulations. DARPAS can delegate this responsibility to another member, either in part or full.

The members of the Task Force Group will meet regularly with similar groups/structures. Through interaction with EU agencies like EASA and EUROCONTROL the Task Force Group will determine and interpret the new rules. Each member will attend at least 1 meeting during the remaining period of the ICAReS project and will send a summary of the meeting to Gemeente Woensdrecht and DARPAS thereafter.

Analysis & reports

DARPAS and Gemeente Woensdrecht will collect and analyse the information gathered by each of the members of the Task Force Group and will actively communicate this to the quadruple helix innovation cluster (Knowledge Institutes, Governments, Civil Society and Industry). The form and extent of the communication will be determined at the quarterly meetings of the Task Force Group.

Business model for continuation

The Task Force Group will create a document describing a business model that makes it possible to continue the ICAReS TFG force after the project period. This business model will be a blueprint for similar actions in other EU MS or other end-user sectors. This will be coordinated by DARPAS, with contribution by the other members of the Task Force Group. Below is a first draft for such a business model which may serve as a seed for the continuation of this project.

The current situation concerning the entities which play a role in organising and participating in relevant meetings and conferences about RL can be described as volunteer workers. Small national drone-related trade associations like DARPAS, BeUAS and DCRO have a board of directors, which are not being paid for the hours they spend on these meetings and the preparation (reading documents). Drone associations of small countries do not raise enough money with membership fees to be able to pay the hours spent by people travelling to and participating in these meetings to contribute to the discussions about new RL. When the associations ask for a too high membership fee, many members drop off because of their company's insufficient revenue. Consequently, the result of asking a higher membership fee is that you end up with fewer members. Next to raising membership fees, trade associations do not have another form of income. It was only thanks to the help of the ICAReS project, that DARPAS was able to pay for participation in these important meetings during the last few years.

Some have raised the idea to organise a conference which could be beneficial for not only exchanging the contents, but also for creating income for the trade associations. Although this sounds right in the first instance, there are arguments against it. Drone events are organised by many parties, such as UVS International (twice per year in various locations), RAI (Amsterdam Drone Week), TUS (Rotterdam), Commercial UAV show, Rijkswaterstaat (Drone and Data Day), information days organised by the government (at national and EU-level), and more. People become a little bit tired of conferences and they do not want to spend too much money on it. In view of this, most drone community members principally attend events in their own country (where the proceedings are in their own language). Consequently, the conclusion has been come to that a conference organised by DARPAS would not be a viable option, as it would not raise a significant amount of money (not taking into account the financial risks that DARPAS would run).

At the international level, the situation is similar. Although UVS International combines the membership fees with the income of two annual conferences, the revenue generated is barely enough to run the organisation. It should be mentioned that the two annual events organized by UVS International (European Civil RPAS Regulation Implementation & U-Space Integration Forum; European Civil RPAS Operators & Operations Forum) are the only stand-alone conferences (not an appendix to an exhibition) that are dedicated to non-military drone-related rules, regulations, standards and operations.

With the start-up of Drone REGIM, which ICAReS supports and stimulates, it becomes even more difficult to create a sustainable volunteer work force to organise and support all the meetings and events related to Drone REGIM. In most cases, starting these efforts is not the problem. People are enthusiastic and can free up some time to organise things for Drone REGIM. However, the problem of working with volunteers is to maintain and sustain the effort for an extended period of time. This is the main threat for a volunteer-based structure.

The purpose of Drone REGIM is to act as the working pool to produce, in close liaison with the national aviation authority regulation implementation coordination (NAARIC)

group, consensually agreed opinion papers & recommendations, which will be officially submitted by the Member States representatives (NAARIC members) to the European Commission (DG MOVE) and the European Aviation Safety Agency (EASA) for their consideration. Thanks to early stage harmonisation (between Drone REGIM and the NAARIC group), this methodology should guarantee that the documents officially submitted by the Member States to the European Commission and EASA are in substance all nearly identical (and reflect the position of the European drone community).

This entire process gives the members of the NAARIC Group access to subject matter experts from industry that possess the required competencies to help them formulate their (technical) opinions.

The Drone REGIM initiative currently bundles 119 persons representing 91 companies & organisations (including some ICAReS partners) in 22 countries (including all ICAReS countries), as well as the representatives of the national aviation authorities of 18 countries, namely: AT, BE, DE, DK, EE, ES, FI, FR, IS, IT, LT, LU, LV, NL, NO, PL, SE, UK, which jointly form the NAARIC group.

The high level purpose of Drone REGIM is to coordinate the work required relative to the national implementation of the new EU drone regulation (topics that are not covered by the EU regulation, but that are the responsibility of the national aviation authorities). There is currently no other organisation capable of fulfilling this function. This Drone REGIM process will cement ties between the Drone REGIM participants and the NAARIC members, will have a positive influence on cross-border cooperation relative to the development of drone-related technology and drone usage (all market sectors & mission purposes).

The Drone REGIM initiative is a coordinated drone community action plan; its outputs will be of benefit to the entire EU drone community, and specifically the drone operators in the “open” and “specific” operational categories (which are principally micro-companies & SMEs).

Costs

The cost of starting-up Drone REGIM, getting it going and bringing it to the current stage is estimated at € 65 000 (500 hours at € 125/hour). This was mostly delivered on a voluntary basis.

To counter the threat inherent to a volunteer-based structure, our vision is to professionalise the Drone REGIM organisational structure and adequately finance those who play the vital roles of leaders, namely the Working Group (WG) (Co-)Leaders and the members of the Steering Committee (SC). Referring to reports to be written in WP3 (deliverables D3.2.1 and D3.2.2), there will be 10 SC positions and 22 WG-Leader positions.

To make a first estimate of the amount of money needed to keep Drone REGIM going, we have to make some assumptions. An initial proposal can be found herewith following.

Drone REGIM WG (Co-) Leaders & Steering Committee Members

- 1) WG (Co-) Leaders (hourly rate: € 85,00)
 - Quantity of 1 full day (8 hours) face-to-face meetings of WG members per year: 2
 - Quantity of hours per face-to-face meetings (preparation, organization, chairing & reporting): 16
 - Quantity of teleconferences with WG members per year: 10
 - Quantity of hours per meeting (preparation, organization, chairing & reporting): 8
 - Total per WG (Co-) Leader: € 85,00 x (8 + 2 x 16 + 10 x 8) = € 10 200
 - Total: 22 WG (Co-) Leaders x € 10 115 = € 224 400 / year

- 2) SC Members (hourly rate: € 85,00)
 - Quantity of 1 full day (8 hours) face-to-face meetings of SC members per year: 2
 - Quantity of hours per face-to-face meetings (preparation, organization, chairing & reporting): 8
 - Quantity of teleconferences (2 hours) between SC members per year: 4
 - Quantity of hours per meeting (preparation, organization, chairing & reporting): 8
 - Total per SC Member: € 85,00 x (2 + 2 x 8 + 4 x 8) = € 4 250
 - Total: 10 SC Members x € 4 250 = € 42 500 / year
- 3) Attendance Drone REGIM information dissemination conference:
 - Contribution to the travel & hotel expenses linked to the attendance of 10 Drone REGIM Steering Committee Members & 22 WG (Co-) Leaders:
 - Annual total: 10 + 22 x [€ 250 (travel) + € 360 (3 hotel nights)] = € 20 130

Drone REGIM Running Costs

- 1) Overall coordination of the Drone REGIM Focus Groups & Working Groups by UVS International (including oversight of “SharePoint” and documents to be posted, and dissemination of documents, administration):
 - 960 hours at € 125 = Annual total of € 120 000 / year.
- 2) Administration of the Drone REGIM web site & blog, and creation of the required documents (400 hours/year at € 125): € 50 000/year:
- 3) Communication (incl. social media) (200 hours/year at € 125): € 25 000/year
- 4) Travel & hotel expenses related to the participation in one-on-one meetings with the EC (DG GROW & DG MOVE), EASA, EUROCONTROL, SESAR, EUROCAE, ASD-STAN.
 - 2 Drone REGIM representatives/6 meetings/year:
 - 2 x 6 x [€ 250 (travel) + € 120 (1 hotel night)] = € 4 440
- 5) Travel & hotel expenses related to the participation in committees, panels, commissions, working groups organized by EC (DG GROW & DG MOVE), EASA, EUROCONTROL, SESAR, EUROCAE, ASD-STAN.
 - 20 Drone REGIM representatives / 10 meetings/year:
 - 20 x 10 [€ 250 (travel) + € 120 (1 hotel night)] = € 11 100
- 6) The creation of the “SharePoint” collaborative portal is of critical importance for the success of Drone REGIM. This is being undertaken by the IT team of Explain, The Netherlands, which participates in Drone REGIM. They will also take care of the administration of the “sharepoint”.
 - 100 hours at € 125 = € 12 500/year

As a rough estimate, € 223 000/year would cover the running costs.

Drone REGIM Information Dissemination Conference (2 x year)

- 1) Finding venue, identifying & contacting speakers, production of conference programme of programme, creating & administration of web site,
Annual total: 2 x 180 hours at € 125 = € 45 000
- 2) Finding venue, identifying & contacting speakers,
production of conference programme of Drone REGIM information dissemination conference (2 x year):
Logistics (venue rental, audio/visual equipment rental, catering (coffee breaks, lunch):
Annual total: 2 x € 25 000/conference = € 50 000/year.
- 3) Drone REGIM information dissemination conference (2 x year):
Cocktail: € 3 500/cocktail (200 persons)
Annual total: 2 x € 3500 = € 7 000

As a rough estimate, € 102 000/year would cover the annual conference costs with free participation for 200 persons.

Benefits

The drone communities, as explained, do not have deep pockets. Consequently, raising membership fees above the already regularly criticised amounts will not be a solution. As a result, we must seek for other ways of financing the indicated estimated costs to keep Drone REGIM alive in a professional manner. The consequence of creating a professional approach is that we create job opportunities to do the work indicated, but more importantly, that Drone REGIM will, in coordination with the national aviation authorities of 18 countries (NAARIC), contribute in a very significant way to the harmonization of the national approaches relative to the implementation of the EU drone regulation.

Proposals to create income to finance the activities described in the costs section are:

- A. Request an entrance fee for the two conference to disseminate the knowledge about the status of the working groups. Counting on the same number of participants, (Note: Participation is expected to be significantly lower than when participation is free) the participation fee shall be an average of more than € 500. However, this amount is not affordable for the majority of the SMEs/SMIs interested to participate. However, if an entrance fee of € 200 is charged to 200 participants for a two-day conference, this results in a deficit to the organiser.
- B. Send out a letter to explain the important work being undertaken by Drone REGIM in coordination with NAARIC and what the implications are for not having such a structure in terms of the drone community being able to contribute to being able to implement the EU drone regulations in a harmonised manner in the EU member states (and nationally meeting the legal deadlines imposed by the EC). This letter could also indicate the consequences of a lower level of harmonisation between the EU Member States (e.g. not having a pan-European pilot license), which would result less business opportunities. In the letter it should be made clear that we need a professional basis to run Drone REGIM, which requires a substantial amount of money (for set-up, management/coordination, administration, organisation, communication, dissemination). Thus, a voluntary contribution could be asked for from the EU drone community. This letter can be sent to all the relations of the ICAReS project (about 6000) and all the relations of UVS International (23.000) (with some overlap). We do not have any idea how much money such a request could raise. In addition, it will probably work only once, so it cannot be repeated on an annual basis. As a wild estimate such an action could possibly be able to generate between € 10.000 to 20.000.

- C. Drone REGIM could play a role in creating a level playing field on the topic of equal examination levels for the drone knowledge tests relative to the “open” & “specific” operational drone categories. In compliance with the EU drone regulation, each drone operator, both professional & recreational, desiring to operate a drone of more than 250 gr. will be required to pass a knowledge test. If UVS International would be able and allowed to ask a small contribution in favour of Drone REGIM from each approved examination centre for each subscription to a drone knowledge test, an interesting revue income stream could be created. It is estimated that several 100.000 of examinations will have to be taken, as a start. If only € 1 is paid by the examining organisations for each examination taken, this could already equate to an interesting revenue stream, which would compensate Drone REGIM for its work.

However, it should be noticed that there are some setbacks to endeavouring to raise money in this manner. It would require a substantial administration in order to collect the money. The examinations will probably start to happen only after 1st July 2020 and from then slowly increase to a substantial volume. In other words, the flow of income will only start after a lot of work by Drone REGIM Working Groups have already been done. Consequently, the income will arrive (too) late. In addition, it is still rather unclear how these examinations will be organised and if it will be possible (in view of European rules on open competition) to come to an agreed cost for taking an examination. When it will be decided by the national aviation authorities (or other competent authorities) which organisations in their country qualify to administer the examinations, it will probably be rather difficult to reach out to all these examining organisations and agree on a contribution to Drone REGIM. For this to be a viable solution, it would have to be addressed at a higher European level (possibly linked to the access of the examining organisation to the central EU database with the qualified questions).

All by all it seems rather difficult to us to raise enough money to set-up a professional Drone REGIM organisation. Only if Drone REGIM can collect some form of financing from external sources like the EU stimulation funds, will it be possible to unlock the potential that Drone REGIM holds to contribute to resolving a significant amount of extremely urgent problems that are currently be faced by all EU Member States. It should be emphasised that there is currently no alternative to Drone REGIM, and that this fact has been recognized by NAARIC.

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