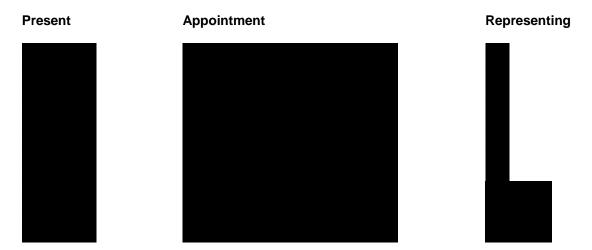
MINUTES OF RADNOR BVLOS UAS TDA (ACP-2021-030) ASSESSMENT MEETING HELD ONLINE ON 5th July 2021



CAA Assessment Meeting Opening Statement

The CAA has received the presentation and agenda in advance of this Assessment Meeting and confirmed that the documents must be published together with minutes of the meeting, on the Airspace Change Portal.

The purpose of the Assessment meeting, as set out in CAP1616 is for the Change Sponsor to present and discuss their statement of need, provide information on how it intends to fulfil the requirements of the airspace change process and present its provisional timescales. Lastly, the Sponsor is also required to provide information on how it intends to meet the engagement requirements of the process.

	ACTION
Introduction	
The Attendees introduced themselves and outlined their roles in the process.	
The meeting Chair, , read the CAA Assessment meeting opening statement provided above.	
Statement of Need	
read the SoN, as submitted to the CAA, and invited any immediate questions. The following points were raised under a previous meeting for ACP-2021-029 and are relevant to this ACP application:	
 The RPAS team stated their requirement for a thorough risk analysis, within the Safety Case, and considering all direct and indirect risks, with appropriate and proportional mitigations. 	
 It was reiterated that this initial application is part of a staged approach to the development of a robust TDA in accordance with the requirements of CAP1616. 	
 The RPAS team stated that concurrent assurance regarding oversight and approvals for the associated ground installation(s) to testing is required by the Regulator. 	
 The RPAS team identified that the Sponsor's current BVLOS permissions only permit operations within established, permanent danger areas listed under AIP Section 5.1. A Technical Variation must be submitted if the Sponsor wished to conduct operations within a TDA. 	

Location – Radnor Range is an accredited T&E facility and provides services to and commercial organisations for the defence, security, police, transportation and civil sectors. Situated within Class G airspace, the range area, incorporating an established ground danger area, is clear of controlled airspace.

Issues and opportunities arising from proposed change

Significant enhancement of UAS/ testing for the extant customer, and providing further opportunities for technology development.

CAA granted permissions to the Sponsor in September for E/BVLOS, with an RAE application currently under review.

Application to the innovation hub to understand how value can be added to operators joining the BVLOS arena, this application is because BVLOS needs segregated airspace.

Provisional timescales*

- 1. TDA up to 90 days in Q1 2022.
- 2. Airspace trial -3-6 months in 2022 to understand whether the capabilities provides the capability wanted to the customers. Not part of this ACP.
- Permanent segregated airspace activated by NOTAM in 2022+. Not part of this ACP.
- 4. Jun 21 Platform testing regime currently being planned
- 5. Aug Oct 21 Up to 10 weeks targeted engagement
- 6. Jan/Feb 22 Draft AIC available for review
- 7. Feb/Mar 22 TDA goes live (AIRAC 12/21 or 13/21) for up to 90 days

timeline agreed may become subject to change by the CAA. This is because the Secretary of State for Transport has directed the CAA to prioritise RNP Instrument Approach Procedures (IAPs) without an Approach Control proposals; this may impact Airspace Regulation resource and consequently timelines.

Next steps

The CAA noted that the presentation was very helpful and had a number of questions in relation to the ACP in the first instance.

The CAA stated that understanding the difference between an application for a trial, and a temporary change is key. CAP 1616 sets out the basis of a trial, which is innovative use of technology or airspace, whereas a temporary application is for work of temporary nature. A trial application would be for a longer duration, potentially leading into an application for a permanent change and the requirements therein. For any application for a trial it is key to justify what is innovative regarding this piece of work.

The TDA request is for a temporary change and therefore a slightly different CAP 1616 process and a more tailored engagement approach is required.

The CAA would like to understand how the management of the DACS or DIAS for the airspace, and how often this would be activated, hours of operation and a thorough articulation of how to manage a piece of airspace as a danger area.

The following points were noted as required for inclusion:

- CAP 1616 sets out the requirement for a trial plan.
- The Safety Case is to be looked at by the RPAS team to ensure the activity will be contained within the area suggested.
- Measures to mitigate against inadvertent penetration of the danger area must also be considered and actions arising should that occur.
- An understanding of the dimensions of BVLOS airspace and the requirements of the 'buffer policy', specifically how to protect other airspace constructs.

Action – will send the policy including the requirements of this to the Sponsor

Consultation and engagement

This process must encompass:

- Aviation stakeholders
- Other airspace users
- NATMAC
- Aerodromes
- A Anyone directly, indirectly or potentially impacted, including elected representatives and/or environmental interest groups representing communities likely to be affected by potential impacts.
- This engagement may be limited to safety/risk mitigations and operational responsibility, facilitating the relevant parties' understanding of impact and response(s).

Action: xx will provide a contact list of relevant stakeholders to be reviewed by the Sponsor

It was agreed that is important to maintain paper trail of who, what, and why as part of the engagement strategy to support this proposal. The gateway isn't a formal part of the process, however it may be a useful point where the application can be reviewed by the CAA and inform interested parties regarding outcome(s).

- A report of how the engagement process worked, including feedback into the final proposal, was also requested. This could be in the form of a table summarising themes or individual feedback depending on the volume received.
- The RPAS team stated that if the proposal would affect traffic below 7000ft then stakeholders are required to be informed of any feedback.
- A complaint monitoring plan should be included, for monitoring enquiries or complaints and reporting it back to CAA. The Sponsor should identify the appropriate audience then plan a timeline that is reasonable for engagement, which should be reasoned and included within the engagement plan.
- As there are different stakeholders for the 2 applications, ACP029 and ACP030, any over lapping stakeholders will be approached concurrently; local stakeholders will be approached separately. Any feedback will be associated with the respective application(s).

Environmental concerns

- asked that the application take note and reference the following with regards to environmental concerns.
 - Appendix B CAP 1616, page 173 and 174, which references temporary changes
 to airspace design. For temporary changes noise impacts should be assessed but
 there is no requirement to assess any other environmental impacts (i.e. CO2, local
 air quality, tranquillity), because these are likely to be negligible for such a shortterm change.

- The consequential noise impact to any other traffic that would normally fly through this area should be considered. For temporary changes a qualitative description of any changes to these traffic patterns, illustrated using operational diagrams should be provided.
- Noise levels of drones. As the noise from a UAS can be tonal in nature, this could be regarded as 'irritating' for other people and therefore it may be appropriate to add a penalty for this characteristic.
- Although there are no historical noise complaints, the noise assessment should not assume there will be no complaints for the proposed change and should look at how activities differ from the current activity and how this change might impact health and quality of life.
- Should there be a need to do so, the sponsor can request to discuss the proposed assessment methodology with the CAA.

Next Steps for Timeline

This will depend on engagement timeline. The following steps will need to be completed before an end date can be agreed:

- process discussion (this meeting)
- minutes agreed
- opportunity to submit draft engagement plan
- opportunity to discuss draft TDA structure and dimensions alongside permanent airspace application
- Once engagement is complete and final trial plan has been submitted, then the CAA will take 28 days to make a decision, (this is dependent on AIRAC cycles).
- As the summer holidays fall into this cycle, this may affect timings.

The Sponsor requested that it be noted that this application is for airspace permissions, and does not cover any equipment installations, which are subject to their own permissions. Any flying activities will be conducted in accordance with EVLOS and BVLOS rules, and current permissions. The CAA stated that one of the points to be looked at is whether or not the intended use meets the metrics of what is being requested. Activity that directly links and/or anything that does not affect this needs to be fully understood, including whether the activity and equipment is being operated safely and in line with regulations before this application can be approved.

Item 7 - Any other business

thanked the attendees for coming and noted that further questions arising from consideration of a trial or permanent ACP are welcome.

Minutes need to be agreed and commented on in the next week or so.

No further questions or business was noted, and the meeting closed.

ACTIONS ARISING FROM RADNOR BYLOS UAS TDA ASSESSMENT MEETING

Subject	Name	Action	Deadline
Airspace		Send Sponsor CAP 1616 Policy documentation	ASAP
Regulation			
Consultation &		Send contact list of relevant national stakeholders	ASAP
Engagement			
Minutes		Send draft minutes to for review	16 Jul 21

Nexus Nine ACP Sponsor