



the sponsor was required to provide information on how it intended to meet the engagement requirements of the various stages of the airspace change process.

<p><b>Item 1 – Introduction</b></p> <p>All attendees were introduced. Apologies were made and the mandatory statement was read. The ACP Sponsor outlined the importance of the PROTECTOR Programme to the UK and described the relationship between the MOD and the Defence Unmanned Air Systems Capability Development Centre (UAS CDC).</p>	
<p><b>Item 2 – Statement of Need (discussion and review)</b></p> <p>The MOD introduced its Statement of Need as follows:</p> <ul style="list-style-type: none"><li>• “There is a requirement for a large Remotely Piloted Air System (RPAS) to operate out of RAF Waddington from the mid-2020s. Pursuit of an ACP optimises an approach, in terms of efficiency and safety, for RPAS to operate from and to RAF Waddington. Furthermore, this approach will support the safe integration of the RPAS into the national airspace structures, given the anticipated performance of on-board systems and the surrounding airspace classification. Access to existing training areas around the UK will also be considered as part of the integration into the national airspace structures”;</li><li>• Altitudes affected:<ul style="list-style-type: none"><li>○ Surface to below 4,000 ft;</li><li>○ 4,000 ft to below 7,000 ft;</li><li>○ 7,000 ft to below 20,000 ft;</li><li>○ 20,000 ft and above;</li></ul></li><li>• Proposed submission date: by Apr 2022.</li></ul> <p>Key information:</p> <ul style="list-style-type: none"><li>• Main Operating Base - RAF Waddington;</li><li>• Release to Service – [REDACTED];</li><li>• Initial Operating Capability - [REDACTED];</li><li>• Final Operating Capability - [REDACTED];</li><li>• Training areas all around UK.</li></ul> <p>There were no further comments.</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	

<p><b>Item 3 – Issues or opportunities arising from proposed change</b></p> <p>The MOD outlined that:</p> <ul style="list-style-type: none"> <li>• At Release to Service PROTECTOR would not have a certified Detect and Avoid capability;</li> <li>• Multiple training locations around the UK had been identified;</li> <li>• PROTECTOR would be equipped for flight within classes A – C airspace;             <ul style="list-style-type: none"> <li>○ The CAA asked why class D had not been included. The ACP Sponsor explained that whilst the airframe will allow inclusion of the avionics to support operation in Class D (if required) it had not been specifically contracted for inclusion by the MOD;</li> </ul> </li> <li>• Any airspace design would be in line with the Airspace Modernisation Strategy (CAP1711);</li> <li>• A Detect and Avoid capability would be delivered at Final Operating Capability, [REDACTED]. Therefore, this could be a short duration airspace change;             <ul style="list-style-type: none"> <li>○ The CAA Case Officer explained that airspace changes can be time and/or capability bound at the approval stage. In this case, such conditions set at implementation may facilitate removal of airspace change introduced purely as a result of the capability gap between the expected Initial and Final Operating Capabilities.</li> </ul> </li> </ul>	
<p><b>Item 4 – Options to exploit opportunities or address issues identified</b></p> <p>The MOD outlined that it had embarked on a Dual Strategy Approach with regard to the integration of PROTECTOR into UK airspace. The strategy was as follows:</p> <ul style="list-style-type: none"> <li>• The MOD was developing a set of safety arguments to enable the flight of PROTECTOR in some, if not all, classes of UK airspace without the need for segregation. It was felt that some classes of airspace would be less challenging than others, particularly with the platform being equipped for flight in classes A – C. However, the challenge would remain significant for other classes, in particular class G;</li> <li>• Where flight was not possible without segregation, the airspace requirements would be addressed through the airspace change process.</li> </ul> <p>Through this work the benefits of emerging Airspace Modernisation Strategy would be explored. The CAA UAS Team representative stated that the equipage requirements for flight in all classes of UK airspace would not change under the Airspace Modernisation Strategy.</p> <p>It was felt that, as presented, the Dual Strategy Approach was an appropriate solution for the operation of PROTECTOR in UK airspace.</p>	

**Item 5 – Provisional indication of the scale level and process requirements**

The CAA representatives agreed that an airspace change was an appropriate means to address the issues presented. The following comments were made:

- The ACP was set as a provisional Level M1, but was to be left on the portal as TBC. The category would be confirmed in Stage 2b.
- There was unlikely to be any requirement for the ACP to consider airspace change above FL195;
- The ACP submission should include the anticipated frequency of flight, duration and operational hours etc. ██████████ explained that ██████████ the details were not yet available, but that they would be included;
- The ACP Sponsor explained that where possible the operating parameters for PROTECTOR would be designed to minimise the impact on other airspace users, provided there was no significant detriment to the MOD's training and operational output;
- The CAA Environmental Regulator stated that consideration must be given to the impact of the expected RPAS operations on civilian airspace users. The environmental impact of any resulting alteration of civil aviation traffic patterns will require to be assessed;
- The CAA Environmental Regulator stated that an assessment of the civil traffic flight density around RAF Waddington must be undertaken as this is the region within which the RPAS is most likely to be operating below 7000ft. The ACP ATM Lead asked if there was a standard means of doing this. The CAA confirmed that there was currently no formally defined process or requirement other than to consider apparent radar replay/returns;
- The CAA Engagement & Consultation Regulator stressed the importance of early and consistent stakeholder engagement across stages 1 – 3 of the ACP, and highlighted the requirement for the Sponsor to ensure that appropriate records are collated and submitted to validate engagement related activities;
- The CAA Case Officer suggested that NATS would be the major point of contact for engagement to consider impact of PROTECTOR flying across the UK;
- The CAA Economic Regulator stated that the CAA required an economic analysis of the cost and/or benefit of the airspace change. ██████████ stated that there would be no economic impact that could be quantitatively assessed; therefore, no WebTAG file would be used during options appraisal and only a qualitative assessment of economic factors would be provided. The CAA Economic Regulator emphasised that the Sponsor would be required to provide justification to illustrate why it would not be possible to complete a quantitative analysis or produce WebTAG output.

**Item 6 – Provisional process timescales**

The following timeline was proposed:

<b>Gateway</b>	<b>Date</b>
Define Gateway	Sep 19
Develop and Assess Gateway	Dec 20
Consult Gateway	Oct 21
Update and Submit	Apr 22
Decide Gateway	Sep 22
Implementation	Oct 22

After discussion it was agreed that the timeline needed to be adjusted to take into account submission dates for the AIRAC cycle. The new timeline proposed was as follows\*:

<b>Gateway</b>	<b>Date</b>
Define Gateway	Sep 19
Develop and Assess Gateway	Dec 20
Consult Gateway	Oct 21
Update and Submit	Mar 22
Decide Gateway	Sep 22
Implementation	Jan 23

This would require an AIRAC submission date of 28 Oct 22 to achieve publication on 26 Jan 23.

The following comments were made:

- The [REDACTED] stated that whilst the ACP might be completed before Release to Service was achieved, there would be no requirement to implement the change before Release to Service;
- The CAA Case Officer stated that a significant number of ACPs were in process and so timescales might be a challenge. The CAA would compare the presented timescales for the PROTECTOR ACP against the current internal demand to ensure that there were no major issues/blockers to meeting the key dates presented;
- It was worth noting that Gateway Assessment Meetings required a minimum of 2 weeks between submitting the necessary documents and the meeting date and that this notice period might need to increase. If a Gateway timeline required to be changed, this would be negotiated with the MOD. It was also noted, however, that the timeline presented was realistic;
- The CAA Engagement & Consultation Regulator clarified that the DECIDE Gateway was not tied to the published Gateway Assessment schedule.

<p>* Post-meeting note: Prior to the minutes being published the timeline as proposed above was agreed by the CAA. The agreed timeline was, therefore as follows:</p> <table border="1" data-bbox="178 338 911 584"> <thead> <tr> <th><b>Gateway</b></th> <th><b>Date</b></th> </tr> </thead> <tbody> <tr> <td>Define Gateway</td> <td>Sep 19</td> </tr> <tr> <td>Develop and Assess Gateway</td> <td>Dec 20</td> </tr> <tr> <td>Consult Gateway</td> <td>Oct 21</td> </tr> <tr> <td>Update and Submit</td> <td>Mar 22</td> </tr> <tr> <td>Decide Gateway</td> <td>Sep 22</td> </tr> <tr> <td>Implementation</td> <td>Jan 23</td> </tr> </tbody> </table>	<b>Gateway</b>	<b>Date</b>	Define Gateway	Sep 19	Develop and Assess Gateway	Dec 20	Consult Gateway	Oct 21	Update and Submit	Mar 22	Decide Gateway	Sep 22	Implementation	Jan 23	
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<p><b>Item 7 – Next steps</b></p> <p>The minutes of the meeting were to be published and uploaded onto the portal within 2 weeks of this Assessment Meeting. A complete version was to be agreed and presented to the CAA, whilst a redacted version was to be placed on the portal.</p>															
<p><b>Item 8 – Any other business</b></p> <p>No other business.</p>															

**ACTIONS ARISING FROM MOD RPAS OPERATIONS AT RAF WADDINGTON ASSESSMENT MEETING**

<b>Subject</b>	<b>Name</b>	<b>Action</b>	<b>Deadline</b>
Timeline	[REDACTED]	The timeline was to be adjusted to accommodate the AIRAC cycle	ASAP
Minutes	[REDACTED]	The minutes of the meeting were to be published and uploaded onto the portal within 2 weeks of this Assessment Meeting	6 June 2019

[REDACTED]  
ACP Sponsor