



**NATIONAL POLICE
AIR SERVICE**

NPAS BVLOS Trial

Annex B: HRA Screening Criteria

Stage 4 Submit

ACP-2024-035

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Referenced Documents

Ref No	Name and description	Links
1	Airspace Change Portal	Link to Website
2	CAP1616I	Link to CAP1616I
3	MagicMap website (DEFRA)	Link to MagicMap

1. Introduction

1.1 Purpose

- 1.1.1 This document evaluates the NPAS BVLOS Trial (ACP-2024-035) (Reference 1) against the CAA's HRA Screening Criteria as set out in Chapter 9 of CAP1616I (Reference 2). The aim of this document is to provide sufficient evidence to enable the CAA to determine any HRA requirements.
- 1.1.2 This document is an annex and should be read in conjunction with the Airspace Change Proposal.

2. Screening Criteria Questions and Responses

2.1 Screening Criteria Question 1 (1)

Are there any changes to air traffic patterns or number of movements expected below 3,000 feet due to the airspace change proposal?

Yes

- 2.1.1 NPAS does not anticipate changes to air traffic patterns for their main operations. NPAS already operate crewed aircraft within the potentially affected area below 3,000 feet and intend to mimic current operations with the RPAS, although starting from Avonmouth Helipad rather than NPAS Almondsbury (approximately 7.5 miles away). The trial aircraft will be operating out of Avonmouth Helipad, which is an active helipad with current operations. The NPAS trial RPAS vehicle will be in addition to any other Avonmouth Helipad and NPAS Almondsbury operations.
- 2.1.2 It is anticipated that there will be an increase in the number of movements below 3,000 feet as trial movements will occur in addition to current NPAS crewed aircraft operations. In the month from 16th July to 15th August 2024, NPAS Almondsbury based aircraft overflew the Severn Estuary 82 times. The trial is expected to increase this by approximately 5 flights a week.
- 2.1.3 In addition to the trial aircraft and NPAS operations (as described above) other airspace users also operate in the area. Access to the TRA will be restricted, therefore, other airspace users may choose to operate above or go around the TRA. Therefore, the TRA could change traffic patterns for other airspace users. However, it is not possible to quantify this change.

2.2 Screening Criteria Question 2 (2a)

Are there any European sites within a radius of 18 km of each runway end?

Yes

- 2.2.1 The identification of European Sites has occurred within 18km of Avonmouth Helipad ¹.

¹ As there is no runway at Avonmouth Helipad, "runway end" has been interpreted as "take-off site" for this trial.

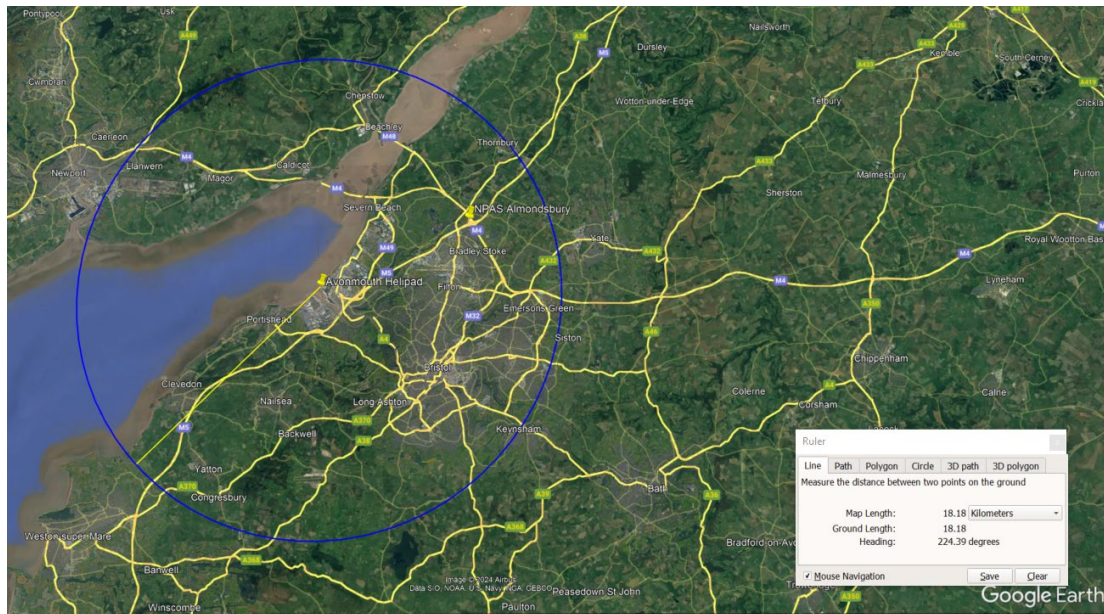


Figure 1 - 18km radius from Avonmouth Helipad used to identify European Sites within the vicinity. Source – Google Earth Pro

- 2.2.2 The proposed TRA (red polygon in Figure 2) will primarily be located North (including Northeast and Northwest) of Avonmouth Helipad. However, the full 18km radius (blue circle) from Avonmouth Helipad has been assessed as well as the entirety of the proposed TRA shape (including the areas outside the 18km radius).
- 2.2.3 Figure 3 shows the sites in the proximity to this proposal, with Table 1 and Table 2 detailing those potentially impacted.

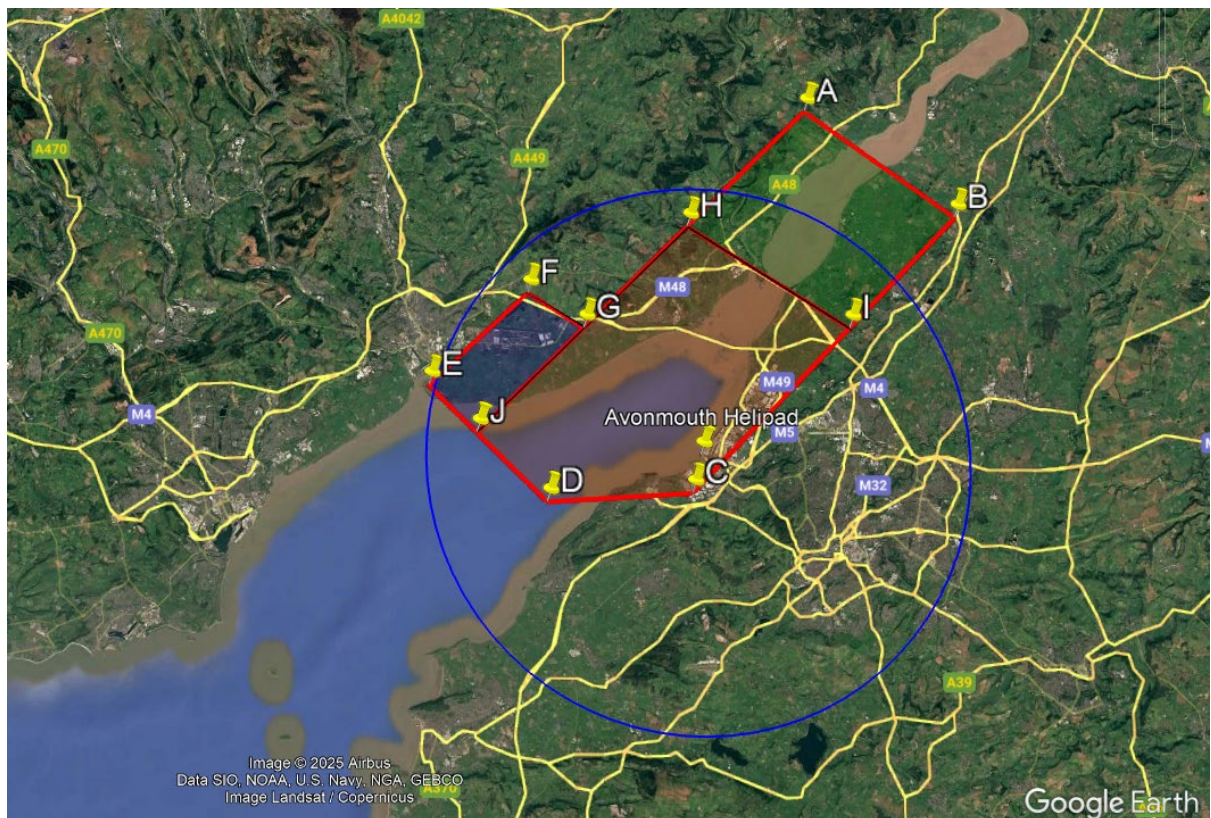


Figure 2 - Proposed TRA (purple polygon) and 18km radius from Avonmouth Helipad (blue circle). Source - Google Earth

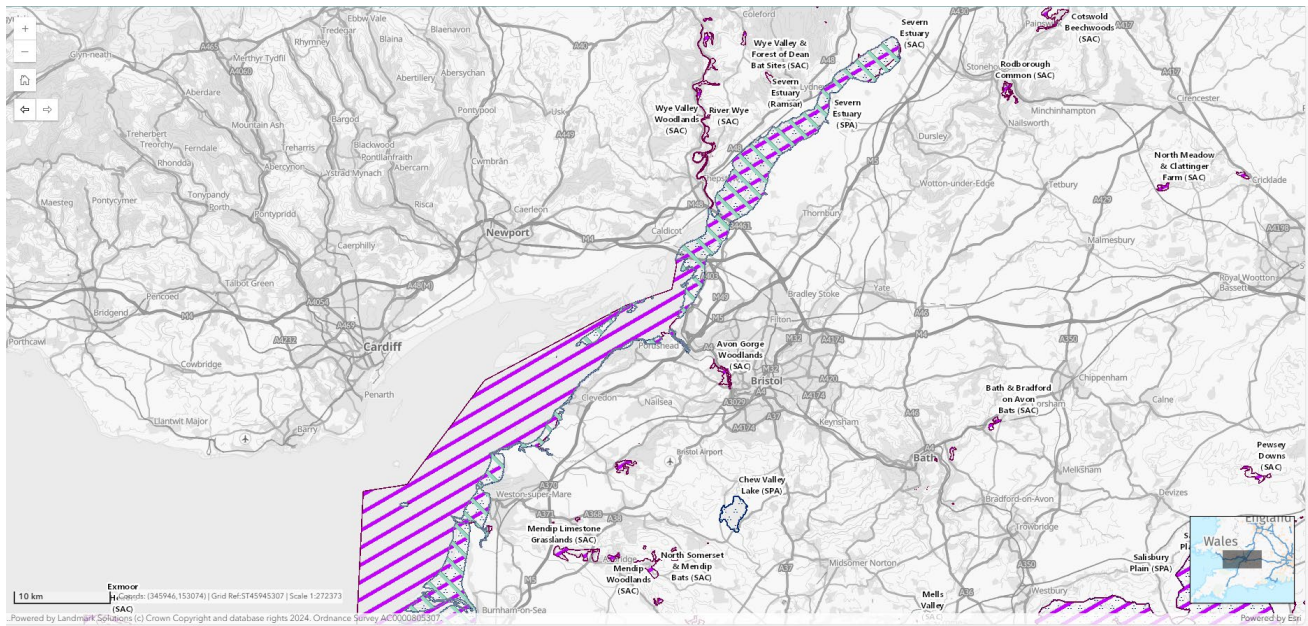


Figure 3 - European Sites in the proximity of the proposed TRA. Source – MagicMaps DEFRA

2.2.4 Table 1 shows the European Sites within the currently proposed TRA:

Name	Site Type	Location
River Wye	SAC	West of Severn Estuary
Severn Estuary	SAC, SPA, RAMSAR	Severn Estuary

Table 1: European Sites located within the proposed TRA. Source - MagicMaps DEFRA²

2.2.5 Table 2 lists European sites within an 18km radius of Avonmouth Helipad but outside of the TRA boundary:

Name	Site Type	Location
Avon Gorge Woodlands	SAC	East of TRA, in proximity to Bristol
North Somerset and Mendip Bats	SAC	South of TRA, in proximity to Congresbury

Table 2: European Sites located within 18km of Avonmouth Helipad but outside of the TRA boundary, Source - MagicMaps DEFRA

2.3 Screening Criteria Question 3 (2b)

Are any European sites identified in Q2A overflown (i.e. plane passing directly overhead or within 2,655 feet of the boundary of a European site at 3,000 feet or below) by proposed flight routes?

Yes

2.3.1 The RPAS will operate over the Severn Estuary, but no other European Sites will be actively overflown. Flights over the Severn Estuary would occur at c.900-1,050 feet above mean sea level (AMSL), which is no lower than current day NPAS operations.

2.3.2 Other European Sites, within the proposed TRA (the River Wye) will be geofenced and not overflown.

² All European Site data obtained via Magic Maps website as per February 2025.

2.4 Screening Criteria Question 4 (3a)

Will the airspace change proposal reduce the number of movements overflying one or more European sites, while not increasing them over another?

No

- 2.4.1 The number of NPAS overflights of the Severn Estuary will increase slightly as the temporary RPAS trial flights will be additional, as described in paragraph 2.1.2.
- 2.4.2 Although this trial will minimise the impacts on other airspace users, where practicable, the proposed TRA will restrict access to the airspace. This could lead to a reduction in overflights of European Sites as fewer non-NPAS aircraft operate at low altitudes within the area. However, it is not possible to quantify this reduction.

2.5 Screening Criteria Question 5 (3b)

Will the airspace change proposal increase the altitude of aircraft overflying one or more European sites, whilst not decreasing altitude over another?

No

- 2.5.1 NPAS will continue to operate one crewed aircraft from its Almondsbury base at the same altitudes as today. It is envisaged that trial operations will occur at similar altitudes in order to achieve a key trial objective; to determine if RPAS can be a cost-effective addition to the NPAS fleet. Therefore, no increase in altitude is expected.
- 2.5.2 Although this trial will minimise the impacts on other airspace users, where practicable, the proposed TRA will restrict access to the airspace. This could lead to a reduction in overflights of European Sites as fewer non-NPAS aircraft operate at low altitudes within the area. However, it is not possible to quantify this reduction.

2.6 Summary

- 2.6.1 NPAS cannot rule out a secondary HRA screening based on the criteria listed in CAP1616i. However, given the minimum altitude that the trial aircraft will operate at and engagement we have conducted with Natural England (Statutory Nature Conservation Body) we do not believe that this 6-month trial will have a significant effect on any European Sites.

End of NPAS BVLOS Trial: Annex B: HRA Screening Criteria