Specialist Aviation Services

ACP-2022-033

Proposed Introduction

of

Global Navigation Satellite System (GNSS) Point-in-Space (PinS) Procedures

at

Henstridge Aerodrome, Dorset

to Support

Dorset & Somerset Air Ambulance

on

Wed 14 Jun 23

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Scope

- Introductions
- ACP-2022-033 Statement of Need
- Dorset & Somerset Air Ambulance (DSAA) Mission Statistics
- Henstridge 2-3 Year Plans
- Henstridge Airspace Context
- Initial Design Principles
- Current Preferred Options at Stage 1
- Extant Operation and Stakeholders
- Other Considerations
- Potential Timeline and ACP Process
- Any Other Business

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Dorset & Somerset Air Ambulance (DSAA)

2000
Dorset and Somerset Air Ambulance launched in our BO105 Aircraft

2007
Upgraded to the EC135 - more space, more payload and improved safety

2008
Moved to a purpose-built airbase at Henstridge Airfield

2013
DSAA sponsor a 3-year post-graduate education programme

2015
A restructuring exercise saw the formal creation of a Critical Care Team

2017
AW169 the most advanced air ambulance helicopter in the country

Aviation
Agile. Adaptable. Assured.

V2.0 14/06/2023 14:00

PildoLabs wessex

Specialist Aviation Services Ltd (SAS)

On any given day SAS operate: six HEMS aircraft, up to 24hrs per day, in support of 4 UK charity partners; a fleet of 7 AW169 and 4 MD902 helicopters; and employ over 180 personnel, including 60 pilots.

In addition to our AOC for HEMS & NVIS operations, SAS hold an Approved Training Organisation (ATO) approval and approvals under Part 21 (Aircraft Design & Completions), Part 145 (Maintenance), Part CAMO (Continuing Airworthiness) and Part 147 (Engineering Training).

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Pildo Wessex Ltd & Avigation Ltd

Pildo Wessex

Pildo Wessex Ltd is the UK subsidiary of Pildo Labs.

Founded in 2001, Pildo Labs is an engineering company specialising in delivering cutting edge technology and services within the aeronautics and aerospace sectors.

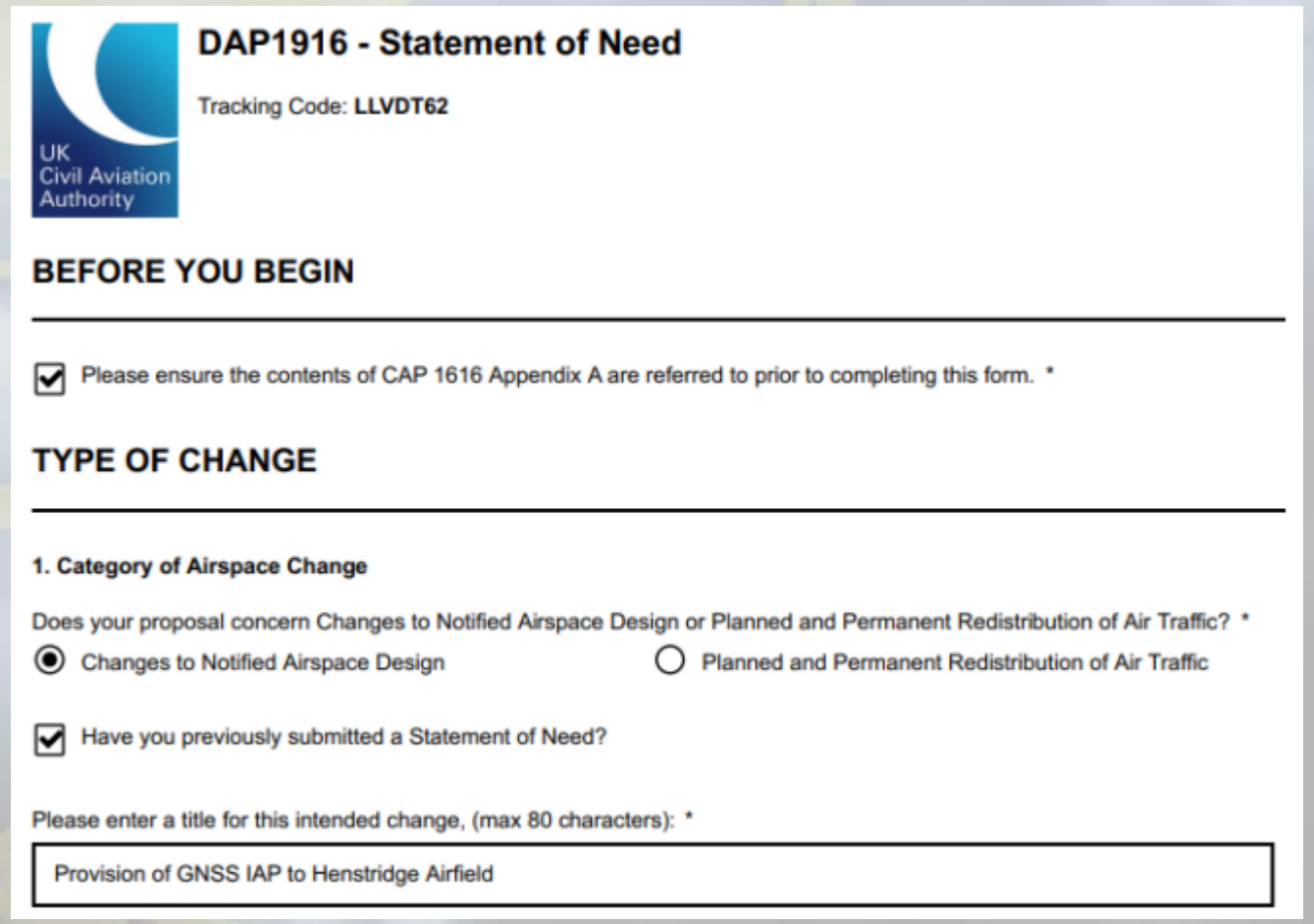
Pildo Labs is known for leading the introduction of Satellite Navigation Services (GNSS) and implementation of Performance Based Navigation (PBN) within the European aviation sector, participating since the very beginning in most strategic initiatives by means of innovative and cost-effective solutions.

Avigation

Established in 2018, Avigation Ltd is a team of independent aviation consultants with a demonstrable breadth and depth of knowledge and expertise in - *inter alia* - ATM, aviation operations management and regulatory compliance and airspace design and change.

ACP-2022-033 Statement of Need

- DAP1916.
  - Submitted originally on 22 May 22.
  - Resubmitted on 1 May 23.
  - Revised on 16 May 23.



UK Civil Aviation Authority

DAP1916 - Statement of Need

Tracking Code: **LLVDT62**

BEFORE YOU BEGIN

☑ Please ensure the contents of CAP 1616 Appendix A are referred to prior to completing this form. *

TYPE OF CHANGE

1. Category of Airspace Change

Does your proposal concern Changes to Notified Airspace Design or Planned and Permanent Redistribution of Air Traffic? *

◉ Changes to Notified Airspace Design ○ Planned and Permanent Redistribution of Air Traffic

☑ Have you previously submitted a Statement of Need?

Please enter a title for this intended change, (max 80 characters): *

Provision of GNSS IAP to Henstridge Airfield

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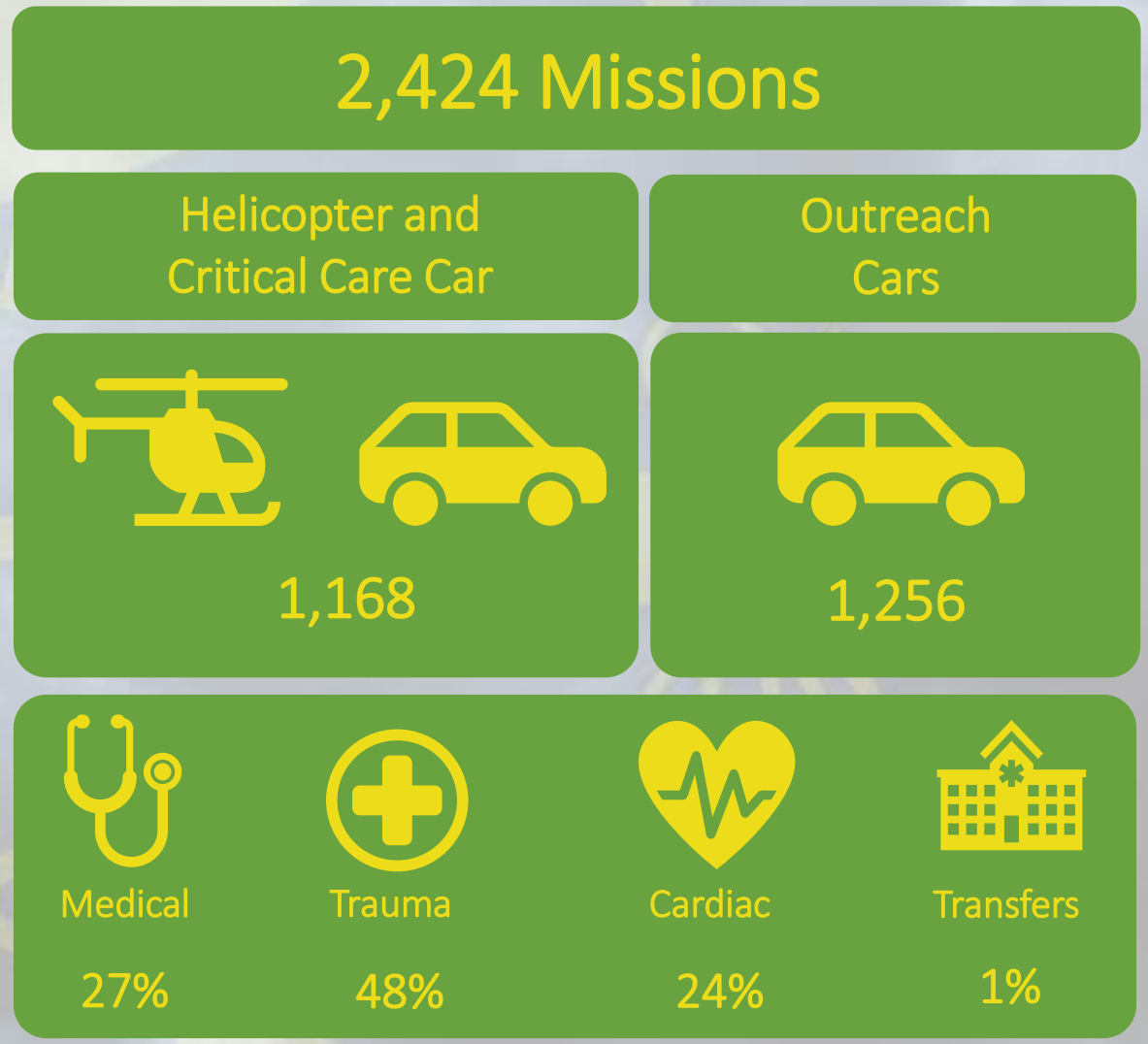
DSAA Mission Statistics (Apr 22-Mar 23)

- 19 hours a day; 0700-0200 AW169 and critical care car.
- 7 days a week, 365 days a year.
- 1168 AA missions, equates to over 3 missions per day.
- Enhanced care service using our outreach cars 1000-2200.

- **Non-availability Due Weather**. 449 hours offline due to weather constraints.
  - Equates to 24 operating days, which could equate to 72 life-saving AA missions.



Aviagation
Agile. Adaptable. Assured.

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DSAA - Henstridge 2-3 Year Plan

Deliver more critical care for patients in existing 19-hour operation, through a range of operational and infrastructure enhancements.

- **Improve All-weather Capability**.
  - PinS approaches at base and, in the future, regional hospitals - potentially, enabling an additional 72 AA missions.
- **Infrastructure**.
  - Second hangar.
- **Increased Aircraft Availability.**
  - Improved all-weather capability (GNSS PinS).
  - Second aircraft.
- **Expanding Reach of Team.**
  - Car hours/volunteer responders etc.
- **Tasking.**
  - HEMS desk.
- Future aspiration to conduct H24 operations.

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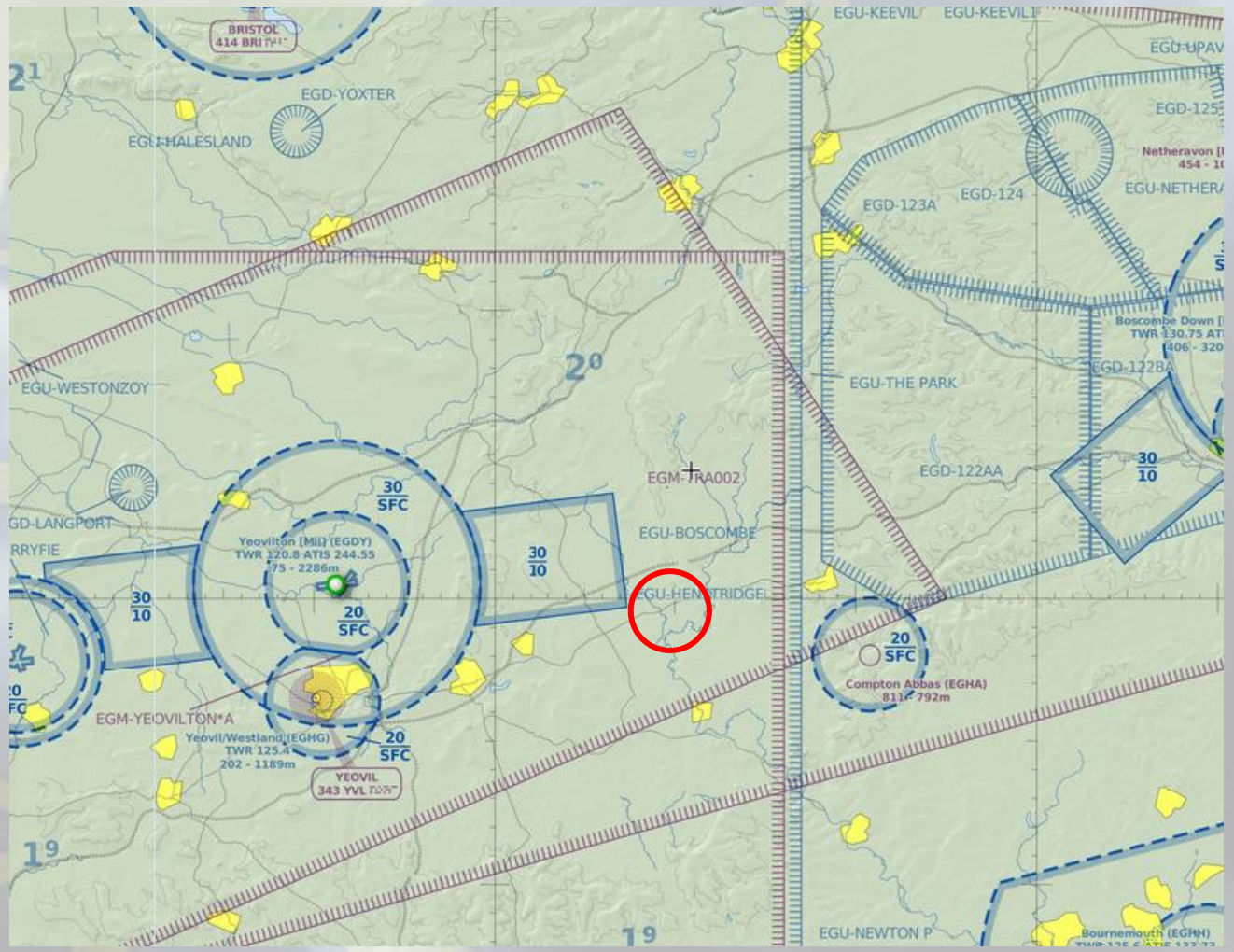
Henstridge - Airspace Context

- Unlicenced, small GA aerodrome located in East Somerset, between RNAS Yeovilton and Compton Abbas aerodrome.
- One non-instrument runway (RW06/24).
- Most flying activity in the vicinity of Henstridge is either military or GA.
- Class G airspace.
- Class D.
  - BOH CTZ (≈15nm SE).
  - BRS CTZ (≈20nm NW).



Initial Design Principles

- Initial Design Principles (DPs) are:
  - *DP1*. The proposed design must maintain a high level of safety. [From Part 1c]
  - *DP2*. The proposed design should avoid overflight of densely-populated areas, where possible. [From Part 1c]
  - *DP3*. The proposed design should avoid unnecessary complexity.
  - *DP4*. The proposed design should have minimal impact on other airspace users.

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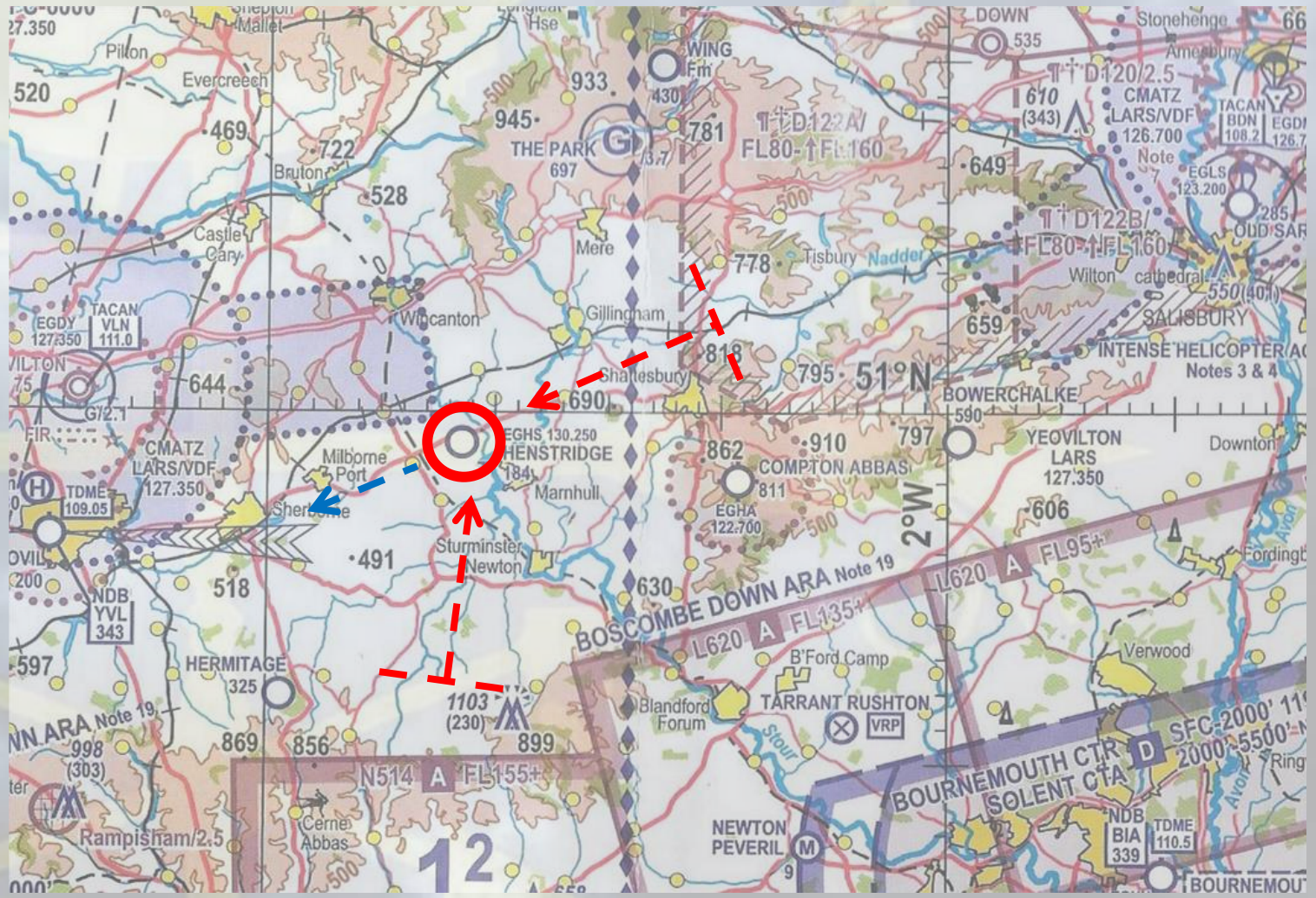
Current Preferred Options at Stage 1

- Single aircraft ops, no slots required.
- Arrivals (Red).
  - Initial thoughts, 2 potential options.
  - Aligned broadly with existing VFR routing.
  - Sympathetic to Compton Abbas, RNAS Yeovilton and Boscombe.
- Departure (Blue).
  - Two-way comms with RNAS Yeovilton, routing as required by task.



Extant Operation and Stakeholders

- Henstridge. Air-to-air blind calls when "Henstridge Radio" unmanned; SA for all. No change required.
- ATS from RNAS Yeovilton, during their operating hours; outside RNAS Yeovilton hours, blind calls.
- ATS from BRS and BOH ATC.
- **SAS Pilot Training**. PBN training already incorporated; extant procedure(s) trained and flown monthly under VFR.
- **Aviation Stakeholders**. DSAA(SAS) has a good working relationship with Henstridge airfield and adjacent aviation stakeholders. The introduction of PinS procedures would prompt no significant impact extant aviation stakeholders.
  - Stakeholder Identification, mapping and engagement will be explored in more detail in Stages 2 and 3, which will include the development of a corresponding engagement strategy document and associated stakeholder engagement materials.
  - Engagement activities likely to be a combination of in-person and VTC meetings to discuss options and potential impacts and, where necessary, solutions.

Other Considerations

- **Ownership and Responsibilities**. CAP2520, Para 5.3a and b; what is CAA's decision on how this applies to Henstridge?
- *Ownership versus Sponsorship*…
- **Hazard Identification and Risk Analyses**. CAP2520 and CAP2304 offer initial guidance. Exploration of hazards and risks associated with variance from extant operations undertaken during Stages 2, 3 & 4.
  - *RMZ*. Referenced in CAP2520, but not considered necessary for Henstridge, given the relatively low increase in potential mission numbers.
- **Noise and Environmental**. Potential increase in AA movements is IRO 72 missions (≈6%). [CAP1616, Part 1c, Para 356]

Potential Timeline and ACP Process

- DAP1916 submitted on 1 May 23.
- Initial Assessment Meeting on 14 Jun 23.
- Potential timeline for project delivery:

CAP1616, Part 1c "Stage"	Est Completion Month	Remarks/Comments
Stage 1 - "Define".	Jun 23	
Stage 2 - "Develop & Assess".	Jul 23	
Stage 3 - "Engage".	Sep 23	Subject to duration of engagement period.
Stage 4 - "Validate, Assure & Submit".	Nov 23	
[Stage 5 - "Decide"]	*Feb 24*	Subject to duration of CAA's "Decide".
Stage 6 - "Implement".	Mar/Apr 24	

- Timeline subject to confirmation between sponsor and CAA (Airspace Change Account Manager *et al*).

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Potential Timeline and ACP Process

Further discussion items:

- ATM Safety Questionnaire. Applicability to GNSS procedures and Henstridge.
- Engagement activities.
- IFP design.
- Proposal submission.
- Anticipated implementation date.

Any Other Business

- As required by meeting attendees.

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Conclusion

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