



Infrastructure Pathfinder

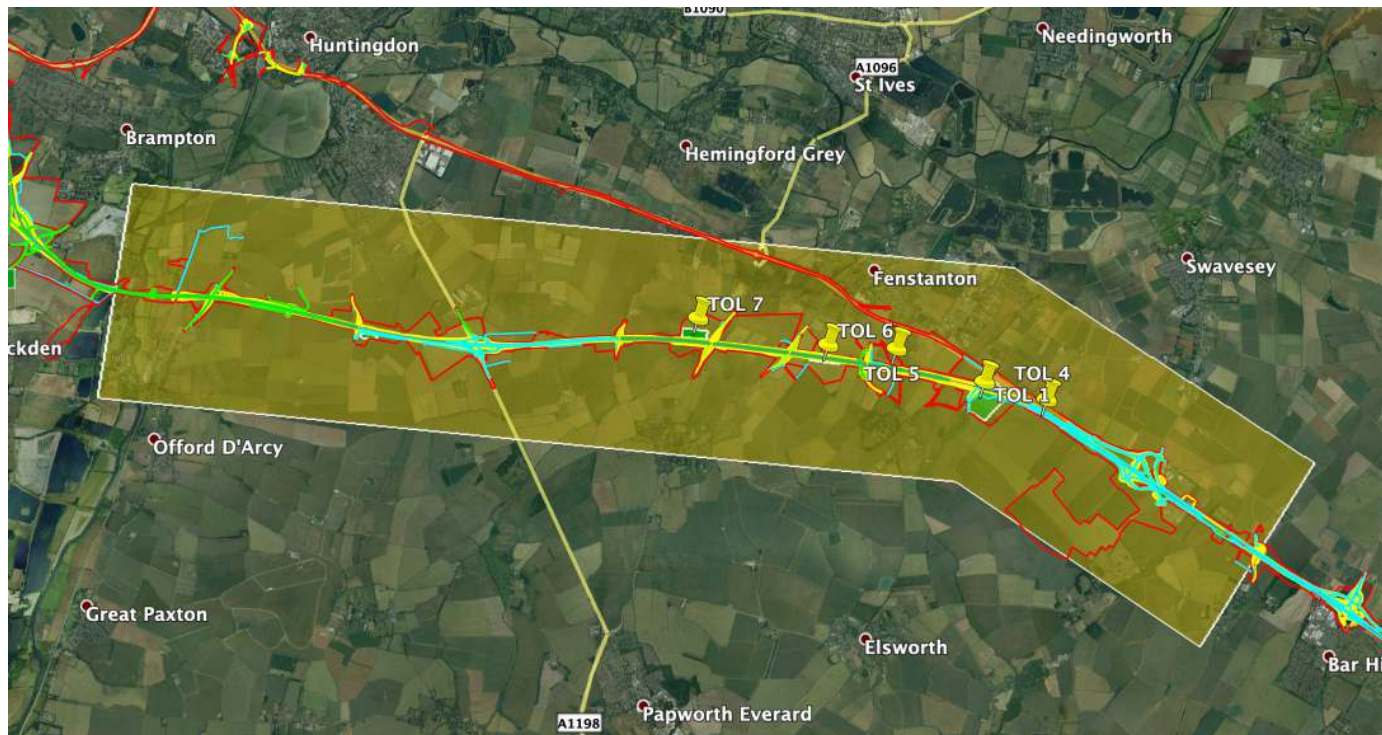
Project update and lessons learnt

SenSat®

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The Infrastructure Pathfinder project has successfully trialled BVLOS operations over a live construction project. Reaching a total distance of 12 KM from the Remote Pilot on the A14 between Cambridge and Huntingdon.

Creating the TDA



TDA Communication(s)

The communication between all airspace stakeholders was key to the successful implementation of the TDA in Cambridgeshire. SenSat worked directly with stakeholder to achieve better deconfliction.

Prior Engagement and Communications

SenSat contacted over 50 individual stakeholders, inviting them to submit feedback via an online form. The communication included a separate information pack, containing information about the project, TDA and planned operations.

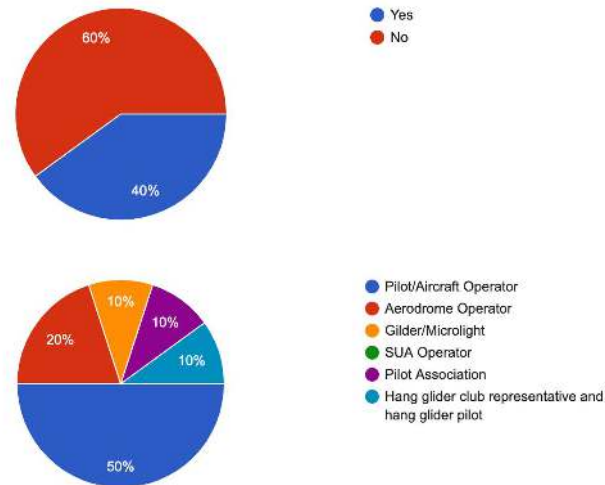
Details:

- 3 rounds of emails sent
- 10 Responses to from
- 5 Direct Responses

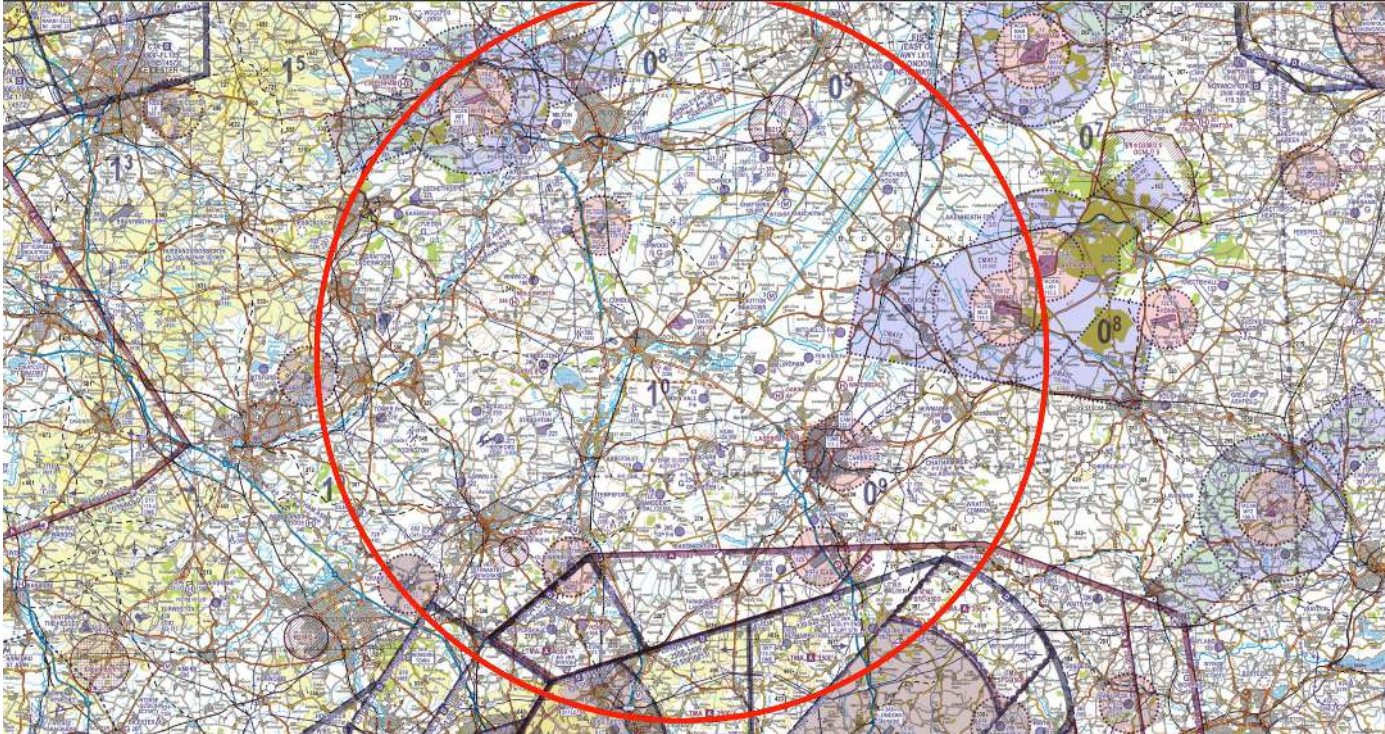
Feedback:

- Altitude concerns (separation)
- Restriction for other airspace users
- 100% of people happy to discuss TDA further
- 60% of respondents not happy with initial proposal

Feedback mainly from local/national flying clubs (e.g. Glider/Towing Clubs, Model Aircraft flyers, etc.



Extent of stakeholder engagement



Working with stakeholders

The location of the TDA meant we needed to work with multiple stakeholders directly, both military and civilian.

Danger Area Activity Information Service (DAAIS)

Communication with airspace stakeholders was primarily achieved through automatic and manual communication between ATCU and other ir users.

- Duxford*
- RAF Mildenhall and Lakenheath (USAF)

According to the CAA, this is the first time a US Air Force base has agreed to aid in civilian TDA activity.

**Used because Cambridge Airport declined to offer this service, though being the closer airport and having more resource to accommodate*

WhatsApp?

During the operations, it was agreed that the easiest way to communicate the TDA's activation was via WhatsApp. A small group was set up between SenSat and other airspace users.

- Message 24 hours prior to operations to inform group of any activity
- Message before operations begin for the day
- Message when operations had ended

Feedback on the group was very positive and stakeholders... as you can see here.

TDA Activation: 5 Days



Lessons Learnt

The purpose of the Infrastructure Pathfinder project is to provide evidence on how BVLOS operations can be conducted routinely and safely and to advise on regulatory change in the future and to provide the government an insight into the potential benefits for UK PLC.

Flying hasn't been the biggest lesson...

... paper work has. The operational planning, communications and submissions have been the key learning processes throughout the project.

- Balancing stakeholder requirements
- Time scales - understanding the time it takes
- Working within current regulations
- The TDA is the biggest enabler and at the same time, biggest inhibitor, of routine BVLOS operations
- Supplier choice of BVLOS UAS - we should have had multiple suppliers

We have to prove the viability and safety of BVLOS without a TDA, whilst operating within a TDA. Without this, there can be no movement away from the requirement to use TDAs in UK airspace.

What's next for our project?

We are going to create a report and white paper outlining our approach to the current problem and our suggestions for how to move forward with BVLOS operations in the future. This will include:

- Evidence we can provide to advise on the regular and routine use of BVLOS and its benefits for UK PLC
- Concept of operations - how can BVLOS currently be achieved right now
- What the future for BVLOS trials could (and should look like)
- Current issues/problems for BVLOS trials
- Suggested changes to the current environment to allow more regular and routine trialling of BVLOS in the UK