

Response to CAP 1776 Electronic Conspicuity - a call for evidence and future plans - including views gathered at the Share the Air Conference (June 2019)

CAP 1837

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Executive Summary

This document summarises the feedback received from both the Call for Evidence titled “Electronic Conspicuity – a call for evidence and future plans” and the “Share the Air” conference.

This feedback demonstrated there is an appetite within the aviation community to engage with Electronic Conspicuity (EC). However, this is qualified by a desire for any EC solution to be practical and deliver value to the users. Whilst the transmit, receive and re-broadcast approach to EC to internationally accepted standards should offer the greatest safety benefits to users, it is noted that a flexible approach is needed suitable to the circumstances of particular categories of aviation.

A key principle for EC to be effective, is that each aircraft should be conspicuous to all other relevant airspace users. It is acknowledged that there are several non-certified EC solutions in operation providing active assistance in collision avoidance. The CAA does not wish to see any existing solutions becoming prematurely obsolete. However, there is a need for interoperability, so that all airborne solutions provide a satisfactory level of conspicuity both to other aircraft and ground-based services with a legitimate interest in flight safety.

It remains the CAA’s intention to bring forward proposals to require EC where its use reduces the likelihood of mid-air collisions and where such mid-air collisions are a serious risk to those people either engaged in flying or on the ground. EC is viewed as a means to enable the UK to take advantage of the opportunities that might be presented by new technologies, but at the same time allow the volume of commercial air transport to increase efficiently whilst enabling recreational aviation to continue to enjoy the activities they favour.

The CAA has announced its intention to facilitate a proof of concepts trial during the first half of 2020. The precise details of the trial are being developed at the date of this report and will be published separately. The CAA’s ongoing technical work into performance requirements, and the outputs from the trial previously mentioned, will inform a comprehensive framework of EC requirements, which will underpin our recommended strategy to Government. We fully expect that each major deliverable in the path towards an EC environment will be subject to a full public consultation.

Introduction

This document summarises the feedback received from both the Call for Evidence titled “Electronic Conspicuity – a call for evidence and future plans” and the “Share the Air” conference. The CAA’s view is that Electronic Conspicuity (EC) will be the means to allow greater use of the finite resource of UK airspace, which may include widespread use of unmanned aircraft but without reducing safety. This document reports the progress of public engagement by the CAA on developing EC. It indicates the CAA’s conclusions drawn from the often-conflicting views expressed, and outlines the next steps to be taken towards the universal adoption of EC.

On 18 March 2019, the CAA published “Electronic Conspicuity – a call for evidence and future plans”. This call for evidence closed on 25 May 2019.

EC is one of the most important recent airspace modernisation initiatives because of its potential to deliver safety benefits and save lives by reducing the likelihood of mid-air collisions and airspace infringements.

By ensuring the full adoption of EC solutions to enhance situational awareness in targeted blocks of airspace, the aviation sector can transform its approach to integrating different types of operation and lay the foundations for new users like unmanned aircraft systems (UAS) to operate in an integrated airspace environment.

Full adoption means all users operating in a designated block of airspace can be detected electronically in the air or on the ground to a prescribed level of accuracy and reliability.

The CAA hosted a conference entitled “Share the Air” on 27 June 2019 at the Royal Aerospace Society. The purpose of the conference was to discuss:

- The opportunities presented by new technology
- The risk introduced through expanding and conflicting demand for the use of airspace,
- The challenges of ensuring that expanded uses of airspace will not lead to a reduction in safety.

The purpose of this document is to present the answers to the questions posed by the CAA and collate the views expressed within both the call for evidence and at the Share the Air conference.

Call for Evidence

Questions asked

Prior to the specific questions, respondents were asked to identify themselves, provide their contact details to receive responses and to help us categorise the basis of their response and their interest. This information has assisted the CAA to contextualise responses and understand common themes held by different aviation communities within the wider body of external stakeholders.

Respondents were asked the following closed questions:

Q1 Should the CAA act to coordinate the adoption of interoperable EC solutions in targeted blocks of airspace?

Options were Yes, No, Don't know

Q2 Do you agree with our strategy to coordinate the full adoption of interoperable EC solutions in targeted blocks by using location specific mandates?

Options were Yes, No, Don't know

Q3 What EC functions should the CAA focus on when coordinating adoption?

Options were Transmit only, Transmit and receive, Transmit, receive and rebroadcast and A combination depending on the need.

Respondents were asked the following open questions allowing a free textual response:

Q4 What evidence should be used?

This question considers whether the best available evidence is being used and if there is anything that could be done to improve the data available to decision makers.

Q5 Have all the options been considered?

This question considers whether there are other approaches that could also be considered.

Q6 Do you have any specific feedback on the suggested approach?

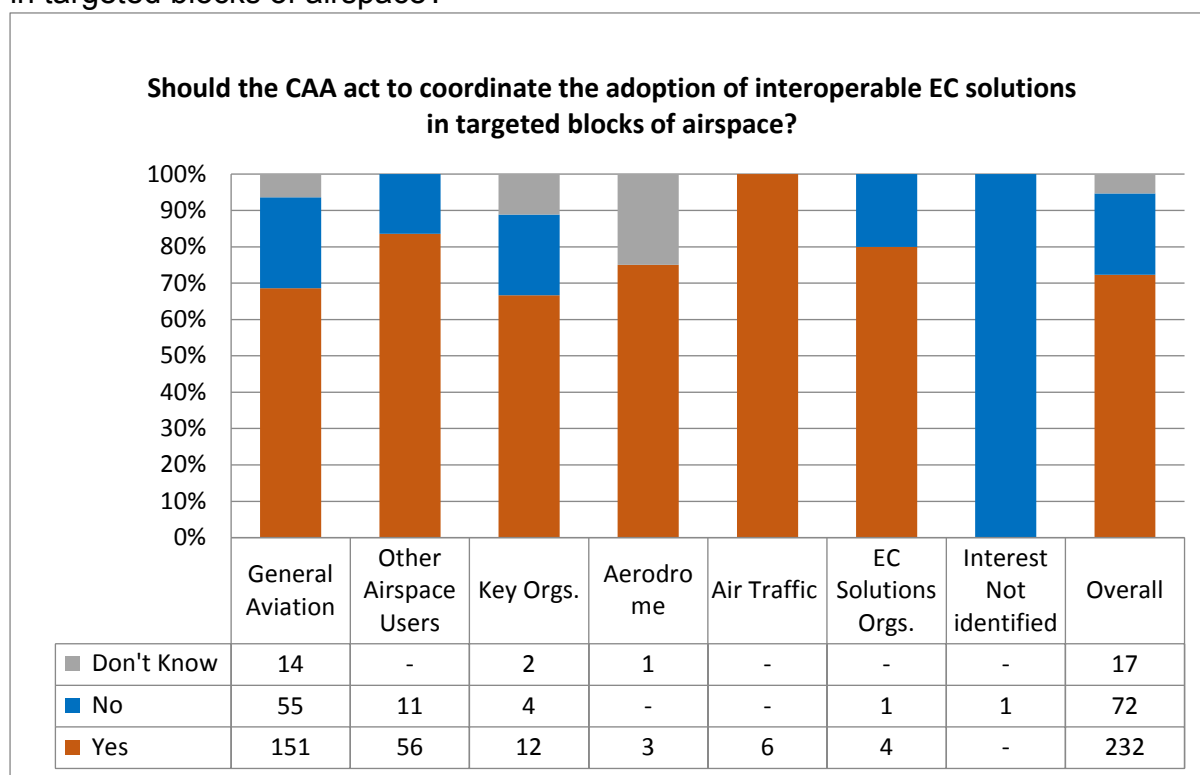
This question aims to gather feedback from stakeholders on the scenarios presented in Part 2 (of the Call for Evidence), the technical functions for EC solutions outlined in Part 3 (of the Call for Evidence) and our suggested approach to coordinating deployment proposed in Part 4 (of the Call for Evidence).

Responses

We received 327 responses. The CAA wishes to thank everybody that responded for taking the time and effort. Discrepancies between the total displayed and 327 responses arise from questions not being answered.

Based on the pre-eminent aviation interest of respondents, the headline results to the closed questions were as follows:

Q1 Should the CAA act to coordinate the adoption of interoperable EC solutions in targeted blocks of airspace?



Expanded results focusing on General Aviation and other airspace users

