

Response ID ANON-ZRXN-SVWV-8

Submitted to Draft Airspace Modernisation Strategy 2022-2040

Submitted on 2022-03-31 20:59:02

## About you

### A Are you responding in an official capacity on behalf of an organisation?

Yes

Organisation name:

Federal Aviation Administration

### B What is your name?

[redacted]

### C What is your email address?

[redacted]

### D Are you answering as:

Central or local government body including military

### E Where do you live or where is your organisation based?

Not Answered

### F Is there anything else that you would like us to know about you in connection with your response?

Anything else about you?:

These comments are provided from the Federal Aviation Administration to help promote the importance and legitimacy of the AMS moving forward.

### G Do you consent to your response being published?

## Views on the overall strategy

### 1 Do you agree with our overall approach in the refreshed Airspace Modernisation Strategy?

about right

overall approach reasons:

FAA Points of Interest in the Strategy (CAP2298a):

- A vital aid to better sharing and access among different users of airspace is full electronic conspicuity of UK airspace users between each other and with air traffic management service providers, to ensure that this integrated air operation is safe. Electronic conspicuity allows airspace users to detect all others and be detected by all others. (paragraph 2.18)

- o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.
- The CAA anticipates that the owners and operators of advanced air mobility and remotely piloted or unpiloted aircraft systems will be subject to the same, or similar, statutory requirements relating to noise as other airspace users. (paragraph 2.38)
  - o Harmonization on noise requirements for new and novel aircraft may be useful to enable a global market.
- Surveillance phased modernization includes the greater uptake of aircraft broadcast position information and the advancements in available portable technology, allowing an affordable option for all aircraft operators (civil, military and General Aviation) to share electronic surveillance information about one another with one another. (paragraph 3.44)
  - o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.
- Aircraft capabilities will include electronic conspicuity on all aircraft less than 5700kg and ACAS updates to integrate the electronic conspicuity data (Table 4.3 – Item 9)
  - o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.
- Integration of new airspace users such as BVLOS (beyond visual line of sight) drone and advanced air mobility operations will normally be accommodated within the airspace classification. It will utilise an overlay of air traffic services where additional information services are provided to achieve safe integration, rather than being segregated from other airspace users. The need for airspace segregation will remain for some activities, such as certain military operations and space launch. (Use Case 1 – Future Structure of Airspace)
  - o Collaboration with the FAA in the development of future airspace requirements via its FOT35 program may be useful.
- To encourage greater take-up of electronic conspicuity devices within the General Aviation and remotely piloted aircraft system communities, the Department of Transport made available a funding scheme in the form of a 50% rebate of up to £250 (including VAT) per applicant. (paragraph 6.6)
  - o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.

#### FAA Points of Interest in the Strategy (CAP2298b):

- Part 2 is more focused on the near term, and will evolve over time, aligned with the ICAO GANP programme. GANP uses a guiding deployment framework known as the Airspace System Block Upgrade (ASBU)
  - o Continued collaboration with the FAA may be useful as both authorities amend the GANP to address the harmonized provision of air traffic and communications, navigation, and surveillance services, as well as aircraft performance for new entrants
- The UK Integration element (UK-AM/4 - 4th of 9 elements) is enabled through:
  - flexible access airspace structures that allow for low level integration of different users
  - electronic conspicuity sharing accurate navigation position data between airborne devices and with ground systems
    - o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.
- sharing of digitised airspace availability information and broadcast of relevant operational information such as meteorological information
  - o Harmonization of digital data descriptions, fields, and broadcast mechanisms may be useful for global safety and efficiency.

[] Increasingly, industry standards bodies are proposing data formats, message formats and other elements in the requirements for their standards. For example, the recently balloted ASTM Surveillance SDSP standard (applicable for small UAS below 1200' AGL) contains elements borrowed from FIXM and ASTERIX, but does not require the use of either. FIXM, AIXM and WXXM specifically are hindered by the verbose UML/XML message format they are built on and translation to GeoJSON is a cumbersome process. While those are ICAO products, the lesson for the international regulator community is that future efforts should be responsive to the needs not just of the crewed

aviation community, but also to new entrants, which may have different requirements on the structure and format of data sources, as well as the underlying data resolution, precision or accuracy. Leveraging industry standards may be a beneficial way to improve harmonization and usability of digital information protocols.

- delivery of a new ICAO-aligned lower airspace service to deliver services that enable more flexible and efficient operations for users such as General Aviation, Ministry of Defence, remotely piloted aircraft systems and advanced air mobility.
- procedures and processes to manage high-altitude airspace for integration of high-altitude platform systems and supersonic/hypersonic passenger operations.
- The UK Airspace Management element (5th of 9 elements) is described as a traffic management system for the UK combining ATM and UTM and developing procedures for space activity. (Element UK-AM/5)

CAP 1711b – Airspace modernization governance – Annex to Airspace Modernisation Strategy

- Table A2 provides Stakeholder engagement groups, including:
  - o ARPAS UK - The Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK) is a non-profit association, formed in 2013, to represent the small RPAS industry in the UK, and to help promote best practice amongst its members.
  - o Future collaboration between the UK CAA and FAA may be useful to see how the interests of the small RPAS industry are being addressed.

## 2 Have we captured the drivers for change adequately in Part 1, Chapter 2?

Not Answered

missing drivers:

## 3 Have we identified the right stakeholder groups in Part 1, Chapter 2?

Not Answered

Describe missing stakeholder group:

### Views on the delivery 'elements'

## 4 What are your views on the nine delivery 'elements'?

about right

Comments on delivery elements:

- The UK Integration element (UK-AM/4 - 4th of 9 elements) is enabled through:
  - flexible access airspace structures that allow for low level integration of different users
  - electronic conspicuity sharing accurate navigation position data between airborne devices and with ground systems
    - o Harmonization on the means used to provide electronic conspicuity and associated use in ACAS-X systems may be useful.

## 5 Part 3 of the AMS will cover who is responsible for deploying the delivery 'elements' and related activities, and how. At this early stage, what are your views on any requirements we should have for those tasked with the deployment of those elements and activities?

views on requirements for those tasked with delivery:

## Views on AMS governance

### **6 How effective has the AMS governance structure been, for example in terms of overseeing delivery of the strategy, stakeholder engagement or transparency?**

don't know

explain modifications to governance:

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### **7 The refreshed strategy is broader in scope. What changes to governance are needed to deliver the broader strategy, including future approaches to funding?**

Views on how to deliver broader strategy: