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GASCI input to AIC 002/21 – Review of Irish Airspace

Background

On 25 Feb 2021, The Irish Aviation Authority, as the statutory body responsible for airspace design, announced a review of Irish airspace via AIC 002/21 to:

- Facilitate Continuous Climb and Continuous Descent operations (CCO/CDO) to/from airports.
- Realise Environmental benefits.
- Simplify the airspace structure where possible.

Amplifying material published on the IAA website explained that the intention is to carry out a root and branch review of the airspace with the stakeholders with a view to making changes in the Shannon FIR to facilitate improved instrument flight procedures both now and in the future. The material further mentioned that *'This may require us making changes to the bases of controlled airspace in a tailored fashion that meets all users' needs, in order to Maximise safety and improve environmental flight efficiency for airline customers..*

Specific questions asked of stakeholders were:

- What works well for you today?
- What doesn't work for you today?
- Based on what you know, what are your airspace needs for the future?

While no specific design was published, subsequent meetings reveal that a possible plan to 'simplify the airspace structure' is a widespread reduction in the base of controlled airspace from the current FL75 to as low as 4500' in some areas – in particular one graphic showed an extensive area around Cork Shannon and Kerry airports. This would have a seriously detrimental effect on GA operations in general throughout Ireland. In our view this would also have a detrimental effect on safety, pushing VFR traffic into a smaller volume, closer to the ground with less flexibility and safety margins.

Before going into detail we feel it is necessary to highlighting some pertinent background information.

Previous 'consultations'

AICs 01/16 and 15/15 proposed, amongst other items, lowering the base of Controlled airspace throughout Ireland; it was stated that 'all consultation/documentation/details/responses would be available on the IASA website after 9 May 2016. A briefing document was produced (present on the IAA website 13.4.21):

https://www.iaa.ie/docs/default-source/misc/iaa-ta-consultation-briefing-document-december-2015.pdf?sfvrsn=21ea0bf3_0

Despite several responses from the GA community – in particular opposing the lowering of the base of Controlled airspace - a 'consultation feedback report' was published (also on the IAA website at the time of writing {13.4.21}) :

https://www.iaa.ie/docs/default-source/publications/consultations/iaa-ta-consultation-feedback-report---ver-1-0---20th-june-2016f0726791c3ff6e66b7b5ff0000aadb04.pdf?sfvrsn=cc8d09f3_4

Astonishingly, this document concluded that there was ***no feedback*** and that the lowering of base of controlled airspace was going to proceed! (We have a record of the GASCI submission being replied to with comments by email on 18 Jan 2016).

Proposed Introduction of a Raised Common Transition Altitude: IAA Consultation Feedback Report

8. Questionnaires

The UK used an online monkey questionnaire process as part of their consultation, this was not a requirement for Ireland.

9. Nominal Vertical Separation Minima (VSM)

Assessment of the need for a Nominal Vertical Separation Minima (VSM) was not considered for this phase of the process.

The IAA considers that Nominal VSM will not be required for its operation of a raised TA and that issues of cross-border vertical separation assurance will be addressed procedurally for operational implementation.

10. Conclusions

The IAA received no responses through the group e-mail address (taconsultation@iaa.ie) which was setup for the consultation process. Therefore Ireland will be proceeding with the introduction of the items which the consultation process for the introduction of a raised Common Transition Altitude identified:

- 1) Raising of Transition Altitude
- 2) QNH regions
- 3) Lowering of the base of controlled airspace

While there appears to have been no further action on the introduction of these 3 items, it is of considerable concern that this appears to be still 'in the pipeline' and also that enquiries as to the

fate of stakeholder comments have been stonewalled. This 'consultation process' was highly unsatisfactory from the point of view of those that took the time to contribute.

Under the heading 'Stakeholder Consultation' The IAA website states:

The IAA consults with a wide range of bodies and organisations as it carries out its business. Stakeholder Consultation is an integral part of the policy-making process in the IAA Safety Regulation Division. Consultation enables the IAA to be more open and its policies more effective by inviting and taking note of the views of relevant industries and other involved organisations and the public. The IAA consults on matters that include changes to legislation, the issue of new policy documents and the issue of guidance material.

Included is a list of National and International Aviation Organisations and industry bodies. Rather surprisingly, given the important nature of this current stakeholder consultation - a proposal to review and introduce changes to the structure of Irish Airspace - the Website states that there are in fact **No** open consultations on-going.

This background begs several questions:

- Is this a real consultation process where stakeholder inputs will actually be taken into account when changes to the airspace structure are proposed?
- Will proposed changes be made available to the community for comment and iteration before being implemented?
- Will there be any kind of independent 3rd party review the proposed changes before they are implemented?

If there is to be a real consultation where stakeholders' views and needs are to be given serious consideration then GASCI and individual council organisations will no doubt welcome the opportunity to contribute constructively to this important matter and will be willing to devote considerable time and effort in assisting those that will decide on the changes to be decided on.

ICAO/Eurocontrol Principles of airspace design

ICAO has published a document on its website presented by Eurocontrol at 2013 PBN Workshop on PBN Airspace Design entitled 'Airspace Volumes & Sectorisation'

https://www.icao.int/MID/Documents/2014/PBN%20Workshop-Tunis/13%20%20EUR%20PBN%20Airspace%20Workshop_Designing%20Volumes%20+%20Sectors-vJUL2013%20.pdf

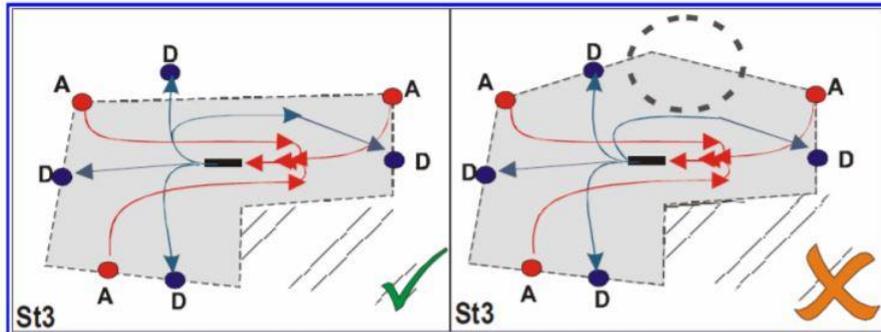
3 Golden rules are prominent:

Three GOLDEN RULES

- Airspace Volumes protect the IFR Flight paths. They are Designed AFTER the routes have been designed.
- Routes should not be designed so as to fit into pre-existing Airspace Volumes.
- Only delineate as much airspace volume as needed.

Airspace Concept Workshop 3

Airspace Volumes



Take the airspace required – not more.



The principle of ***'taking only what is required'*** is re-emphasised in this graphic.

GASCI re-iterate the points made in our position paper submitted at the time of the last airspace 'consultation' process.

https://www.gasci.ie/uploads/1/2/9/1/12917568/review_of_airspace_in_ireland.pdf

We acknowledge the need to facilitate continuous Climb and Descent operations for Commercial Air Traffic, however, we believe any proposal to impose a 'blanket' lowering of Controlled airspace in large areas of Irish airspace for 'simplification' would be totally inappropriate.

Reducing the base of Class 'C' airspace would tend to compress/funnel uncontrolled flights in Class 'G' airspace into a smaller volume of airspace thereby increasing the risk of mid-air-collision. When Control Zones, terrain and weather are taken into consideration the lowering of CA would create choke-points where the risk of collision would be increased over that already in place.

We propose a **general lifting of the base of controlled airspace to FL95 in Ireland** and, as advocated by ICAO and Eurocontrol, that only airspace necessary for IFR approaches along with commercial CCO/CDO is designated as controlled airspace

The size and shape of control zones in Ireland needs to be examined to release airspace no longer appropriate to be classified as Controlled. **'Take the airspace required – not more'** For example, Cork could easily function as a 10 NM radius zone with appropriate step altitudes outside in the CTR; Shannon zone is inappropriately large; neither it nor the regionals need to be circular. With the introduction of PBN there is no need for legacy procedures such as NDB/DME arcs that take up large volumes of airspace if they are to be protected. The principle 'take only what you need' should be

paramount in airspace design. Less controlled airspace means less workload for pilots and controllers, more flexibility for VFR traffic, less ‘funnelling’ (eg the Sligo/Knock case) and less chance of airspace incursion.

The design of CTAs should be such as to protect the majority of the IFR flights – ie protect airliners, but not necessarily **all** IFR traffic. There are occasions where IFR outside controlled airspace may be necessary for operational (eg icing, SAR) or training reasons.

In Summary:

We request the regulator consider:

- Raising the base of controlled airspace everywhere in Ireland to FL 95
- Designing the shape and size of Zones and CTAs to that required to protect Commercial Airline IFR traffic in consultation with all users.
- Overall avoid imposing airspace changes without interactive meaningful consultation with all affected users.

In short:

- *What works well for you today?* Class G airspace with listening squawks and EC facilities works well for all VFR traffic.
- *What doesn't work for you today?* Over-classified airspace is counter-productive for both Controllers and all airspace users, both IFR and VFR with unnecessary RT traffic causing increased workload for everyone.
- Based on what you know, what are your airspace needs for the future? *More Glass G airspace, Controlled airspace designed iaw ICAO and EC 'Golden Rules'*

Practical examples:

- Reduce Cork CTZ to 10 NM radius, design CTA outside and modify SID min altitudes if necessary.
- Reduce shape and size of all Regional airport CTZs to match the protection requirements of single runways.
- Re-design IFR procedures to reflect current and future navigation performance (eg consider removing ARC procedures EIKY & EIWF to free up Class G airspace adjacent to Zones.
- Review Dublin CTZ eg make it a ‘symmetrical’ N/S & E/W shape to free up airspace to the East and South.
 - o This would also allow VFR traffic to transit East – West over lower ground and without the need to enter Class C airspace.
- Separate R15 from the Dublin Zone – totally inappropriate for Dublin Tower to control low level traffic in Baldonnel area 16+ NM from Dublin when Military not active.

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Chairman GASCI

19.4.21