



IAOPA position paper against airspace closures

About airspace segregation & the EU approach

Segregation is the action or state of setting someone or something apart from others. In this context, **airspace segregation separates manned and unmanned aviation**. In other words, it entirely excludes manned aviation from flying in U-Space.

The European Union Aviation Safety Agency (EASA) and the European Commission (EC) had to provide the U-Space implementing regulation within an unrealistically short time frame, which led to a situation where many technical and operational details remain unresolved. Due to the absence of common rules of the air or validated detect-and-avoid solutions, the regulation proposes a concept of *dynamic airspace reconfiguration*, defined as the temporary modification of the U-Space airspace by adjusting the airspace geographical limits. It remains up to Member States (MS) to decide what measures to take and how to design the U-space airspace. This means that different rules may apply across the EU – **without a clear, harmonised approach**.

To date, **it remains unknown how U-Space can be practically implemented**. For now, the only possible interim solution seems to be airspace segregation – a solution that does not necessarily mitigate the safety risk and the associated disruption to operations. For example, the number of airspace infringements has increased significantly over recent years mainly due to the complexity of the European airspace.

What's the situation in the EU?

Denmark has already tried implementing restricted airspace – the national authorities decided to prioritise drones no matter the negative impact that their decision would have on General Aviation (GA). Whilst this attempt was stopped by Danish authorities, Spain took a similar approach and defined U-space airspace as segregated airspace for the exclusive use of drones. The other Member States **have not yet decided** on how to approach this matter.

Alternative solutions: human airspace observers and transponders

IAOPA calls on all Member States not to discriminate GA in favour of drone operators. When designating U-Space, the national authorities may consider two alternative approaches to avoid airspace segregation:

The first alternative follows an example of the solution applied in the U.S.: **to install human observers on the route of the Unmanned Aircraft Systems (UAS)**, if there is no better technology available for UAS than the human eye. Since this solution provides **a safe and adequate solution, which enables entry of manned aviation into U-Space**, the EU Member States should consider this example of best practices when designing U-space airspace.

*The FAA has put in place **human airspace-observers** on the route of the UAS, which will alert the drone-pilot in case a manned aircraft comes too close. This solution for avoiding airspace segregation is applied whenever UAS fly BVLOS. The result is that the U-space does not have to be restricted for only UAS whenever they are flying.*

The second alternative is to make it a requirement that the U-space airspace surveillance systems can receive and evaluate conventional transponder signals. If transponder systems can be used by TCAS systems in aircraft for safe and reliable collision avoidance in conventional airspace, then these standards must also be sufficient for U-Space airspace.

The **adoption of any of the alternative solutions to airspace segregation in the interim phase, before the long-term solution is found**, would in turn ensure that GA does not carry the burden of drone integration, while also providing a safe procedure.

The U-space segregation is the option that IAOPA opposes most. Not only would this result in the implementation of restricted airspace, but also would violate the primary U-Space objectives: joint airspace utilisation and the safe and fair integration of drones into airspace.