



European Action Plan for Airspace Infringement Risk Reduction

Safety Seminar 2023, AOPA Luxembourg

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- Introduction
- Objective
- Scope
- Strategy
- Deliverables
- More opportunities?
- Best practices

EUROCONTROL

41 Member States + 2 Comprehensive Agreement States

EUROCONTROL OFFICE LOCATIONS



BELGIUM

Brussels (HQ, Network Manager & CRCO)



NETHERLANDS

Maastricht (Maastricht UAC)



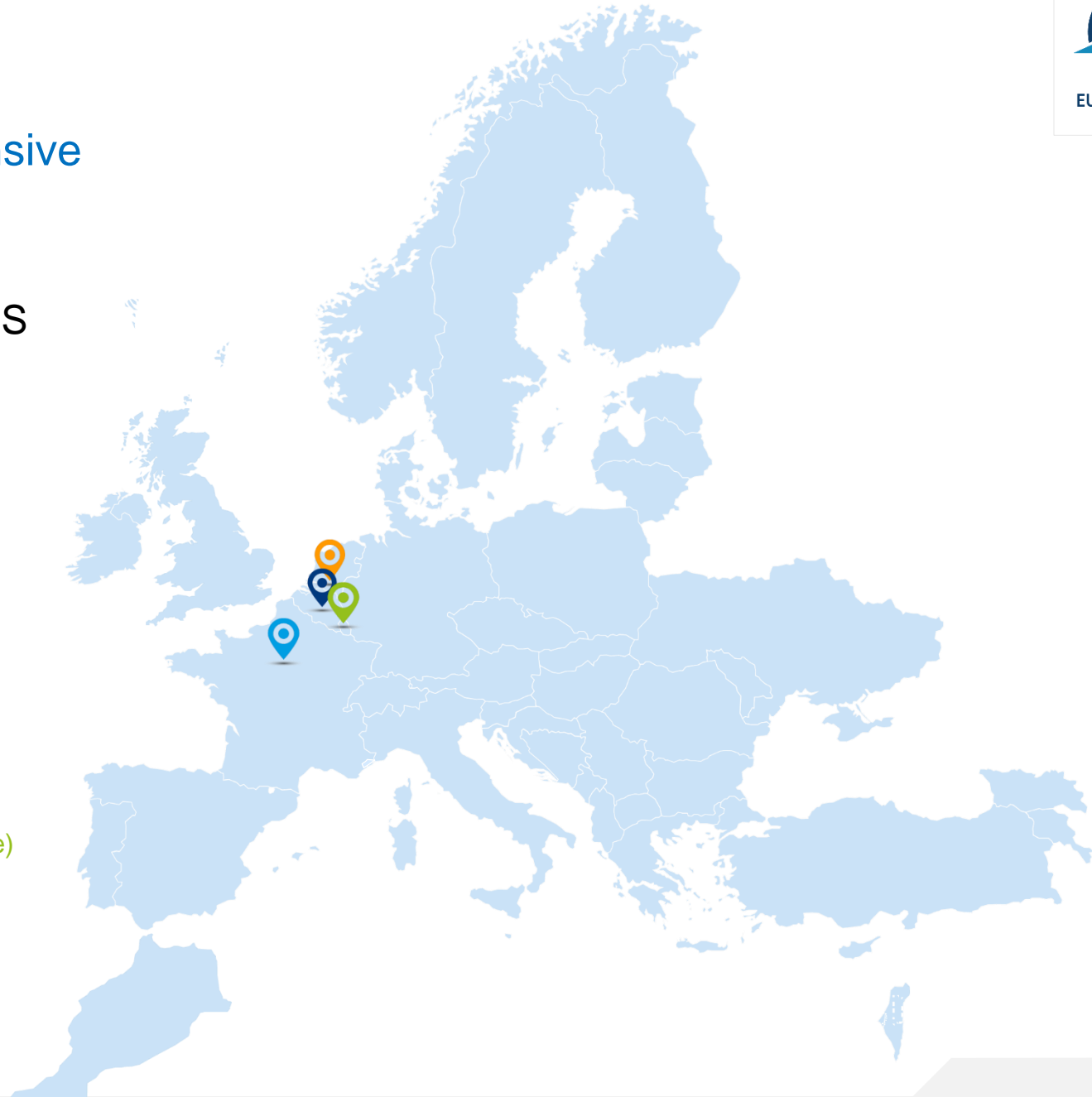
FRANCE

Brétigny-sur-Orge (Innovation Hub)



LUXEMBOURG

Luxembourg (ECTL Aviation Learning Centre Institute)



"The designations employed and the presentation of the material on maps in this presentation do not imply the expression of any opinion whatsoever on the part of EUROCONTROL concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries."

CONNECTING THE NETWORK TO DELIVER IMPROVED PERFORMANCE



SAFETY

Safety alerts, Operational Safety Hazards



AIRSPACE DESIGN & CAPACITY PLANNING

European Route Network



NM OPERATIONS CENTRE

ATFCM, Airspace data, Flight planning, post-ops



INFRASTRUCTURE MONITORING

Communications, Navigation and Surveillance



CIVIL MILITARY COORDINATION

Flexible Use of Airspace



AIRPORTS IN THE NETWORK

Full integration



SCARCE RESOURCES

Radio Frequencies
Radar transponder codes



CRISIS MANAGEMENT

EACCC



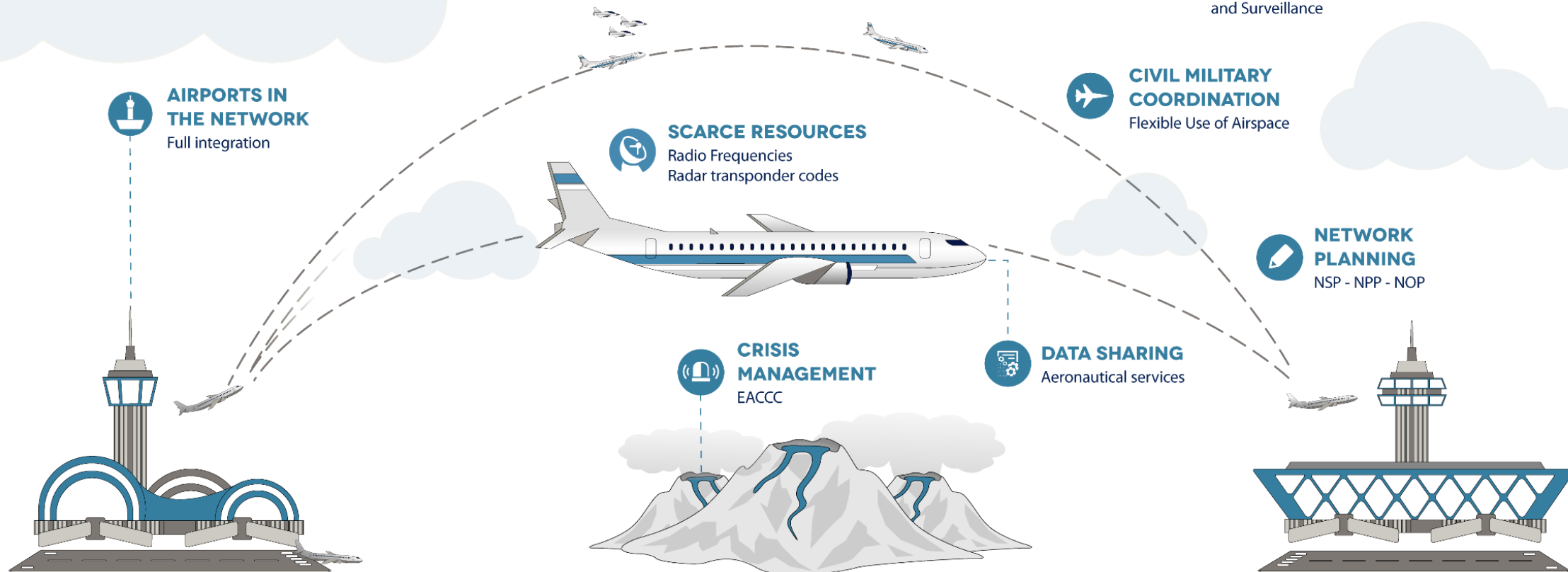
DATA SHARING

Aeronautical services



NETWORK PLANNING

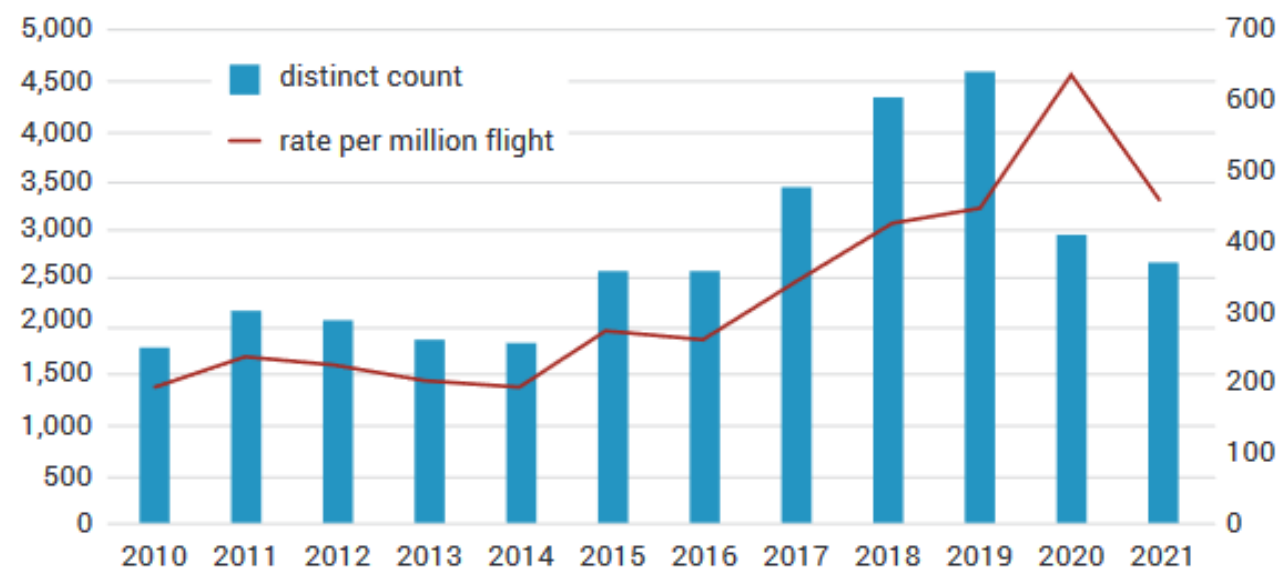
NSP - NPP - NOP



Introduction

Are there really that many incidents?

Airspace Infringement

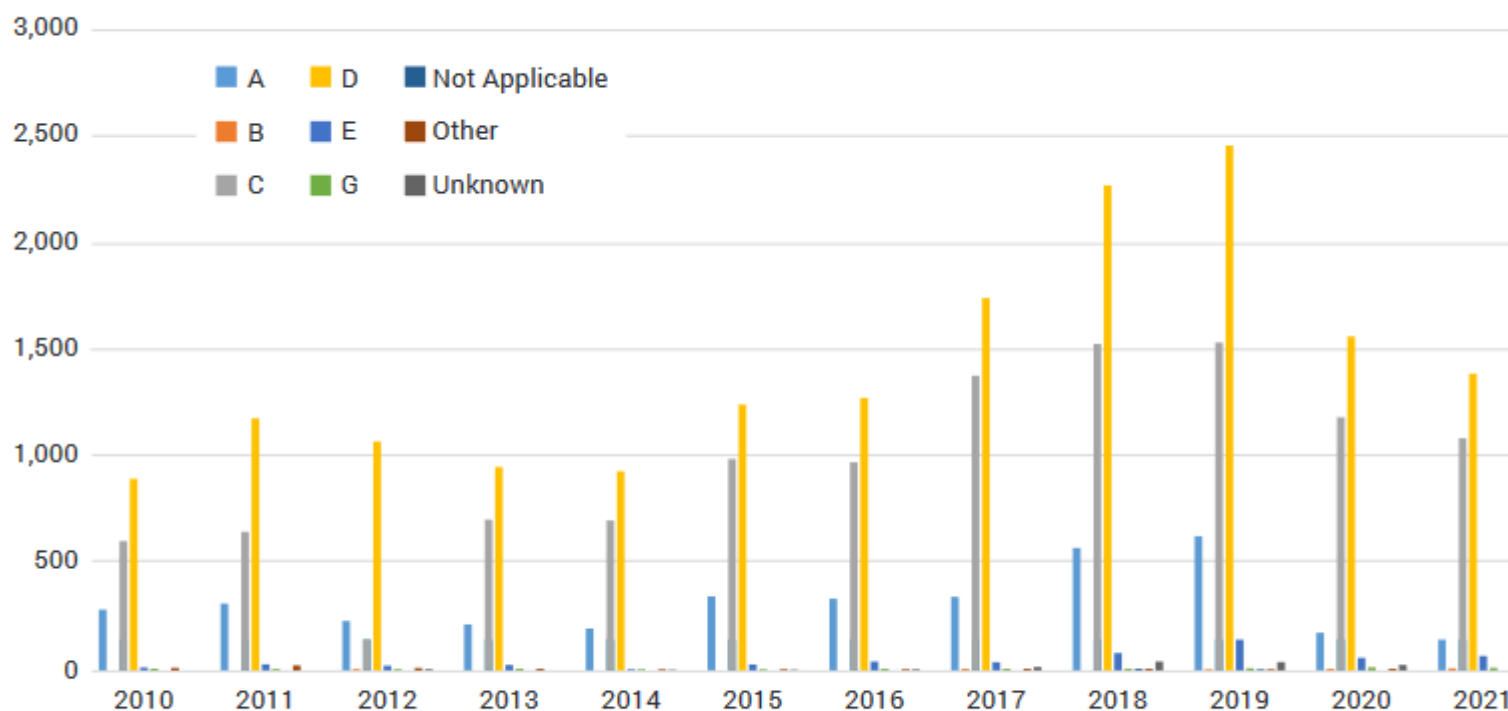


EASA.(2022). Airspace
Infringement, 2010-2021
[Graph]. European Central
Repository for Aviation accident
and Incident Reports.

Introduction

Are there really that many incidents?

Airspace Infringement occurrences per airspace class



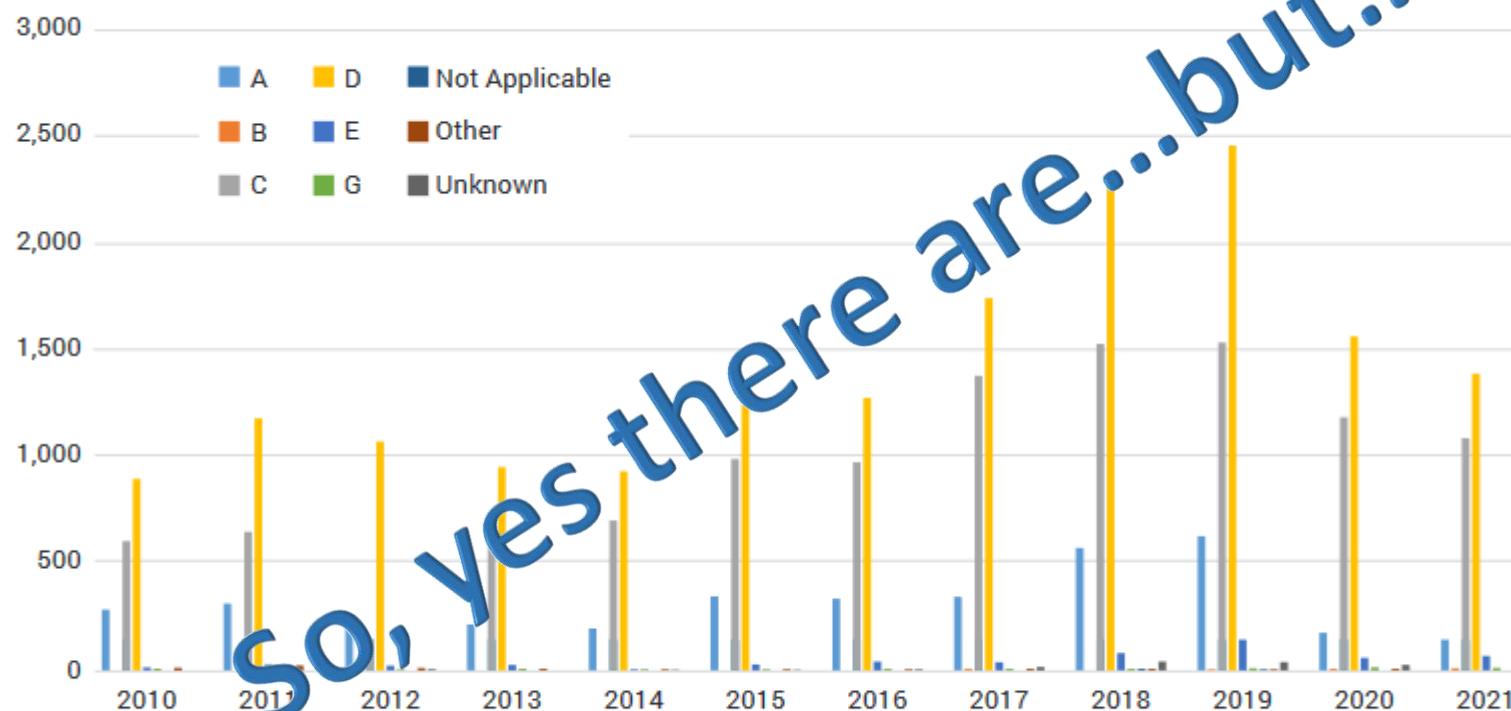
EASA.(2022).Airspace Infringement occurrence per airspace class, 2010-2021 [Graph].

European Central Repository for Aviation accident and Incident Reports.

Introduction

Are there really that many incidents?

Airspace Infringement occurrences per airspace class

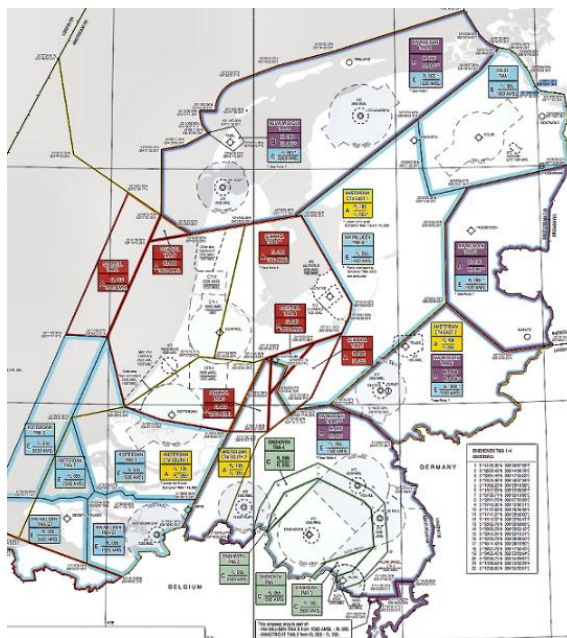


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European Central Repository for Aviation accident and Incident Reports.

European Action Plan for Airspace Infringement Risk Reduction

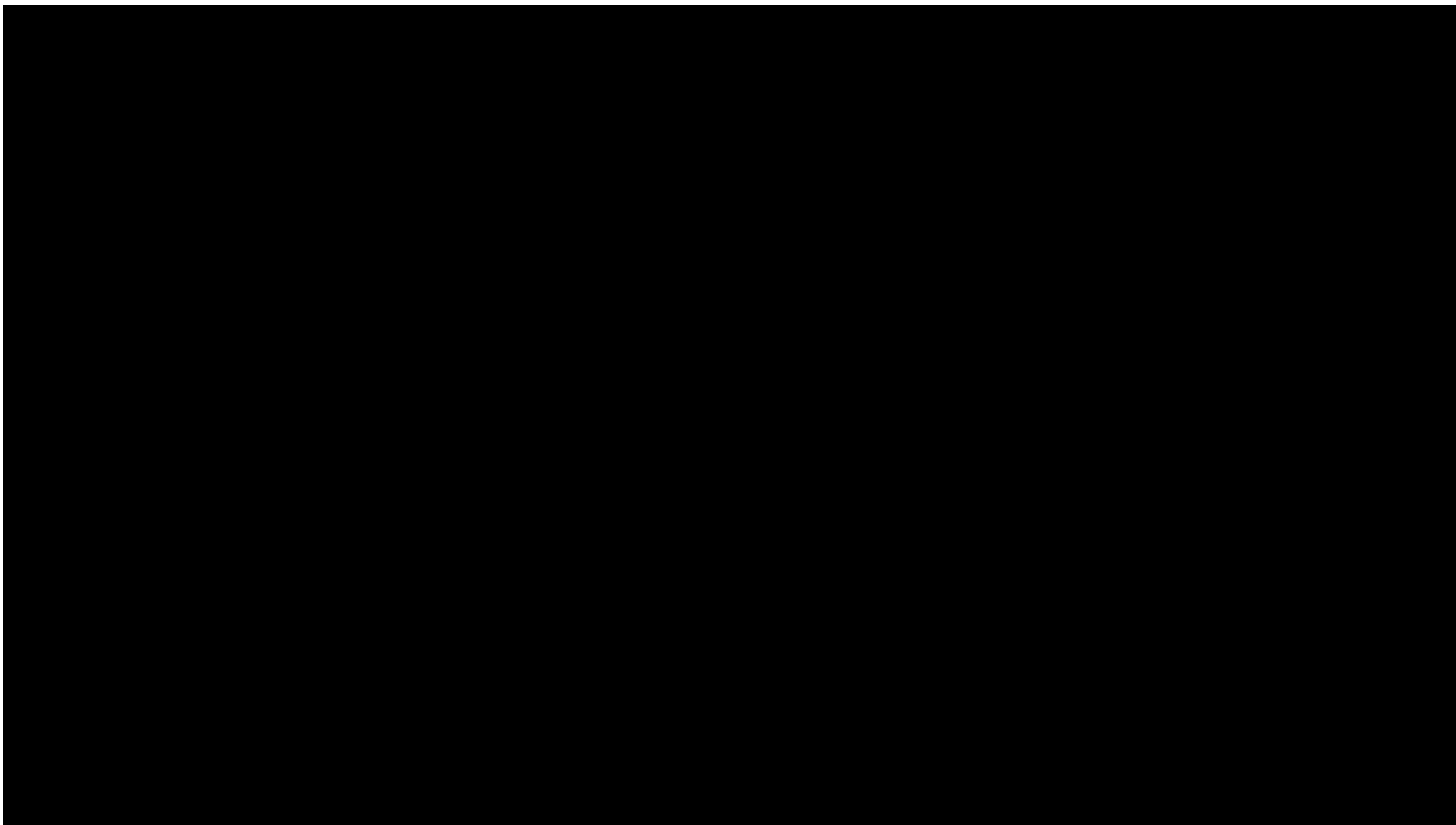
Is it really that complex?



So, yes it is...but...



Is it really a safety risk?



Is it really a safety risk?

NATS

Controlled Airspace Infringement of Birmingham Airspace

Yes it is...so what can we do???

RKSS/GMP
GIMPO INTL

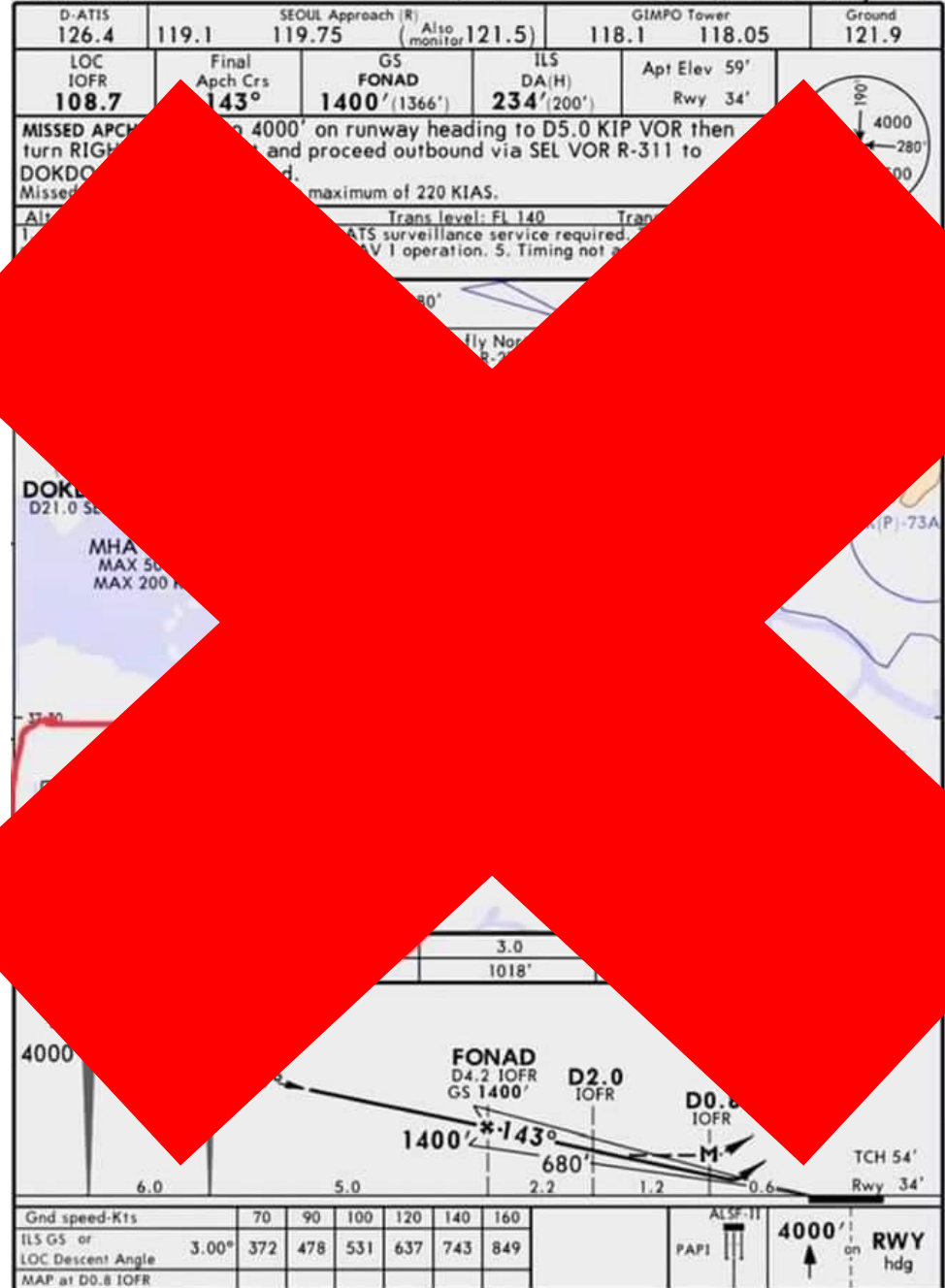
JEPPESSEN
28 DEC 18 (11-3)

SEOUL, KOREA
ILS or LOC Rwy 14R

canso
civil air navigation services organization

EUROCONTROL

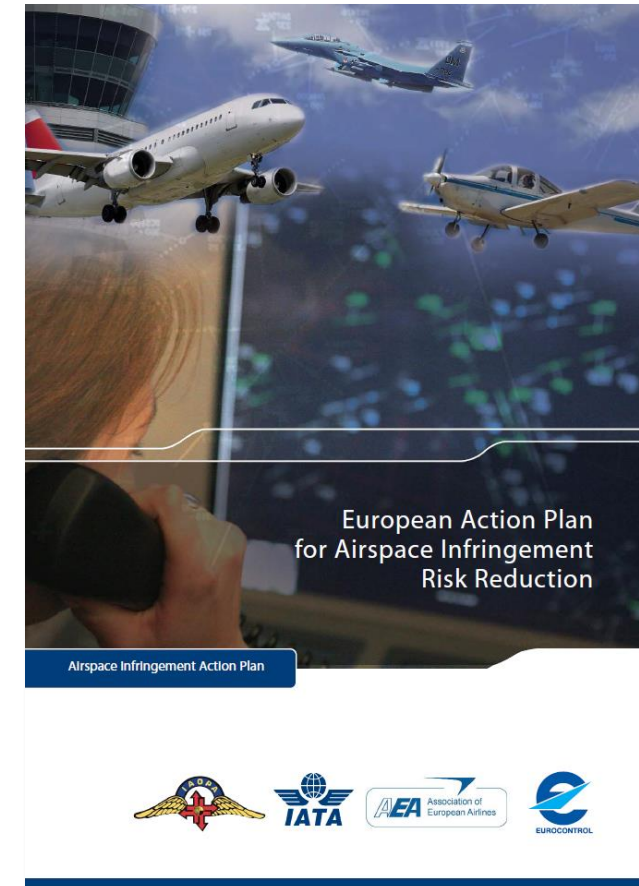
European Action Plan for Airspace Infringement Risk Reduction



Introduction

- 10+ years of EAPAIRR, still high incident numbers
- Acknowledged risk
- Changed environment
- Best practices and experience
- ATM CAG CANSO paper
- Request from the stakeholders

European Action Plan for Airspace Infringement Risk Reduction



European Action Plan for Airspace Infringement Risk Reduction

No results without a (great) team!



DFS Deutsche Flugsicherung



Objective

- **Reduce the risk of Airspace Infringements**
- Enhance cooperation between all stakeholders
- Promote best practices and experience sharing
- Embed the results in European legislation

Scope

GA infringements in European Controlled Airspace

Recommendations for:

ANSPs

Airspace Design

AIM/MET providers

Regulators

Airspace Users

No drones

Strategy

What did we do to achieve this?

- Review of the existing action plan
- Analyse the applicability of the actions
- Remove blockers
- Add new proposals
- Unique group of expertise and back ground...different views

Result: EAPAIRR v2.0

European Action Plan for Airspace Infringement Risk Reduction

EAPAIRR - Version 2.0



Link to the document:

<https://skybrary.aero/sites/default/files/bookshelf/1044.pdf>

REF	Recommendation	Rationale
AU7	Implement knowledge exchange programs between ATCOs/FISOs and Airspace Users. See also recommendation ANSP3	<p>The knowledge exchange programmes should aim to support controllers and pilots in sharing their knowledge of airspace and aircraft, improve understanding of each other's needs, limitations, and way of working. Programmes should include pilots with different experience, e.g., pilots of light aircraft, gliders pilots, helicopters, etc. Such knowledge exchange programmes should be organised at local level in order to maximise effectiveness. Meeting events should be held at the flying schools and clubs and ATS facilities. Pilots' associations and flying clubs should play an essential role for improvement of the interface to ATC.</p> <p>Establish Local Airspace Infringement Teams (LAITs) to be run by the airspace owner. Participants should be included from ANSP's, airspace users (GA, CA and MA), local airports and regulators. Provide more general information on hotspots and ways of communication.</p>
AU8	Review private pilots' initial training content and ensure there is improved R/T training coverage. See also recommendation ANSP1	<p>Private pilots should be taught to: Use unambiguous call-signs - full call-sign or call-sign coupled with type of aircraft; Contact ATS for assistance in complex situations (e.g. unsure of position); Actively seek confirmation in case of doubt; Strictly apply the readback/hearback procedure; Use 121.5 MHz in complex/unusual and emergency situations if not in contact with an ATS unit on another frequency; Adhere to communication failure procedures; Use standard phraseology in English for essential air-ground communication exchanges, like clearance requests. The training course should include practicing R/T skills for the most common R/T exchange scenarios, like crossing controlled airspace, reporting basic flight plan data, and requesting information.</p> <p>This recommendation is also applicable to ULM pilots whose training and licensing are not covered by the EASA regulations.</p>
AU9	Ensure adequate proficiency of flight instructors in terms of navigation and R/T skills	<p>The navigation and communication skills requirements for flight instructors should be reviewed and updated, as needed, to meet the training syllabus needs.</p> <p>The risk awareness of instructors at flying schools should be raised through dedicated workshops, safety seminars and publications.</p> <p>Support from the regulatory authorities should be sought and obtained.</p>
AU10	Promote extended flight corridor and alternate route planning for VFR flights	Promote awareness of the need and encourage private pilots to plan alternative/secondary routes to be flown in the event of unexpected/unforeseen circumstances, e.g., clearance to cross controlled airspace is refused, weather changes occurring faster than predicted, etc.

- Owners
- Users
- ATOs
- Clubs
- Associations
- ...




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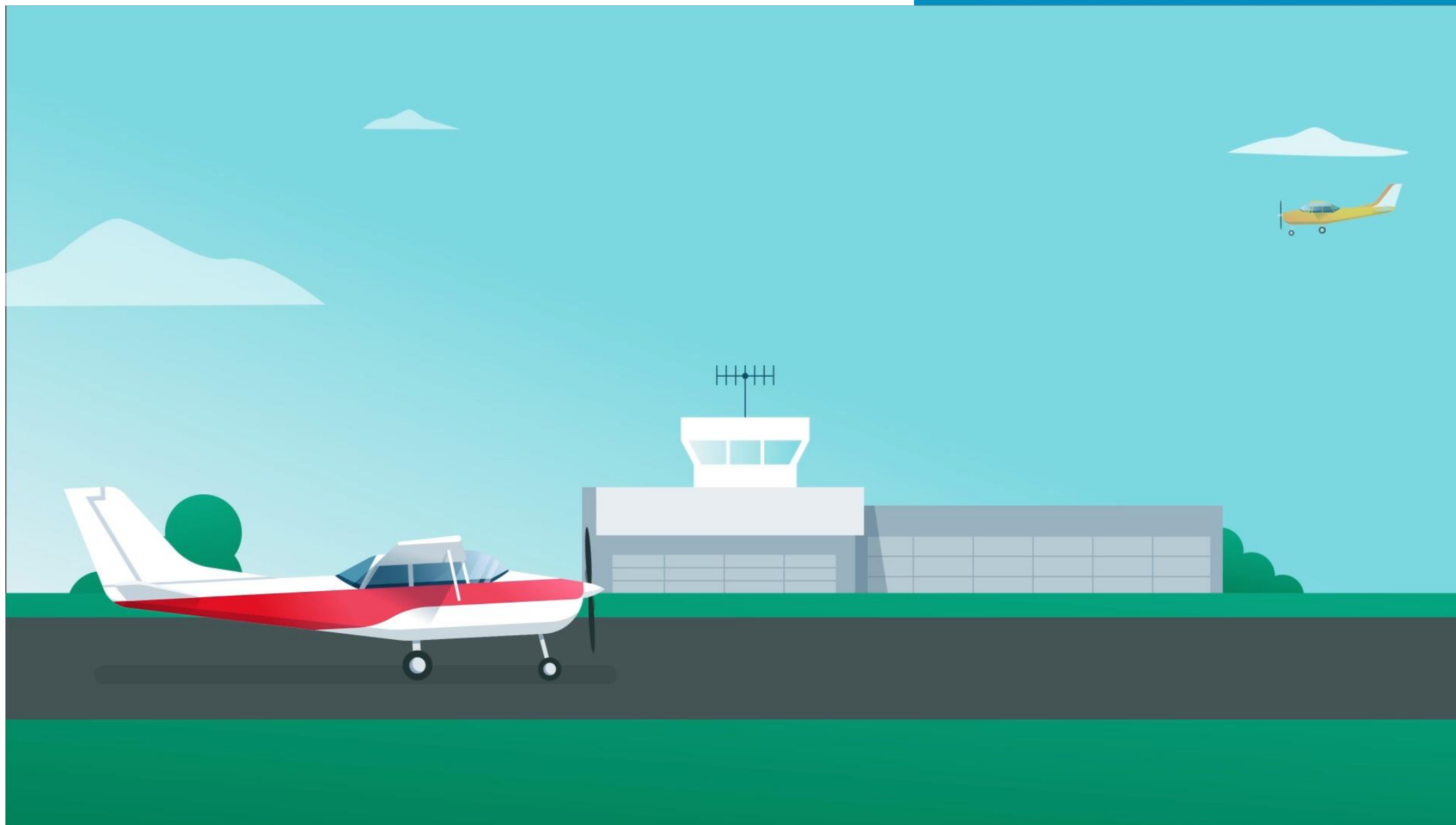


European Action Plan for Airspace Infringement Risk Reduction

Airspace Users
(civil and military)




European Action Plan for Airspace Infringement Risk Reduction



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European Action Plan for Airspace Infringement Risk Reduction

Best practices

SKYbrary

PORTALS BROWSERS THEMES TUTORIALS COURSES PUBLICATIONS

Airspace Infringement Prevention Toolkit

The Airspace Infringement Prevention Toolkit is based on a collection of best practices from all over Europe.

Welcome

How much do you know about Airspace Infringement? How much do you know about how to reduce the risk? We have collected best practices from all over Europe, as well as other useful information to avoid Airspace Infringements.

Material for Pilots

Material for ATCOs, ATOPs & Regulators

View an infringement incident

Controlled Airspace Infringement - Birmingham CTR

How to fly VFR in:

UK Sweden Denmark Norway Finland

Top Ten Tips for GA pilots

Ten ways to avoid an infringement, largely based on good airmanship and common sense.

Toolkit Navigation

Material for Pilots
Material for ATCOs

Reference Material

- Action Plan
- FTB Study
- Airspace Infringement: Guidance Notes for GA
- Intro
- Category: Airspace Infringement
- Airspace Safety Initiative in the UK
- EASA (Airspace Infringement)
- EASA Sunny South
- EASA GA Community

SKYclips

Airspace Infringement (SKYclip)

Airspace Infringement and Aeronautical information (SKYclip)

SKYBRARY PARTNERS:

SAFETY KNOWLEDGE CONTRIBUTED BY:

<https://www.skybrary.aero/tutorials/airspace-infringement-prevention-toolkit>

Best practices

Best Practice – Pre-Flight Planning

- Ensure that you have a current aeronautical chart
- Check NOTAMs before flying. Learn to use efficient methods of briefing, such as a “narrow route brief” or “saved briefings” where these facilities exist.
- Check for planned restrictions of airspace in Air Information Circulars (AIC)
- Check the local and en-route weather and check again just before flight. In many European countries the weather changes rapidly so plan options for your flight, including diverting or turning back.
- Ask an instructor for assistance if you don’t understand the information in any document.

Cost – The information is freely available so the only cost will be time.

Failure to plan is to plan to infringe

Controlled airspace

Parachuting competition all day

Danger Area - live firing
14:00 to 16:00

Red Arrows display
12:00 to 13:00

Correctly planning and studying your route before departure will help you to avoid infringing controlled or restricted airspace.

check NOTAMs at
www.ais.org.uk

check today's temporary
airspace restrictions on
0500 354 802

If you are unsure of your
position call 121.5

www.airspacesafety.com
twitter [airspacesafety](https://twitter.com/airspacesafety)

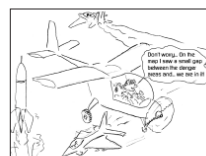
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Best practices

TOP TEN TIPS for GA pilots



Ten ways to avoid an infringement, largely based on good airmanship and common sense:



1 Plan your flight! Where possible, **avoid flying close to controlled airspace boundaries**. A small navigational error or distraction of any sort can lead to an infringement – and it doesn't take much to ruin your day.

2 Pilot workload rises rapidly in bad weather – and so do infringements. If the weather starts to deteriorate, **consider your options early** and if necessary divert or turn back in good time.



3 If you wish to transit controlled airspace call the appropriate ATC unit well in advance. This gives the controller time to plan in your flight.

4 If you plan to cross controlled airspace, remember that a crossing clearance may not always be possible. Be ready with a 'secondary' plan how to avoid controlled airspace – and don't forget to make your overall time and fuel calculations using the longer route.



5 Don't hesitate calling ATC to pass information about your flight or ask for assistance.



DAP/SSH



TOP TEN TIPS for GA pilots



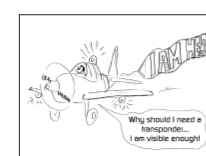
Ten ways to avoid an infringement, largely based on good airmanship and common sense:



6 Think about what you are going to ask before you press the transmit switch and use the correct Radio phraseology. It helps air traffic control to help you – and sounds more professional.



7 Be aware that ATC may be busy when you call them – even if the controller doesn't talk at the frequency at that moment.



DAP/SSH



8 Remember – the instruction "Standby" is not an ATC clearance and you shall fly around the controlled airspace, unless the controller issues a crossing clearance.



9 Be prepared for a crossing clearance that does not match your planned route but will allow you to transit safely.

10 Use the transponder, if equipped. It will help ATC identify you in case you need navigation assistance and may prevent an infringement which may in turn prevent a dangerous proximity to other aircraft or worse.



Questions?



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