

Thank you all for attending

The Webinar will start shortly

There will be opportunities throughout the presentation to ask the panel questions

Questions should be logged using the Chat function







Research project: Impact of Security Measures on Safety

Importance of <u>understanding</u> interdependencies

Your views and expertise are needed

Thank you and stay connected!

Welcome from the European Commission



Mate Gergeley DG MOVE A5 Aviation Security



- Aims and objectives of the project
- Introduction to the project team
- Project timeline
- Introduction to tasks
- Questions & answers
- Next steps









Understand the *nature and extent of the interdependencies between safety and security* in order to *assess the impact of security measures on safety*. In doing so, the project should identify which *processes and job roles are affected by safety–security interdependencies* and which *certification requirements and licensing activities are affected*.

In the medium term, safety risk management techniques that can be applied to security will produce *harmonised risk assessment methods* and *support integrated policy and decision-making* processes at national and EU level.

The main output is a *comprehensive knowledge base* for the evaluation of the potential impact of security measures on the safety performances of aviation systems, personnel and operations, including the *leading indicators* for measuring such an impact (positive or negative) as well as *the main factors* playing a role in such security-safety dependencies.

Project team







- The consulting and training arm of the UK CAA
- Kevin Sawyer Technical Lead
- Sarah Fox Project Manager
- Dorota Broom Lead for Tasks 1 & 4
- Stuart Coates Communications Lead



- Apave Group centre of excellence for risk and safety management solutions to the civil and military Aviation community
- Ivan Volpoët- Lead for Task 2

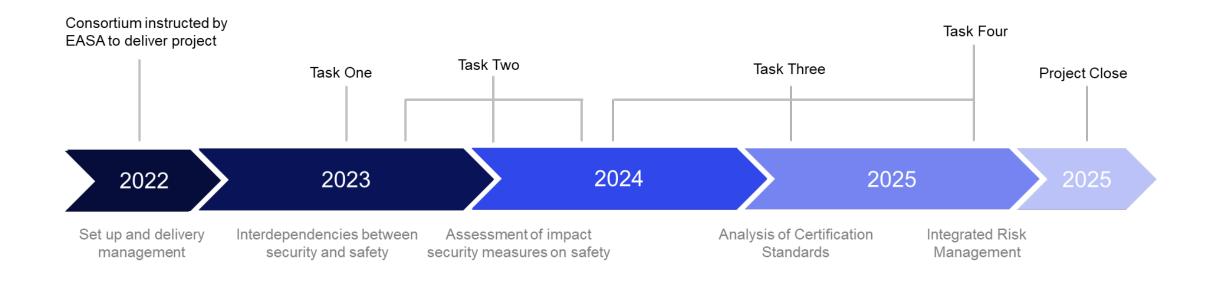


- Centre for Adaptive Security Research and Applications
- Adam Troczyński- Lead for Task 3









Stakeholder engagement and interaction

Task 1Identifying safety/security dependencies





Outcomes

- Defined areas of safety affected by security measures
- Job roles with both a safety and security function identified
- Impact Assessment Framework developed guidance for regulators and regulated entities

The way we work

- Review of security and safety standards and regulations to identify security interdependencies, areas of safety affected by security and job roles with both safety and security function
- Stakeholder engagement is essential for development of Impact Assessment Framework





Safety areas affected by security measures

Considerations

The main purpose of introduced security measures is to prevent acts of unlawful interference, as such, at strategic level the impact of those measures remains positive

Security measures may have an impact on aviation systems, aircraft performance, standard operating procedures, emergency procedures or organisational requirements. This may generate additional safety risk that may contribute to the development of unsafe conditions (negative impact)

Security measures and requirements may also contribute to the achievement of safety objectives (positive impact)





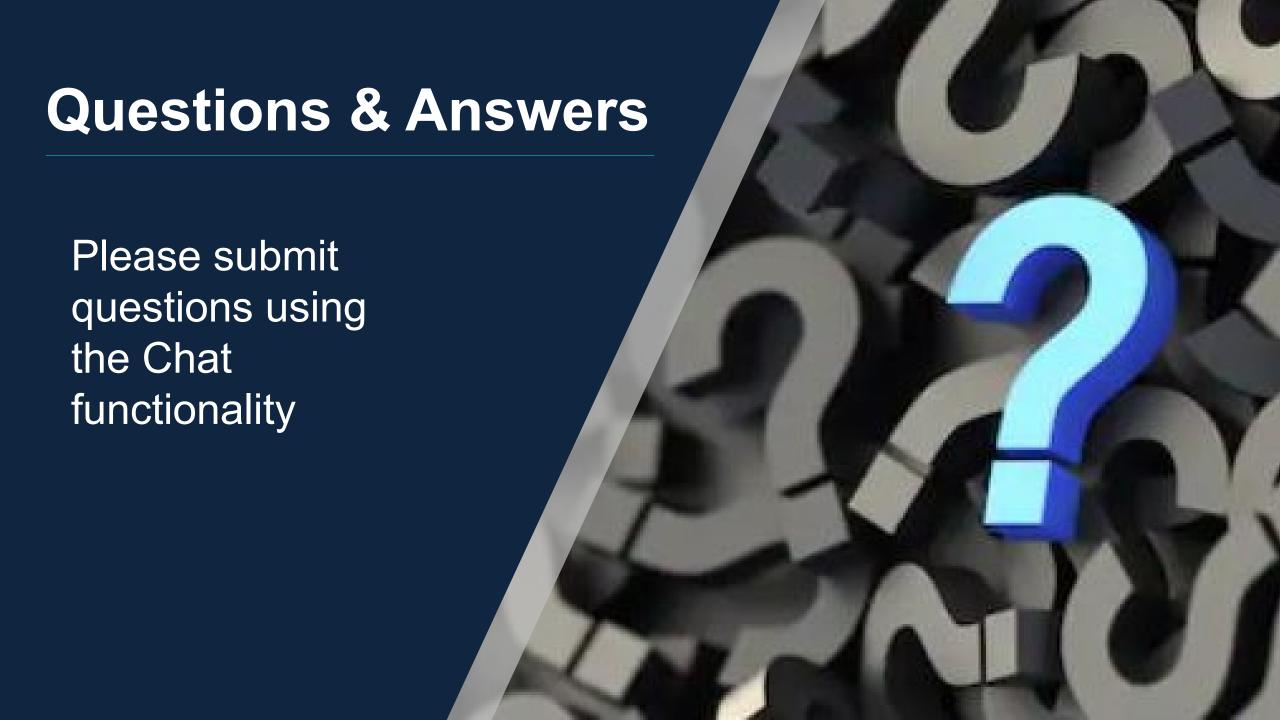
Defining safety areas affected by security measures

Primary categories of safety areas affected by security measures:

- Aircraft and aircraft equipment
- Unmanned Aircraft Systems
- Air Traffic Services
- Aerodromes (including screening and security equipment)
- Air Operations (including Cargo)
- Ground Operations

Specific areas of safety under primary categories:

- Design
- Certification
- Operational Procedures
- Cyber security
- Management System
- Training
- Dangerous Goods







Assessment of the impact of security measures on safety

The Objective

Assess the (positive and negative) impact of the security-safety interdependencies

- Focus on **job roles** for which
 - combined safety and security critical roles
 - or security critical roles with safety responsibilities have been identified
- Specific **areas** of interest:
 - Impact of ground security measures on the overall safety of airports and air operations
 - Impact of in flight security measures on the safety of flights
 - Impact of information security threats and measures on safety
 - Impact of security measures for cargo, mail, baggages and dangerous goods
 - Interdependencies between safety and security oversight mechanisms
 - Preparedness level and training needs of specific personnel groups
 - Impact of security measures implemented for EU inbound flights on the safety of flights
 - Impact of the management of security incidents on the safety of operations





Assessment of the impact of security measures on safety

The way we work

- Using deliverables of previous task 1 (D1.1 "areas", D1.2 "job roles" and D1.3 "knowledge based and assessment framework")
- Interviewing key stakeholders by means of one-to-one interviews, dedicated working sessions and online surveys

Key Steps

- D2.1 identify main security threats having an impact on aircraft safety
- **D2.2** finalise list of interdependencies to be assessed and the participants to surveys prepare questionnaires and surveys
- **D2.3** conduct interviews and assess the results





Assessment of the impact of security measures on safety

Expected outcomes:

Superposition of security threats having an impact on safety

with security-safety interdependencies (areas and job roles)

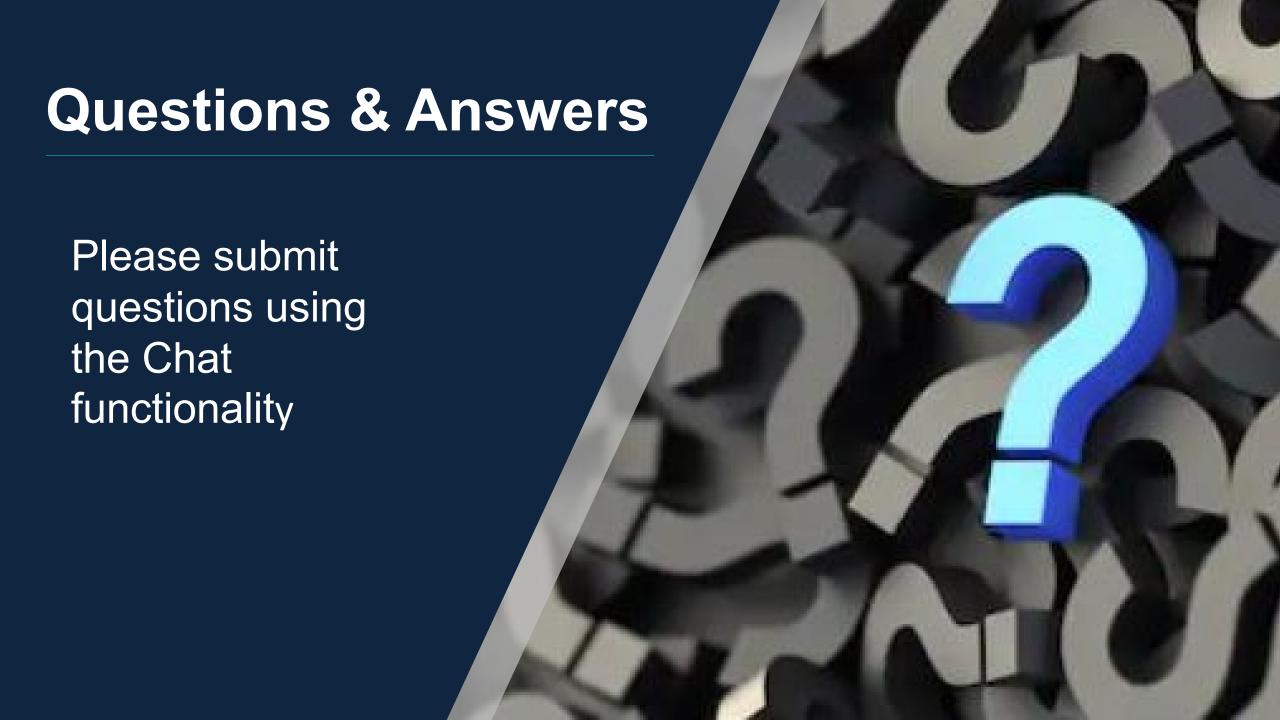
D1.3 Methodology D2.1 Knowledge based assessment Main security threats having an framework impact on safety D1.1 Safety areas affected by security D1.2 D2.2 Job roles involving both safety and security functions Interdependencies to be assessed Preparation of questionnaires and surveys

D2.3

Final assessment of interdependencies

Gap analysis

Gap analysis defining which elements and measures are currently missing to ensure better safety outcomes







Analysis of certification standards

The Objective

Understand and analyse certification standards of

- Air operators
- Aerodromes
- Equipment
- Staff

in the context of safety-security interdependencies and to assess the impact of security measures on safety.

Three subtasks **aimed at assessment of this impact** related to:

- security threats and aircraft design
- security related requirements and the safety certification and/or licensing of air operators, aerodromes
- security certification processes

Task 3Analysis of certification standards



The way we will work

- Using deliverables of previous tasks (huge dependency thus quality input from stakeholders is critical)
- Methodology applied to include: document analysis, semi-structured interviews, gap analysis, workshops (consolidation of input)

Key Steps

- **Review** of Task 1 and 2 outcomes
- **Review** of aircraft design standards and processes, regulatory requirements, screening equipment detection requirements, certification requirements
- Identify stakeholders, **conduct interviews** & **conduct workshops** to validate and consolidate findings

Task 3Analysis of certification standards



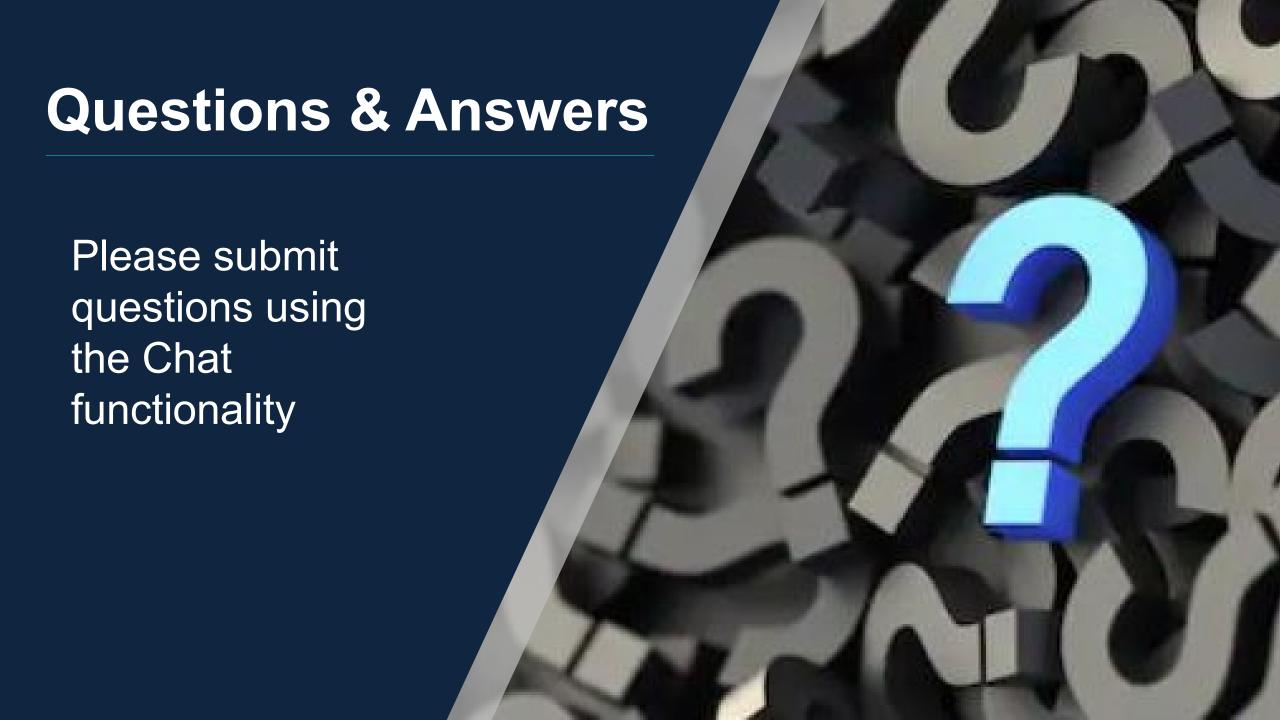


Expected outcomes – comprehensive overview (through reports) of:

- The relevance of the existing detection requirements for screening equipment in mitigating threats to aircraft structure
- The relevance of current aircraft design requirements for mitigating physical and information security threats
- The existing safety and security certification requirements of air operators and aerodromes (including verification of security requirements during certification)
- The security certification processes and their effectiveness including direct and indirect impact on safety

Importance of these outcomes in the context of:

- Bolstered risk management and assessment
- Integrated safety / security approach
- Improvements in designing future regulations



Task 4 Integrated risk management





The Objective and outcomes

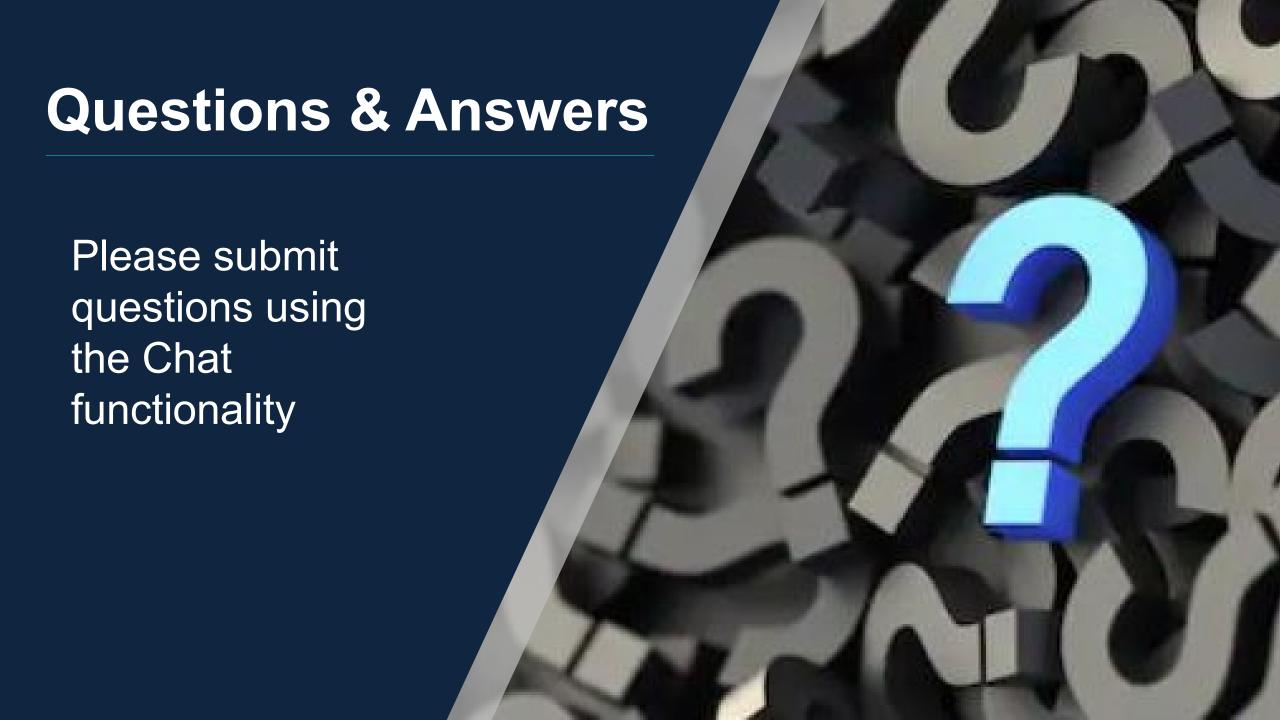
To propose a series of recommended practices and solutions for the implementation of integrated risk management concept

Three subtasks include:

- Identification of currently implemented safety mechanisms and tools
- Development of recommendations for integrated risk management
- Development of recommendations to support an integrated policy and decision-making process in the field of safety and security at national and EU level

The way we will work

- Research of currently existing safety concepts in relation to risk management
- Engagement with stakeholders will be critical
- Analysis of data from previous tasks



Moving Forwards

Your input and engagement is integral to defining better regulation, a better way of working & having the right tools

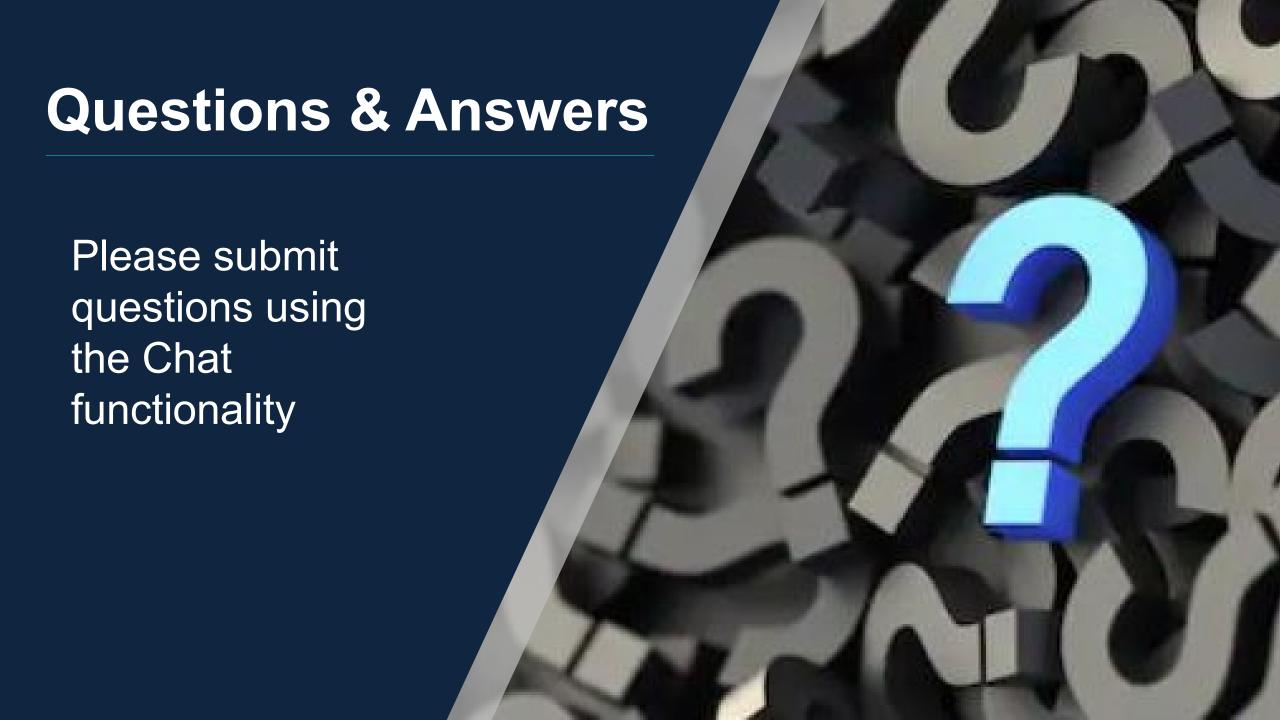
It is important to participate and provide feedback to ensure we deliver something useful which is embraced by Industry and Regulators

We will be contacting you in the future using different methods:

- Questionnaires
- Surveys
- Workshops & Webinars

We are planning a series of workshops throughout the project to:

- Review and validate initial findings
- Present results of research/analysis
- Explore concepts, mechanisms, methodology and tools
- Review impact assessments
- Understand why methods are used and the benefits and limitations





End Presentation