

# CERTIFICATION PROCESSES AND KEY INTERDEPENDENCIES



## RESEARCH STUDY ON THE IMPACT OF SECURITY MEASURES ON SAFETY

EASA actively collaborated with a consortium to examine the impacts of Security Measures on Safety. The third task of this study assessed how certification processes across aircraft design, aerodromes, and air operators interact with aviation security requirements.

Through expert interviews and surveys, the study explored both the positive and negative effects of security certification on safety, identifying key interdependencies, challenges, and opportunities for better integration.

Here are some of the key findings:

### SECURITY MEASURES ASSESSED



**30+** aircraft design requirements



**20** threat scenarios analysed (bow-tie methodology)



**15+** aerodrome & operator certification elements tied to security

**Key finding:** Applying security preventive measures on the ground seems to be more efficient than additional aircraft design standards

### INDUSTRY AND AUTHORITY PROFESSIONALS INTERVIEWED



**20+** interviews with safety and security professionals



**50+** individual expert contributions



**100+** survey responses



**50%** of EU Member States engaged

**Broad stakeholder scope:** authorities, airports, air operators, aircraft manufacturers, and subject-matter experts

### KEY TAKEAWAYS



Touchpoints between safety and security can be coordinated effectively



Some aircraft safety design elements play a role in the mitigation of security incidents



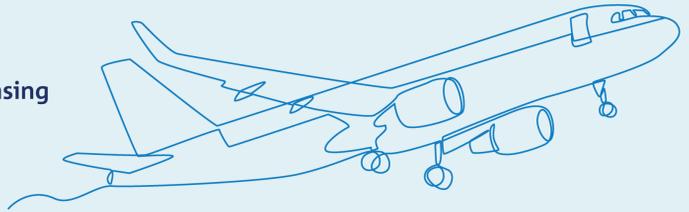
Safety and security certifications are distinct, yet interconnected



Aircraft benefit from the implementation of robust ground aviation security measures

### CHALLENGES AND OPPORTUNITIES

- Overlaps may cause complexity but can also lead to synergies
- Interdependence is a value, not an issue
- Information exchange can help in increasing mutual understanding



- **Separate but linked:** Safety and security certification remain distinct
- **Touchpoints exist:** They can be coordinated effectively
- **Synergies possible:** Mutual benefits can be realised

### Safety Domain Insights:

- An interconnected approach improves overall risk management
- Collaboration boosts mutual awareness of risks

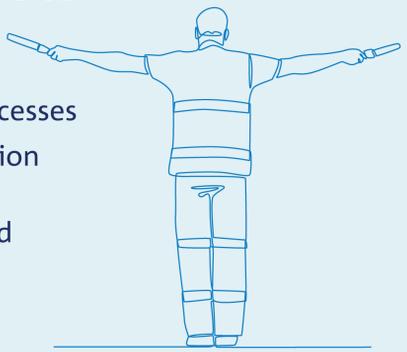


## Certification = Assurance

It strengthens safety, security, and resilience across operations

### KEY RECOMMENDATIONS FOR THE FUTURE

- Encourage use of interconnected risk and impact assessments
- Facilitate safety–security info exchange at various levels
- Promote integrated, cross-domain thinking
- Encourage synchronisation, information exchange and synergies between certification processes
- Encourage research into human–machine interaction to support safe and secure automation
- Ensure regulatory changes don't result in gaps and unintended risks between safety & security
- Improve alignment of terminology used



To learn more about these facts and figures and to explore the practical recommendations in more detail, please visit:  
<https://www.easa.europa.eu/en/research-projects/impact-security-measures-safety>