EASA
European Union Aviation Safety Agency

Webinar: Project Update – Task 2

Impact of Security Measures on Safety

October 9th, 2025 | 14:00 – 16:30 CET

Delivered in cooperation with our consortium

UK Civil Aviation Authority International

apave Aeroservices

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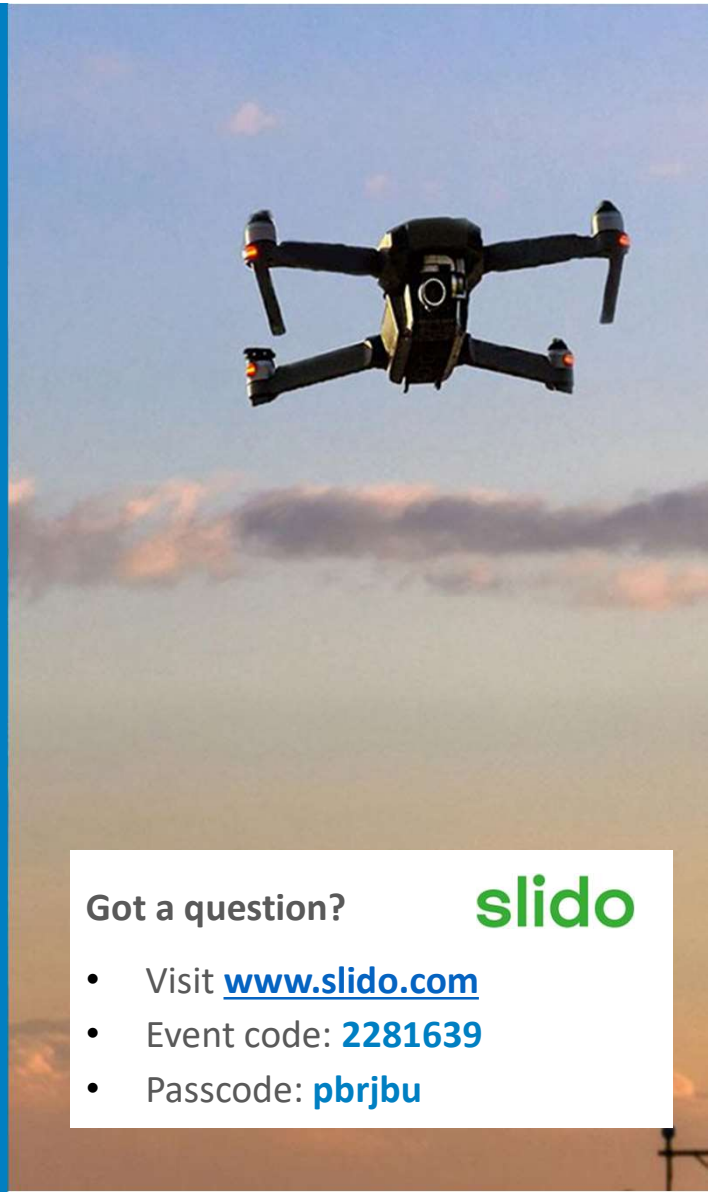
Agenda

- Welcome & Introductions
- Task 2 Overview: Objectives, key deliverables, interdependencies
- Interactive Session: Safety-Security interdependencies
- Task 2 Outcomes: Methodology, results, recommendations
- Interactive Session: Safety Impact Assessment
- Next Steps
- Interactive Session: Promoting the Safety Impact Assessment Methodology
- Q&A
- Closing



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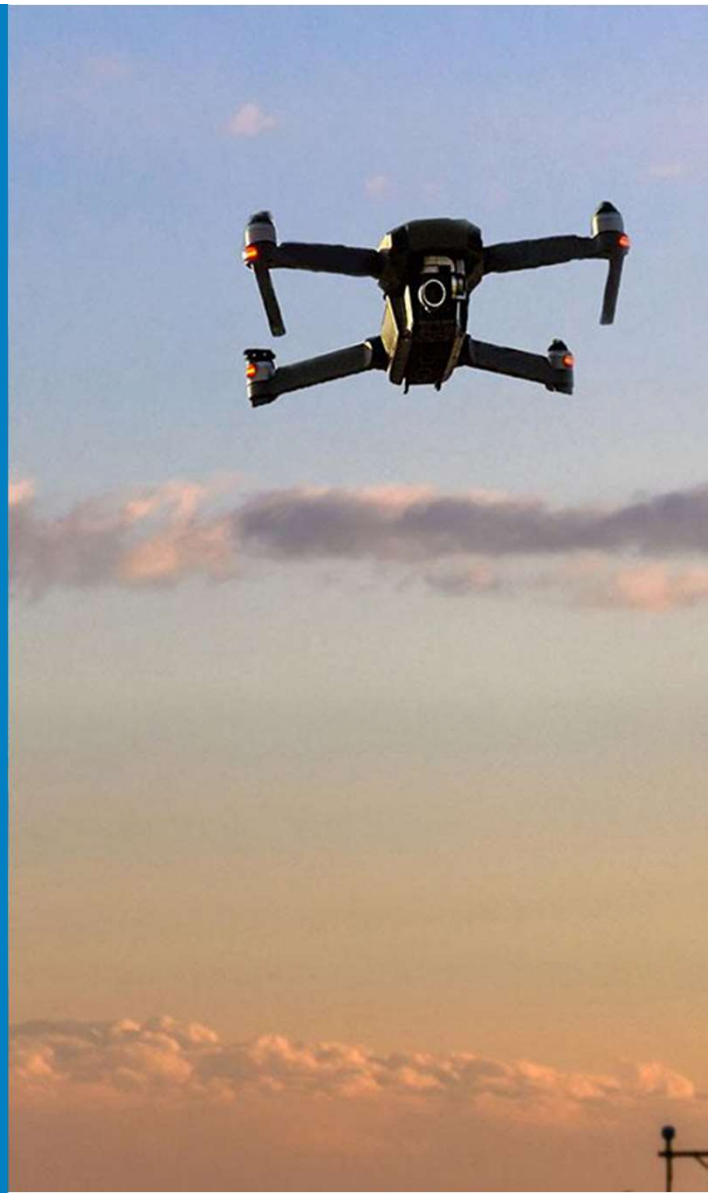
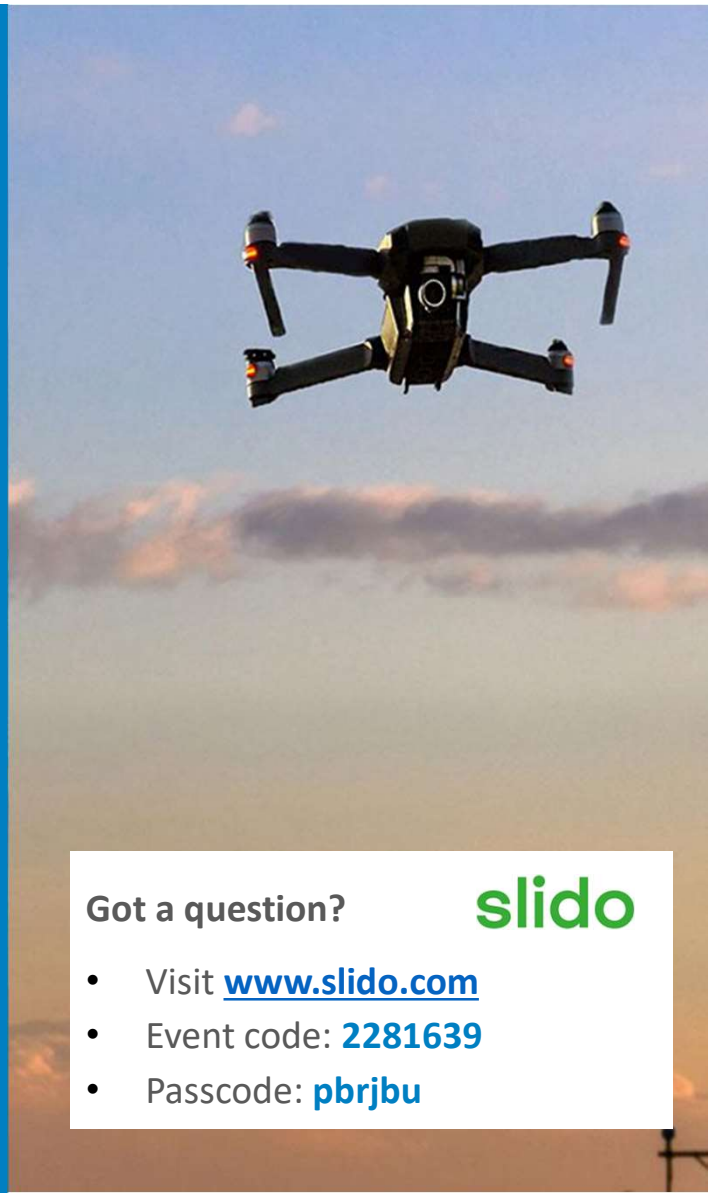


Welcome from EASA

Adam Borkowski
Technical Lead, EASA



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Task 2 Overview:
Objectives, key deliverables, interdependencies

Lucas Lempereur De Saint Pierre
Task Lead, Apave Aeroservices

Project Aims

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Objectives

- ➔ Understand the interdependencies between safety and security:
  - ➔ Identify affected processes, job roles, certification requirements and licensing activities
- ➔ Assess the impact of security measures on safety

Perspective

- ➔ Harmonise safety and security risk assessment methods
- ➔ Support integrated policy and decision-making processes

Expected Outputs

- ➔ Comprehensive knowledge base for the evaluation of the potential impact of security measures:
  - ➔ Including leading indicators and key influencing factors

Task 2 Overview

Objectives

"Task 2: Assessment of the impact of security measures on safety"

- ➔ Assessment of safety–security interdependencies
- ➔ Evaluation of the impact of security measures on safety
- ➔ Gap analysis to identify missing elements and measures needed to ensure improved safety outcomes

Key deliverables

D-2.1	D-2.2	D-2.3
Identification of the main Security threats and scenarios, having an impact on Safety	*Safety and Security interdependencies to be assessed, the questionnaires and interviews proposed as well as the participants to the surveys*	*Assessment of the impact of the interdependencies on the areas agreed upon following the interim report*

Task 2 Overview

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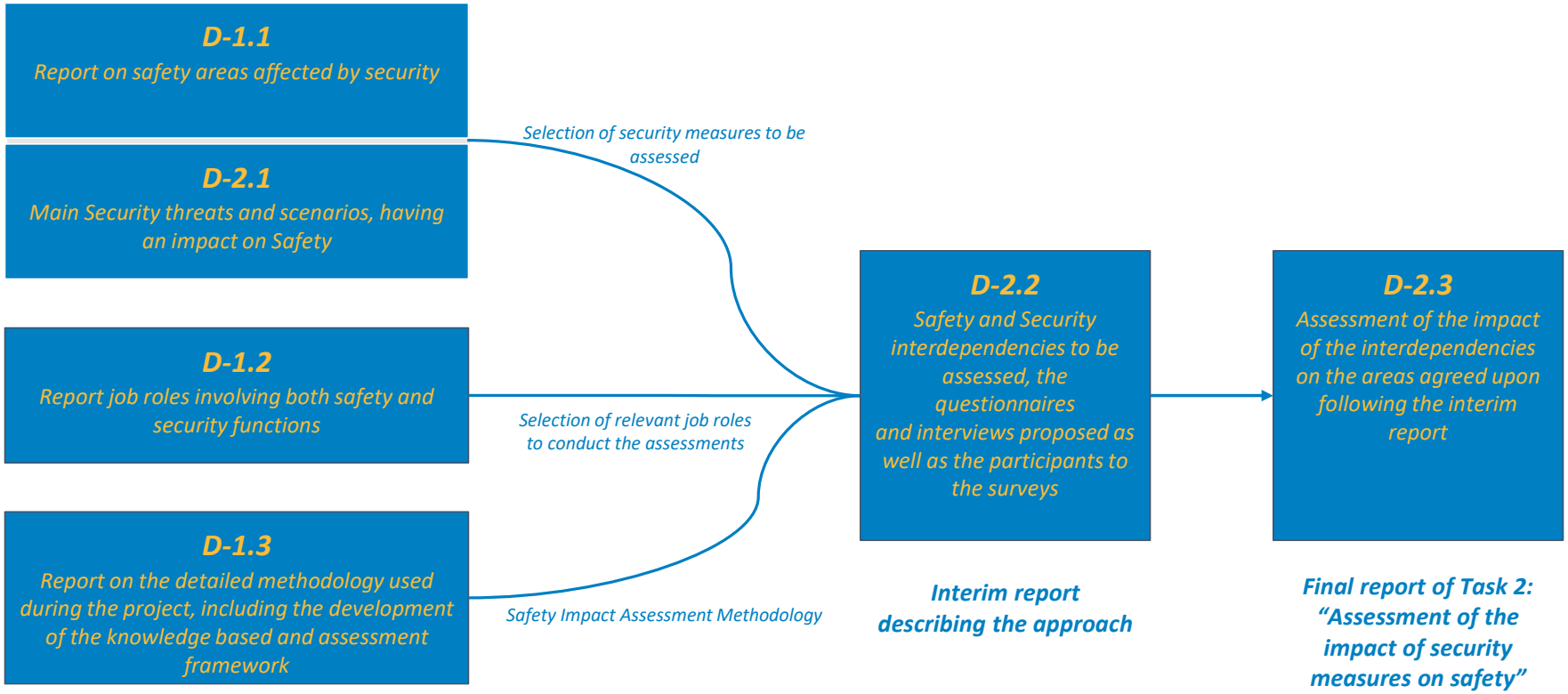
Use of previous deliverables



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Safety-Security Interdependencies – Interactive 1

- Interactive Q&A session using Slido
- Responses received in real time
- Expert Panel to react to and discuss results

Sophie Hibbin
Technical Lead, CAAi

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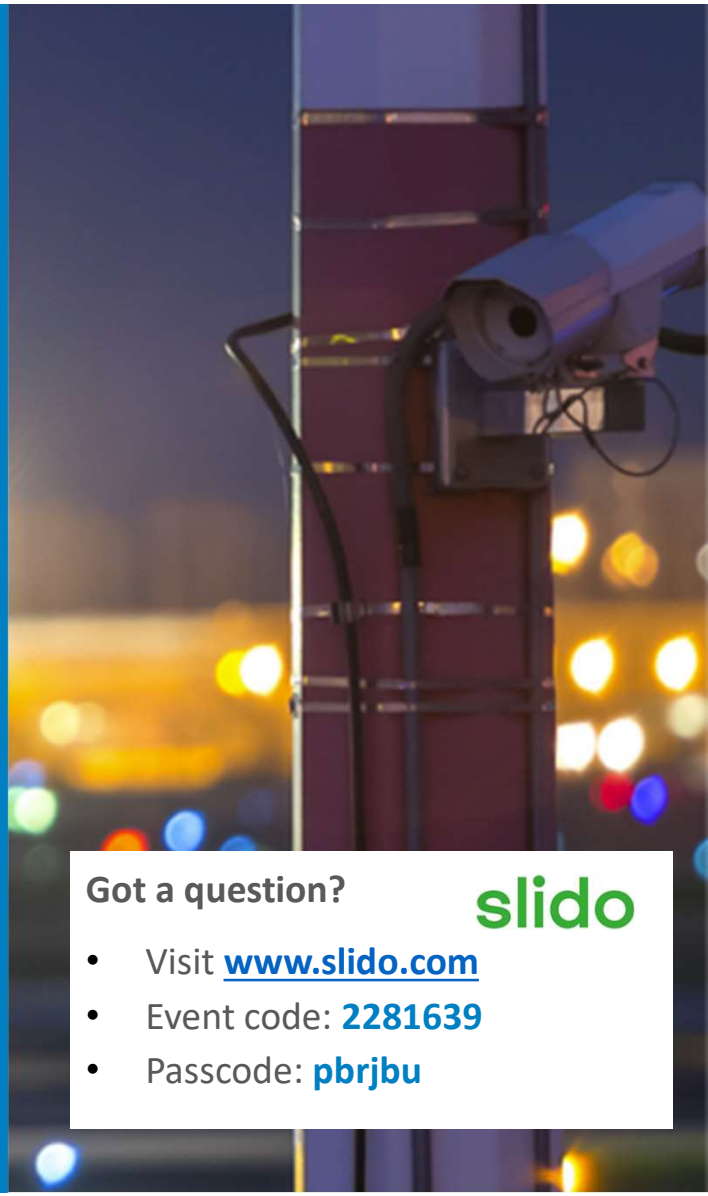
Task 2 Outcomes: Methodology, results, recommendations

Lucas Lempereur De Saint Pierre
Task Lead, Apave Aeroservices



Task 2 Outcomes

D-2.1 – Methodology, outcomes and utilisation for the Remainder of the Task

- ➔ Draw up an exhaustive list of the main Security threat with an impact on Safety
- ➔ Define existing (EU) security mitigation measures
- ➔ Describe and characterise the threats
  - Potential threat scenarios
  - Description of the impact on Safety
  - Type of perpetrator (Insider, Passenger, Non-travelling person)
  - Impacted operational areas
  - Type of threat (Airside, Landside, Information Security)

D-2.1

Identification of the main Security threats and scenarios, having an impact on Safety

Task 2 Outcomes

Safety Impact Assessment (SIA) Methodology

- ➔ Step 1: [Identification of the] security measure to be assessed
- ➔ Step 2: Identification of safety domains, and selection of safety experts
- ➔ Step 3: Assessment
- ➔ Step 4: Impact Rating
- ➔ Step 5: Overall Outcome & Suggested Risk Mitigation Action

Task 2 Outcomes

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Safety Impact Assessment (SIA) Methodology

➔ Step 1 – Security Measure to be assessed

The objective is to frame the assessment by describing the security measure under assessment, including the associated regulatory reference(s), rationale for introduction, and mitigated threats.

A clear definition is essential to understand its applicability and potential impact on safety domains.

Example – Baggage Reconciliation

STEP 1 – Security measure to be assessed
Description of the security measure The security measures under consideration pertain to the identification of hold baggage, verification that the owners of the hold baggage are on-board the aircraft and include specific requirements for the transportation of unaccompanied hold baggage.
Requirements originate from - (EC) 300/2008 5.3 - (EU) 2015/1998 5.3
Rationale for introduction These security measures have been introduced in the security regulatory framework to ensure that all transported hold baggage are identified and that their owner are also on-board the aircraft. Additionally, the transportation of unaccompanied hold baggage might be necessary in certain cases (for example, in the event of mistakenly directed or lost baggage), but it needs to be adequately regulated by appropriate security measures.
Mitigated threats • IED in hold baggage

Task 2 Outcomes

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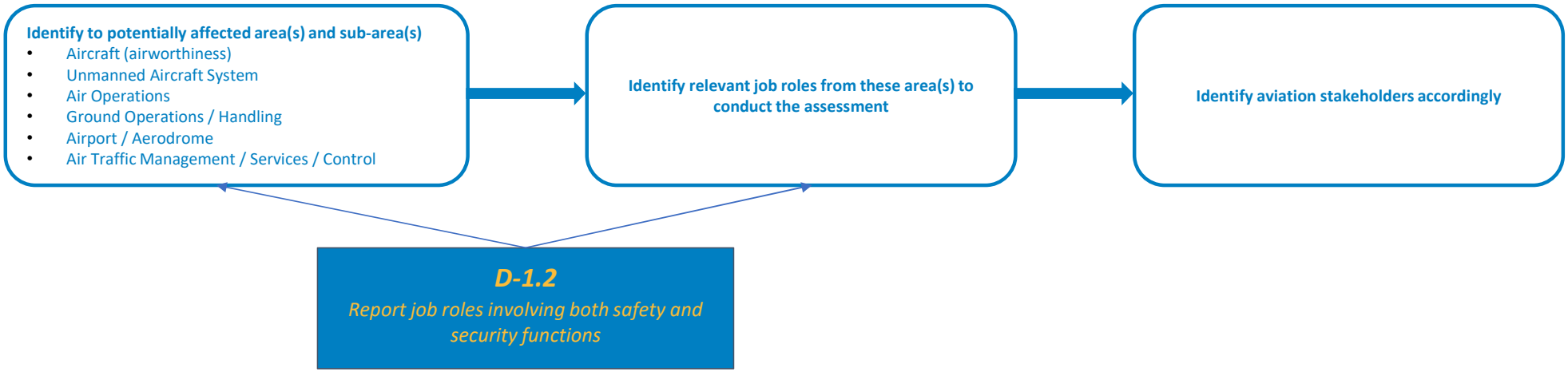
Safety Impact Assessment (SIA) Methodology

➔ Step 2 – Identification of safety domain and selection of stakeholders

Once having describe the security measure, the next step consist in identifying relevant stakeholders to conduct the assessment:



Task 2 Outcomes

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Safety Impact Assessment (SIA) Methodology

➔ Step 2 – Identification of safety domain and selection of stakeholders

Example – Baggage Reconciliation

STEP 2 – Identification of safety domain and selection of safety experts	
Areas of Impact	☐Aircraft ☐ATM / ATS / ATC ☒Air Operations • Flight Preparation ☒Ground Operations/Handling • Baggage handling ☐UAS ☐Airport/Aerodrome ☐Other:
Stakeholders to be consulted	**Ground Operations/Handling** • Ground Handling Operations Manager • Safety Manager **Air Operations** • Crew members • Safety Manager

Task 2 Outcomes

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Safety Impact Assessment (SIA) Methodology

➔ Step 3 – Assessment

The assessment consists of selecting predefined safety indicators (positive, neutral, and negative) by the designated aviation stakeholders, and providing rationale for their selection, for each security measures.

- ➔ Identified stakeholders were provided with the description of the security measure (step 1), and with the list of indicators to be selected.
- ➔ Selected indicators were jointly reviewed during one-to-one interviews, allowing stakeholders to provide the rationale for their selection.
- ➔ The selected indicators and their associated rationale were ultimately reviewed by Subject Matter Experts from the Consortium to ensure consistency across assessments.

Task 2 Outcomes

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Safety Impact Assessment (SIA) Methodology

➔ Step 3 – Assessment

Example – Baggage Reconciliation

STEP 3 Assessment
The data collected through the assessment of baggage reconciliation requirements highlighted several potential impacts on safety through the selection of the following indicators: **Negative indicators:** • **Negative impact on staff performance in terms of human factors** • **Increases operational complexity** • **Decreases operational efficiency** **Positive indicators:** • **Allows for reduction of safety hazards** • **Provides additional safety benefits** • **Increases operational efficiency**

Task 2 Outcomes

Safety Impact Assessment (SIA) Methodology

➔ Step 4 – Impact Rating

Based on the assessment conducted, the objective of this fourth step is to provide a description of the impact(s) (positive, negative, neutral), and to enable a quantitative rating of the negative impact, based on a three-point scale (High Negative, Medium Negative, Low Negative), supported by pre-defined criteria:

- ➔ Describe positive, neutral and negative impact(s)
- ➔ Provide a quantitative rating of the negative impact (Low/Medium/High)

Task 2 Outcomes

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Safety Impact Assessment (SIA) Methodology

➔ Step 4 – Impact Rating

STEP 4 – Impact Rating	
LOW NEGATIVE IMPACT	
Does not lead to an accident or an incident however is contrary to safety requirements	☐
Negative impact was identified but there is no evidence	☐
Additional training is not required to counter negative impact	☐
No actual or anticipated safety measures required to counter the impact	☐
Minor consequences on safety	☐
Security measure creates latent conditions where safety issue may develop	☐

STEP 4 – Impact Rating	
MEDIUM NEGATIVE IMPACT	
May lead to an incident (other than serious) within the meaning of Regulation (EU) No 996/2010	☐
Training is required to ensure safety not compromised	☐
Some mitigating measures are required to counter the impact on safety	☐
Some evidence of impact supported by occurrence reports	☐
Impact on operating procedures	☐

STEP 4 – Impact Rating	
HIGH NEGATIVE IMPACT	
Severe consequences – may lead to an aircraft accident or serious incident within the meaning of Regulation (EU) 996/2010	☐
Direct impact on the aircraft / aircraft operation (flight crew, ATM, aerodrome), aircraft critical systems and equipment	☐
There is a documented history of accidents resulting from this security measure	☐
Robust evidence of negative impact (for existing security measures) in form of occurrence reports and root cause analysis	☐
High number of mitigating measures is required in form of procedures, training and (if applicable) equipment to counter negative impact on safety	☐

➔ The assessment of certain security measures revealed effects that do not constitute a direct or immediate impact on safety, but may instead act as contributing factors with an impact that is not directly measurable. To capture these effects and distinguish them from the direct negative impacts identified, they have been categorised as **“Potential Indirect Impacts”.**

Task 2 Outcomes

Safety Impact Assessment (SIA) Methodology

➔ Step 5 – Overall Outcome

The objective is to determine the overall outcome of the Safety Impact Assessment and, where necessary, to propose appropriate risk mitigation options.

➔ It is acknowledged that the overall outcome of a security measure cannot be reduced to a single, exclusive impact (positive, neutral, or negative), as positive and negative impacts do not offset each other.

Task 2 Outcomes

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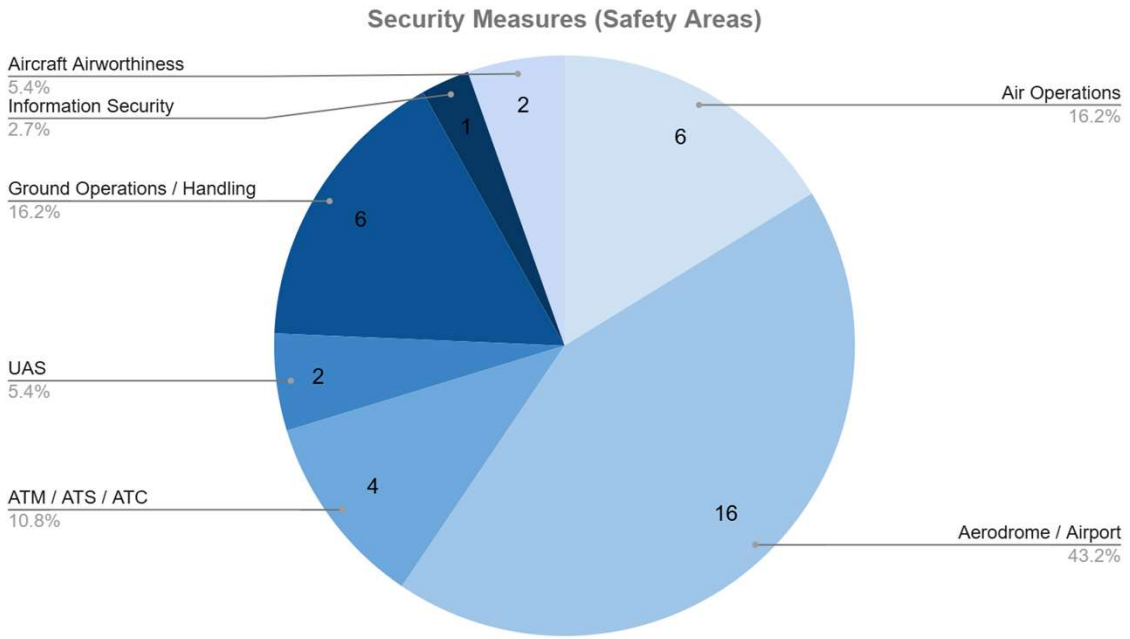
Selection of security measures to be assessed

- As part of the SIA methodology Step 1, the identification and description of the security measure under assessment is necessary. Security measures have been selected:
  - Through a reverse study based on the EU security regulatory framework, each measure was analysed to determine its potential touchpoints with safety, using the outcomes of Task 1 (D-1.1).
  - When measures outside the EU security regulatory framework (e.g., EU “Safety” Regulations, ICAO Recommendations), but which could still be considered related to security were identified in the realm of safety–security interdependencies in Task 1 (D-1.1)
- All security measures to be assessed were agreed upon at the D-2.2 stage and, where appropriate, grouped to facilitate their evaluation, in consolidated sets of security measures.

Task 2 Outcomes

Selection of security measures to be assessed

➔ 36 consolidated sets of security measures were eventually assessed



Task 2 Outcomes

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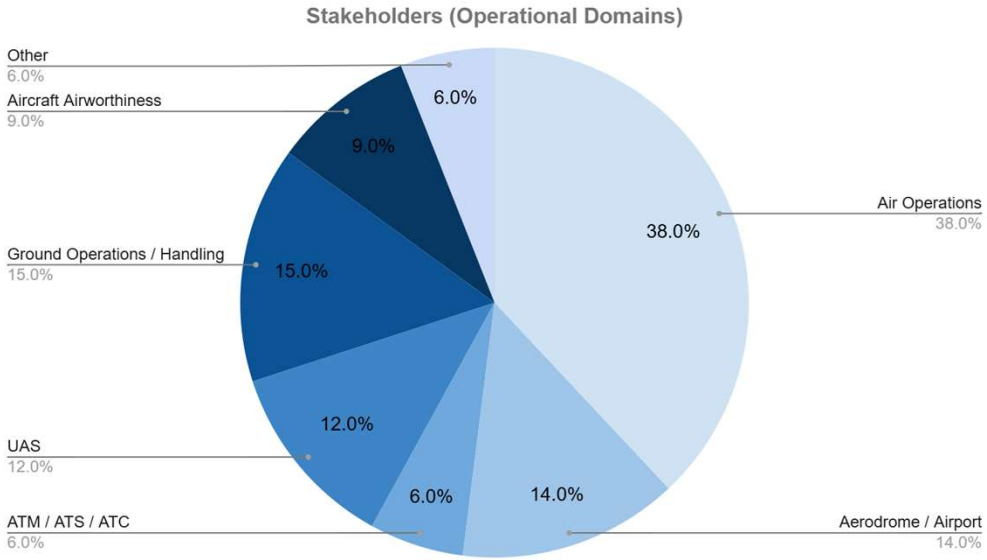
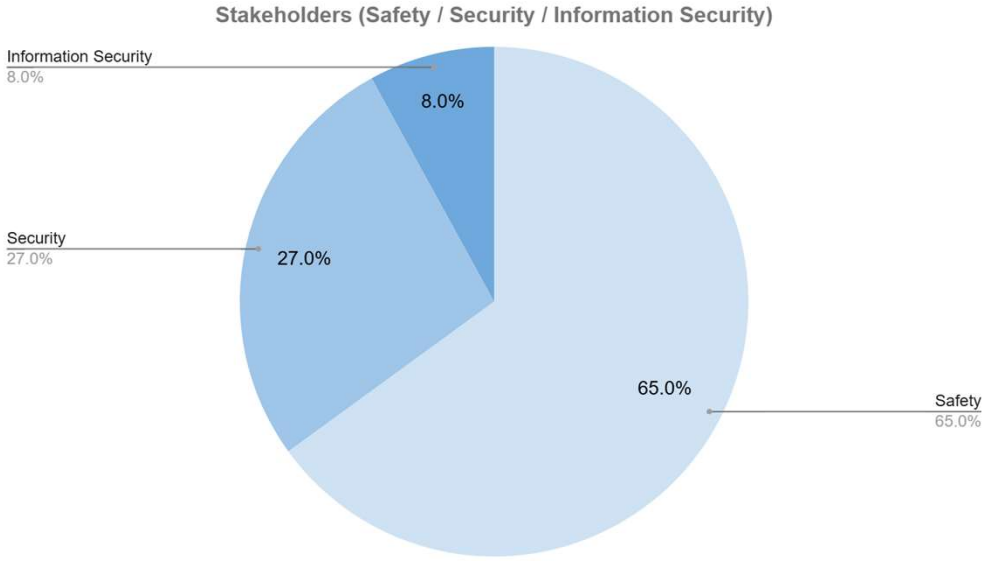
Selection of stakeholders

➔ 35 stakeholders took part of the interviews, to conduct the assessments, selected based on SIA – Step 2 outcomes.





Task 2 Outcomes

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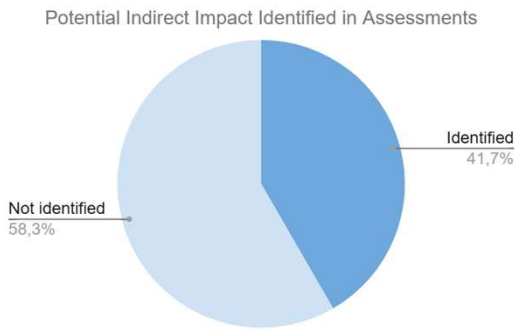
Security Measures Safety Impact Assessment – Overall Overview

Note: The positive impact of security measures on security (in preventing acts of unlawful interference) is not considered in this assessment. Nevertheless, it is acknowledged that security measures contribute positively to safety by preventing or mitigating security threats.

- ➔ Only two sets of security measures were identified with a "**High Negative Impact**" (along with positive impacts): In-flight Security Measures (Flight Deck Door), and Counter UAS Technologies.
- ➔ Numerous sets of security measures present a "**Potential Indirect Impact**" on safety, by generating contributing factors, potentially indirectly impacting safety.



Task 2 Outcomes

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Security Measures Safety Impact Assessment – Overall Overview

Safety Aeras	[Sets of] Security Measures	Positive	Neutral	Potential	Negative
Air Operations	Aircraft Security search	☑	☐	☑	☐
	Protection of Aircraft	☑	☐	☑	☐
	Transportation of Potentially Disruptive Passengers	☑	☐	☑	☐
	Hold Baggage Reconciliation	☑	☐	☑	☐
	In-Flight Security Measures	☑	☐	☑	☑
	Security training for Crew Members	☑	☐	☑	☐
Aerodromes Airports	Airport Planning Requirements	☑	☑	☐	☐
	Access Control	☑	☑	☑	☐
	Screening Operations (Non Passengers)	☑	☑	☑	☐
	Examination of Vehicles	☑	☑	☑	☐
	Surveillance, Patroles, and other Physical Controls	☑	☐	☑	☐
	Screening Operations (Passengers, Cabin and Hold Baggage)	☑	☑	☑	☐
	Prohibited Articles	☑	☐	☐	☐
	Prohibited Articles Exemptions	☑	☑	☐	☐
	Screening Operations and security controls of cargo, mail, airport and in-flight supplies	☑	☑	☐	☐
	Screening exemptions	☑	☑	☐	☐
	Recruitment	☑	☐	☐	☐
	Security Training Requirement for Personnel Implementing Security Controls	☑	☑	☐	☐
	Security Training for Aerodrome Personnel	☑	☑	☐	☐
	Security Equipments	☑	☑	☐	☐
	Security Management System	☑	☐	☐	☐
	Emergency Response Plan	☑	☐	☐	☐

Task 2 Outcomes

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Security Measures Safety Impact Assessment – Overall Overview

Safety Aeras	[Sets of] Security Measures	Positive	Neutral	Potential	Negative
Ground Operations	Protection of Baggage and Passengers			✓	
	Protection of Cargo, Mail and Supplies		✓		
	Cargo from Third Countries		✓		
	Cargo, Mail & Supplies: Approvals	✓	✓		
	Security training for Ground Handling Personnel	✓		✓	
UAS	C-UAS technologies	✓			✓
	Prepardneness and incident response	✓			
Aircraft Airworthiness	Feature of aircraft interior design	✓			
	Flight Deck Door	✓		✓	✓
	Other considerations related to aircraft design	✓	✓		
ATM / ATS	Protection of facilities	✓	✓		
	Contingency planning	✓			
	Security Management System	✓			
Inf. Sec.	Information Security	✓		✓	

Task 2 Outcomes

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Safety Impact Assessment – Example of negative impact (In-flight Security Measure: Flight Deck Door)

In-flight security measure - Flight deck door	
Description of the security measure Both the European safety and security regulatory frameworks address requirements for the protection of the flight crew compartment. While security requirements are solely covered in Regulation 300/2008, which includes a generic requirement to ensure that "*unauthorised persons shall be prevented from entering the flight crew compartment during a flight*" safety requirements are more detailed. Even though it is located within the safety regulatory framework, ORO.SEC.100 can easily be assimilated to security requirements. This regulatory point details the necessity of a cockpit door based on the characteristics of the aircraft, the expected locking and monitoring mechanisms, and mandates the flight phases during which the door must be locked.	
Requirements originate from • (EC) 300/2008, 10. • (EU) 965/2012, ORO.SEC.100 • (EU) CS 25 AMC 25.795(a)(1) & AMC	
HIGH NEGATIVE IMPACT	
Severe consequences – may lead to an aircraft accident or serious incident within the meaning of Regulation (EU) 996/2010	☐
Direct impact on the aircraft / aircraft operation (flight crew, ATM, aerodrome), aircraft critical systems and equipment	☒
There is a documented history of accidents resulting from this security measure	☒
Robust evidence of negative impact (for existing security measures) in form of occurrence reports and root cause analysis	☐
High number of mitigating measures is required in form of procedures, training and (if applicable) equipment to counter negative impact on safety	☒
• Develops latent conditions whereby safety can be compromised • Introduces additional challenges in the management of emergency situations • Decreases safety awareness	

Task 2 Outcomes

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Safety Impact Assessment – Example of negative impact (Counter UAS Technologies)

Counter UAS Technologies	
The counter UAS technology under consideration involves identifying and mitigating risks associated with the malicious use of UAS. These measures include techniques such as disabling or destroying the UAS through various means, such as weaponry, capture, or electromagnetic interference (active systems).	
Requirements originate from • ICAO Guidance Doc 8973	
HIGH NEGATIVE IMPACT	
Severe consequences – may lead to an aircraft accident or serious incident within the meaning of (EU) No 996/2010	☒
Direct impact on the aircraft / aircraft operation (flight crew, ATM, aerodrome), aircraft critical systems and equipment	☒
There is a documented history of accidents resulting from this security measure	☐
Robust evidence of negative impact (for existing security measures) in form of occurrence reports and root cause analysis	☐
High number of mitigating measures is required in form of procedures, training and (if applicable) equipment to counter negative impact on safety	☒
• Force safety non-compliance, contradicting safety rules • Causes deterioration of system and/or equipment (aircraft, air traffic, aerodrome)	

Task 2 Outcomes

Safety Impact Assessment – Potential Indirect Impact

- One key finding of the assessment is the "**Potential Indirect Impact**" security measures can have on safety, by generating contributing factors, such as
  - Increased operational complexity, decreased operational efficiency, increased training requirements
  - Conflicting safety-security priorities

Task 2 Outcomes

Safety Impact Assessment – Potential Indirect Impact

➔ Increased operational complexity, decreased operational efficiency, workload and pressure on personnel

Aircraft Security Search	
Description of the security measure The measures considered are the ones laid down in the European security regulatory framework, defining in which situations an aircraft security search is required and how it must be carried out. An aircraft security search is defined by Regulation (EC) No 300/2008 as an inspection of the interior and accessible exterior of the aircraft to detect prohibited articles and unlawful interferences that jeopardise the security of the aircraft. The Implementing Rules associated with Regulation (EC) 300/2008 also provide requirements for training pertaining to staff in charge of security searches.	
Requirements originate from • (EU) 2015/1998, 3.1	
POTENTIAL INDIRECT IMPACT	
• Increases operational complexity • Decreases operational efficiency • Increases complexity of required training	

Task 2 Outcomes

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Safety Impact Assessment – Potential Indirect Impact

➔ Conflicting safety-security priorities

Hold Baggage Reconciliation
The security measures under consideration pertain to the identification of hold baggage, verification that the owners of the hold baggage are on-board the aircraft and include specific requirements for the transportation of unaccompanied hold baggage.
Requirements originate from • (EC) 300/2008 5.3 • (EU) 2015/1998 5.3
POTENTIAL INDIRECT IMPACT
• May introduce safety hazard

Protection of Aircraft
These security measures pertain to the protection of an aircraft against unauthorised access, regardless of its location at an airport, whether it is parked with air operators' staff on-board or left unattended. Specifically, (EU) 2015/1998 addresses requirements to ensure that persons attempting to gain unauthorised access are promptly challenged, along with specific requirements (sealing, removal of access aids, access locking and monitoring) for aircraft parked outside critical areas.
Requirements originate from • (EC) 300/2008 3.2 • (EU) 2015/1998, 3.2
POTENTIAL INDIRECT IMPACT
• May introduce safety hazard

Task 2 Outcomes

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Safety Impact Assessment – Neutral Impact

➔ The assessments revealed several neutral impacts: The impact exist, but does not impact safety, depending on the safety exposure:

Airport Planning Requirements
European security regulations break down airport planning requirements into two aspects. The first describes security requirements regarding the boundaries between different security areas, while the second defines the SRA and CPSRA and associated requirements. It is these measures aimed at distinguishing between different security areas within an airport that are considered.
Requirements originate from • (EU) 300/2008 1.1, 2 • (EU) 2015/1998 1.1
NEUTRAL IMPACT
• Increases maintenance requirements

Screening Operations & Security Controls: In-flight supplies, Airport supplies, Cargo & Mail
Description of the security measure The security measures under consideration are the ones related to the screening operations and security controls to be conducted on cargo, mail, airport and supplies.
Requirements originate from • (EU) 2015/1998 6.1, 6.2, 6.3.2, 6.4.2, 6.7, 7.1, 7.2, 8.1, 8.3, 9.1, 9.3
NEUTRAL IMPACT
• Increases operational complexity • Decreases Operational Efficiency • Increases Complexity of Required Training (Safety or Security)

Task 2 Outcomes

Safety Impact Assessment – Positive Impact

Security Management System	
Description of the security measure The measures under consideration pertain to implementation, maintenance, and continuous improvement of a management system for aerodrome operators and air traffic services. These measures do not include requirements related to information security management system, which are assessed independently.	
Requirements originate from • (EU) 2017/373 – ATM/ANS.OR.D.10 • (EU) 139/2014 – ADR.OR.D.005	
POSITIVE IMPACT	
• Increases implementation of safety rules • Offers opportunities for safety improvement or leads to actual safety improvement	

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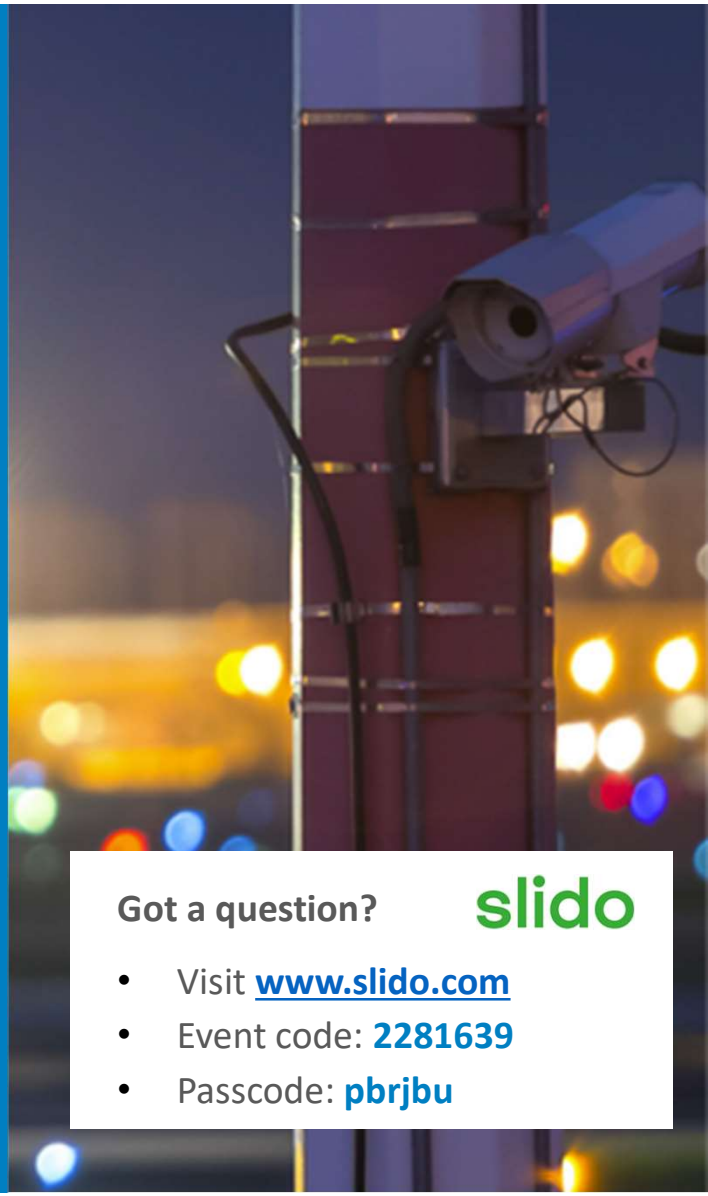
Safety Impact Assessment – Interactive 2

- Interactive Q&A session using Slido
- Responses received in real time
- Expert Panel to react to and discuss results

Sophie Hibbin
Technical Lead, CAAi



Next Steps

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Safety Impact Assessment Methodology

- D-2.3 represent the first large scale application of the SIA methodology developed within the scope of this project.
- Feedback gather during its application allowed for the development of associated guidelines, to support its future use by aviation organisations and civil aviation authorities.

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Q&A

Sophie Hibbin
Facilitator

Your safety is our mission.

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Closing

- Thank you all for attending
- Full details of this presentation, will be posted on the EASA Website
- A Webinar to discuss Task 3 is scheduled for the 16th October and one to cover off the whole project is scheduled for November