

## Pilot 2: Athens International Airport (AIA) Digital Ecosystem

CyberSecDome EU project  
2nd Info Day & Open Call launch event 4<sup>th</sup>  
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# AIA Overview



AIA is the legal entity licensed as the Airport operator of Athens International airport from 1996 until 2046.

Must operate efficiently 24/7 for passengers and cargo.

Acts as a Service Provider to the Airport Community.

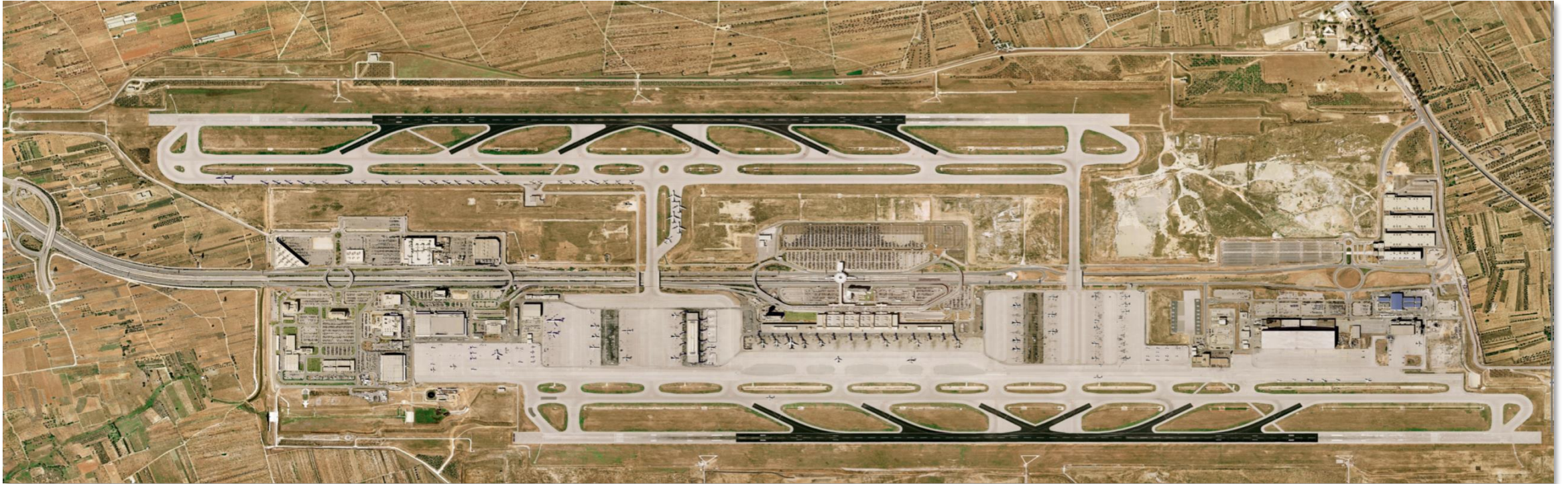
Provides the infrastructure required for the airport and its stakeholders.

Mitigates and/or coordinates responses for unforeseen events following predefined, agreed response plans.

Aims to ensure

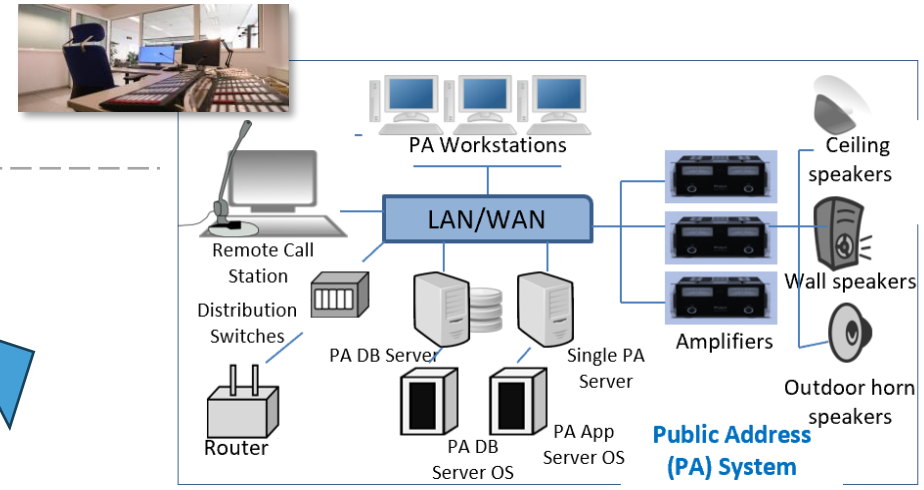
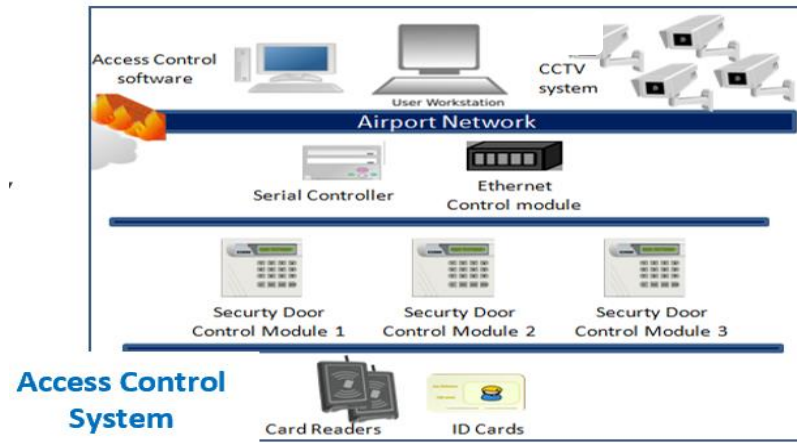
- ✓ people's safety
- ✓ sound and secure airport operations
- ✓ an enhanced positive passenger experience

# AIA Overview

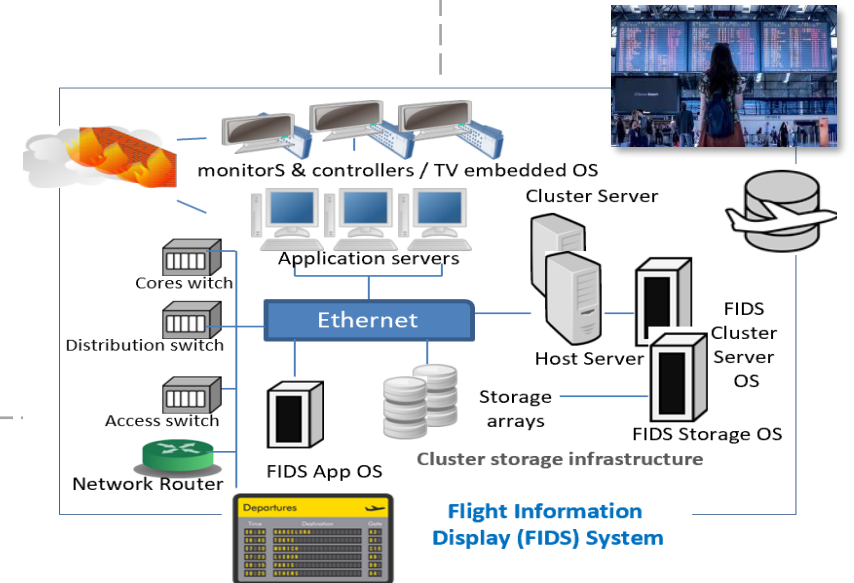
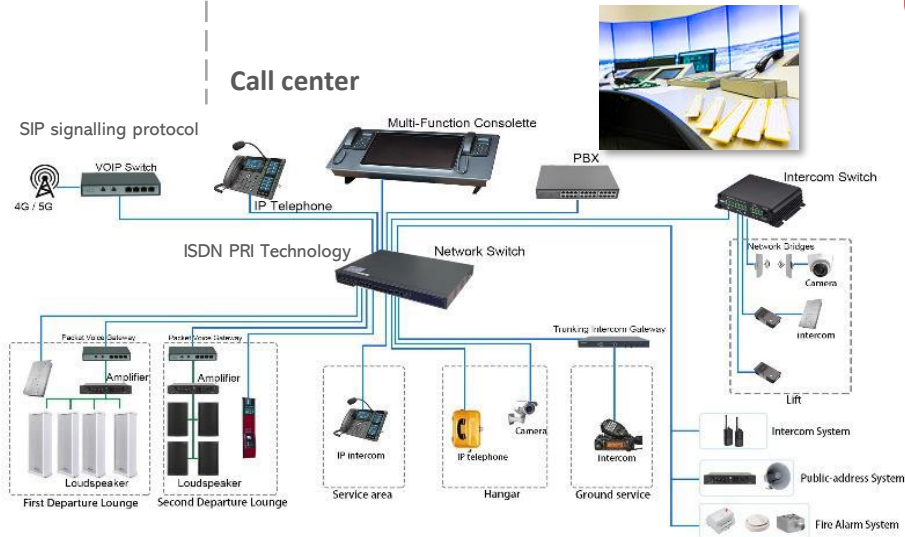


An Airport city (Aerotropolis) hosting more than 300 companies with almost 15.000 employees servicing more than 100.000 passengers and 600 flights per day during peak periods.

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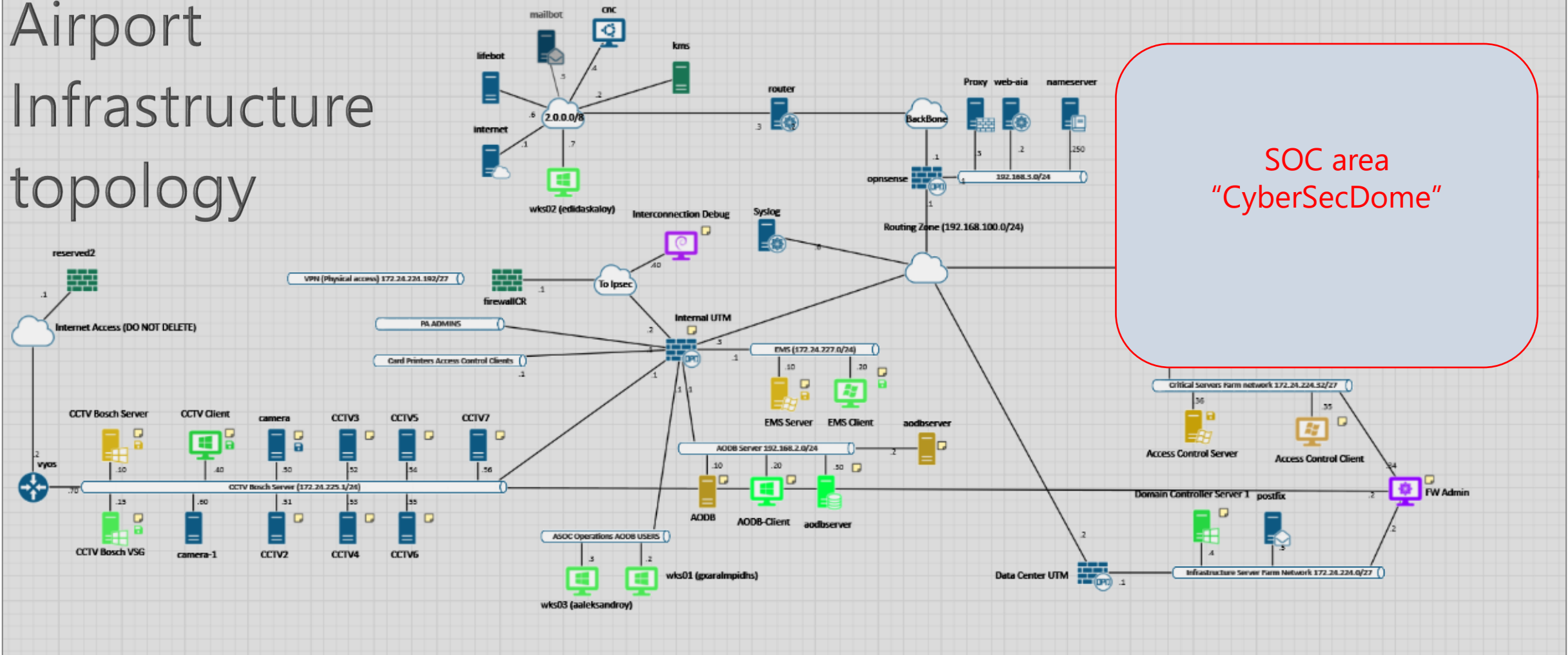
## Unified Communication Service



# Current topology



## Airport Infrastructure topology



SOC area  
"CyberSecDome"

# List of Airport systems for CR

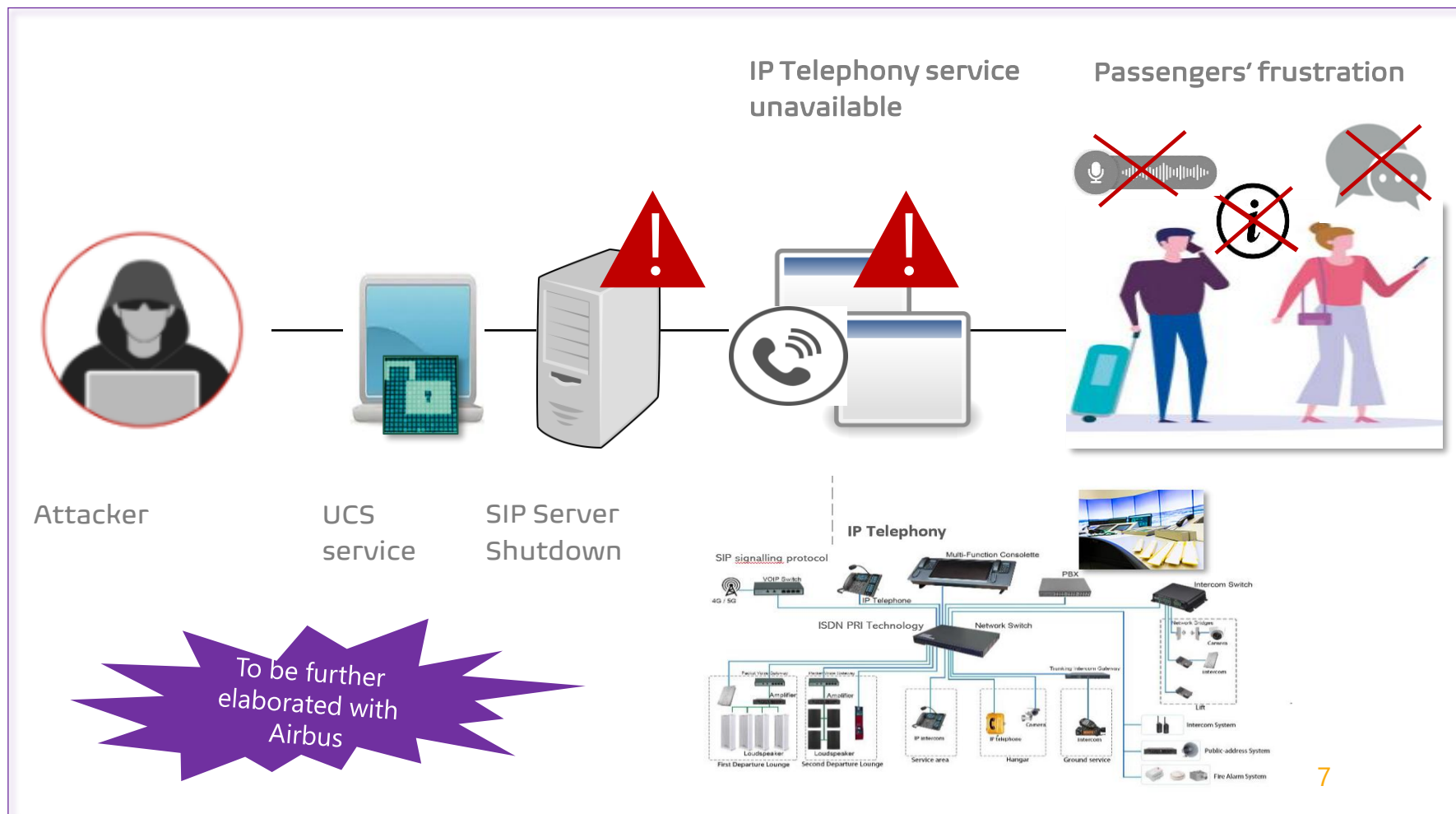
ID	System Name	Sub-System	OT/IT
1	AC	Access Control System	OT
2	EM	Electro-mechanical System	OT
3	Fire	Fire Detection System	OT
4	CCTV	Closed Circuit TV System	IT
5	PA	Public Announcement System	IT
6	AODB/FIDS	Airport Operations Database	IT
7	CC	Call Center	IT

The Airport systems that will participate at the Athens Airport use cases

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## ➤ Use Case #01: Disruption of AIA's Unified Communication Service (UCS)

- ❑ A cyberterrorist aims to sabotage Airport's communication services to degrade Airport's operations
- ❑ Compromise UCS via bruteforce attack (admin credentials-gain unauthorized access / take advantage)
- ❑ Disruption of IP telephony services (i.e. voicemail, chat service, call centre) via DoS Attack on SIP protocol



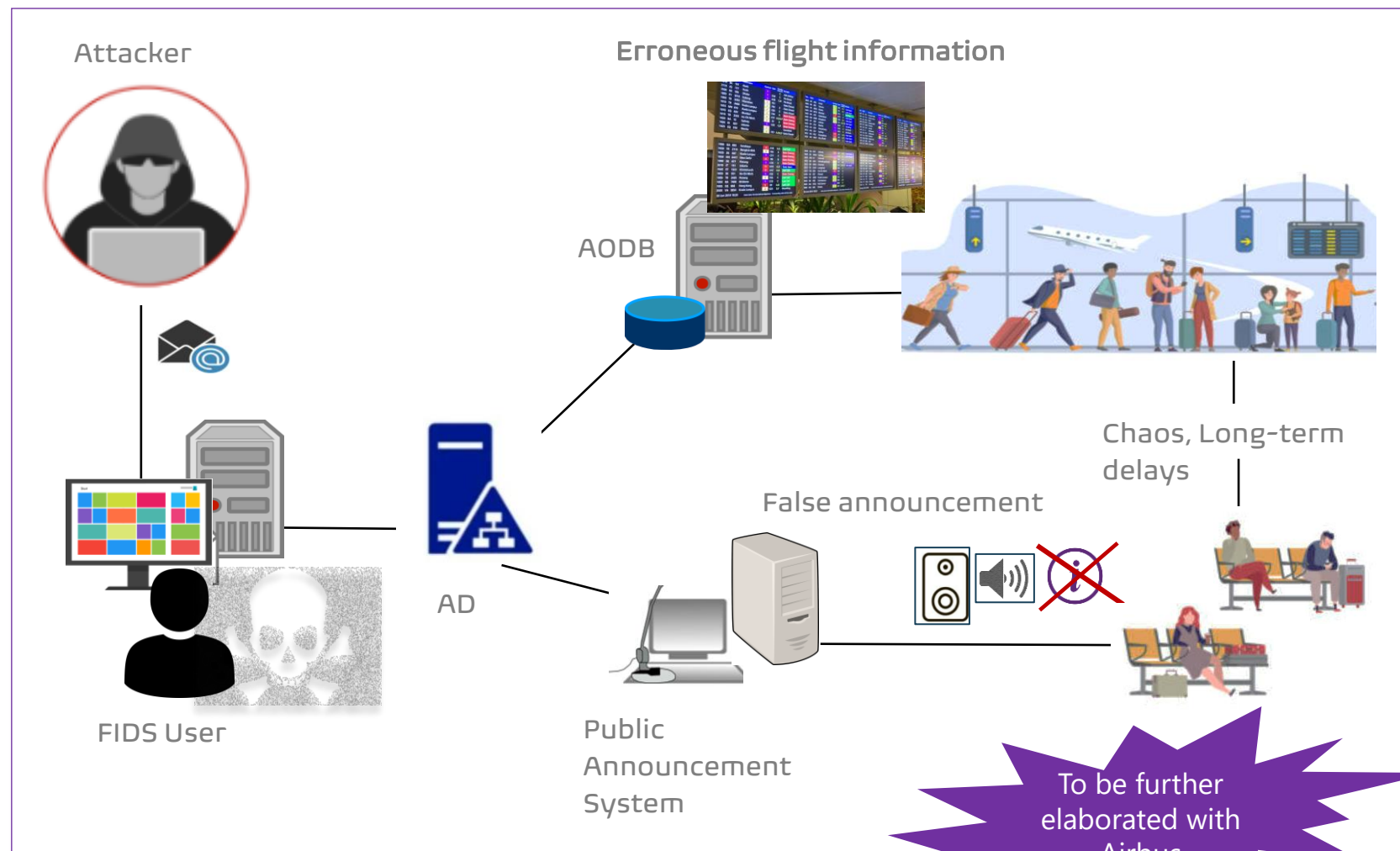
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## ➤ Use Case #02: Phishing Airport Operators to amend flight information

- ❑ A hacker sends phishing e-mails to AIA's operators
  - ◀ FIDS user responds
- ❑ The hacker takes advantage of major Airport infrastructures creating a global disorganisation for illegal activities obfuscation
  - AODB compromised
  - PA compromised

### Possible Attack methods:

untrusted content Phishing, C&C, malicious application, Misconfiguration, vulnerability exploitation, elevation of credentials



To be further elaborated with Airbus



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- Use Case #01: Disruption of AIA's Unified Communication Service (UCS)
- Use Case #02: Phishing Airport Operators to amend flight information

## Pilot 2 Objectives

- Detect and correlate complex attacks
- Early risk detection and mitigation
- Identify anomalies and enhance the SOC capacity under real conditions
- Information sharing of threat-related information

## User Roles



- Cyber attacker: Orchestrates all cyberattacks
- SOC operator(s): AIA's employee(s) of SOC
- Technical Team: responsible for CyberSecDome components Demo

## Runtime Evaluation



- To be Performed in CyberRange (1-Day workshop)
- Cyberattacks execution of UC#01, UC#02
- Collection of Logs from successful attacks
- Analyse logs

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## Use Cases KPIs



KPI ID	KPI Description
<b>KPI#1</b>	Traffic analysis to identify anomalies and mitigate them by 20% in real-time compared to the system without CyberSecDome.
<b>KPI#2</b>	Reduce the coordinated incident response time by 30% compared to the case where CyberSecDome is not used.
<b>KPI#3</b>	Sharing the relevant threat-related information among the stakeholder of the Aerotropolis smart city based on the absolute number of reported incidents.
<b>KPI#4</b>	Identification and mitigation of the absolute number of individual and cascading risks.

## Contact



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**Thank you**

*Any question? !?*