


Web Page: <https://www.socfai.com/>




Home News Management Team Contact Newsletter H1 Newsletter H2

Q

+1 (850) 555-0111

Sign in

Contact Us




SOCFAI

Secure Open Collaboration Framework Powered by Artificial Intelligence

Events

5 June 2024 09:00 - 13:00 (UTC+3)	10 July 2024 10:00 - 11:30 (UTC+3)	17 July 2024 10:00 - 11:30 (UTC+3)	25 July 2024 10:00 - 11:30 (UTC+3)	25 September 2024 13:00 - 16:00 (UTC+3)
First Term Review	Korean Consortium and TAV Tech Optimization Algorithms will be introduced	Knowledge sharing: Block-chain based storage techniques	Knowledge sharing: Data-trust provisioning structures	Online Project Promotion Event
	meeting link	meeting link	meeting link	meeting link



Home News Management Team Contact Newsletter H1 Newsletter H2

Q

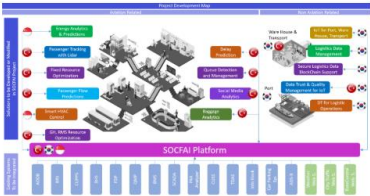
+1 (850) 555-0111

Sign in

Contact Us

SOCFAI

SOCFAI project focuses on airports and addresses the problems caused by the collaborative and multi-stakeholder nature of their operations. This is providing new ways to manage the operations cycle, enable real-time common situational awareness of all aspects of airport operations, optimise different core processes, enable predictive and fully integrated operations management and facilitate customer service management and orientation, all while trying to improve overall customer satisfaction levels by introducing an open-source framework equipped with technologies such as AI, Computer Vision, VR, IoT, UDAR, etc.



Rationale of the SOCFAI



Resource Inefficiencies

Resource inefficiencies in airport operations occur when there is a mismatch between available resources such as gates, runways, and staff, and the demand for those resources, leading to underutilization or overloading. This can result in longer waiting times for



Flight Delays

Flight delays in airport operations can stem from factors like adverse weather conditions, air traffic congestion, and technical issues. These delays can disrupt schedules, increase operational costs, and lead to passenger frustration.




Lack of Communication



The absence of real-time communication between operational stakeholders in airport operations can lead to misalignment and coordination breakdowns among various entities such as airlines, ground handling services, and air traffic control. This can result in inefficient resource allocation,



Stakeholder Conflicts

Operational stakeholders conflicts in airport operations arise when different entities, such as airlines, ground handling services, and security, have divergent goals or incompatible processes. These conflicts can lead to inefficient resource allocation, delays in operations, compromised safety


[Home](#)
[News](#)
[Management Team](#)
[Contact](#)
[Newsletter H1](#)
[Newsletter H2](#)




+1 (850) 555-0111
[Sign in](#)
[Contact Us](#)

overloading. This can result in longer waiting times for aircraft, passengers, and baggage, causing delays, congestion, and increased operational costs.

passenger frustration, affecting overall customer satisfaction and potentially causing cascading delays throughout the aviation network.


inefficient resource allocation, longer turnaround times for aircraft, missed opportunities for optimizing operations, and ultimately, delays in flights, negatively impacting passenger experience and the overall operational efficiency of the airport.

operations, compromised safety measures, and strained relationships among stakeholders. Such conflicts can disrupt the smooth functioning of the airport, resulting in operational inefficiencies, decreased customer satisfaction, and potential financial losses.




Environmental Effects

Environmental factors in airport operations refer to the natural elements and conditions that can impact airport activities. These factors include weather conditions (like fog, snow, and storms), air quality, noise pollution, and wildlife presence. These environmental factors can lead to flight delays, cancellations, and diversions, as well as increased fuel consumption due to longer flight paths or extended waiting times. Moreover, noise pollution can affect nearby communities, leading to public complaints and potential regulatory restrictions. Addressing these environmental challenges is crucial for maintaining safe, efficient, and sustainable airport operations.




Regulation Differences

Regulation differences between countries in the airport business can encompass varying safety standards, operational procedures, and infrastructure requirements. These discrepancies pose challenges for technology providers who need to develop adaptable solutions that meet different regulatory demands, increasing development complexity and potentially limiting market expansion due to the need for customization and compliance adjustments.




Integration Complexity



Integrating a technology solution into airport operations involves navigating intricate processes like coordinating with existing airport systems, ensuring compatibility with diverse hardware and software setups, and accommodating specific operational workflows. Additionally, addressing security concerns, regulatory requirements, and the need for seamless data exchange adds complexity, demanding thorough testing, customization, and collaboration with various stakeholders for successful implementation.




Energy Waste

Energy waste in airport operations refers to the inefficient use of energy resources within the airport infrastructure and processes. This can occur due to factors like outdated equipment, poor energy management systems, excessive lighting or HVAC usage, and inadequate insulation. Energy waste not only leads to increased operational costs for the airport but also contributes to higher carbon emissions and environmental impact, undermining sustainability goals and posing financial and ecological challenges in the long run.


[Home](#)
[News](#)
[Management Team](#)
[Contact](#)
[Newsletter H1](#)
[Newsletter H2](#)




+1 (850) 555-0111
[Sign in](#)
[Contact Us](#)

Process




Project Born

The project idea was developed by TAV Technologies, inspired by the TAM project realized within the scope of Horizon.




PO Stage

The project was prepared with the participation of 25 different partners from 6 countries and presented to ITEA4, and then approval was received for PO stage.




FPP Stage

Project changes proposed by ITEA4, budget, business plan and similar planning studies were carried out and the final project application was made.




National Approvals

After the approval of the FPP, each country consortium presented the project to their local funding authorities. As a result of the evaluation, the project was initiated with the participation of 3 countries and 10 partners.



Project Start

The project was officially launched on 1 July 2023. Demonstrations will be published as research and development studies are carried out.



Project Closure

Project will be completed on 30 June 2026.

Project Partners













News

SOCFAI Project Presentation: Optimization Algorithms

Blogs: [All](#) [News](#) [News](#)

Search...



End-User Collaboration Event in Izmir Adnan Menderes Airport

On June 23, 2025 a collaboration event was carried out in Izmir Adnan Menderes Airport with participation of TAV Airports, TAV Technologies, Inosens, Siemens, Netatq and Enveres. The aim of this event w...

Jun 27, 2025



ITEA4 Review Meeting SOCFAI #2 Held Virtually on June 4, 2025

Second ITEA Review meeting for SOCFAI Project was held virtually on June 4, 2025 with the participation of ITEA Officers, SOCFAI Project Reviewers and SOCFAI Project Partners. SOCFAI Project is an interna...

Jun 27, 2025



Korean Consortium made a presentation

On April 19, 2025 Korean Consortium made a presentation on the progress of development and implementation of AI based CFS/CY Port Logistics Platform...

May 29, 2025



INOSENS Visited Korean Partners

INOSENS had a meeting at KAIST on April 29, 2025 with KAIST and KULS partners in South Korea...

May 29, 2025



Artificial Intelligence Applications in the Business World

On October 8, 2024, a workshop titled "Artificial Intelligence Applications in the Business World" was organized at Gebze Technical University (GTU) by INOSENS and the GTU Technology Transfer Office...

May 29, 2025



Artificial Intelligence and Technology Summit: SOCFAI & SINTRA

On Saturday, December 14, 2024, the Artificial Intelligence and Technology Summit, organized by Eskişehir Technical University and TAV Technologies with the contributions of the Career and Entrepreneur...

Dec 16, 2024



BLUESKY AWARDS 2024: SOCFAI Awarded As Aviation R&D Innovation Project of the Year

BLUESKY AWARDS 2024: Prestigious Awards Celebrating Global Achievement First Their Owners One of the most prestigious events in the aviation world, the BLUESKY AWARDS – "International Aviation Awards,"...

Oct 30, 2024



SOCFAI Online Project Promotion Event

The Online Project Promotion Event took place on September 26, 2024. The purpose of this event was to introduce the SOCFAI project, share the progress with stakeholders, and announce the latest studies...

Sep 30, 2024



SOCFAI Project Presentation III: Data-trust provisioning structures

Korean partners in SOCFAI project presented their studies about data-trust provisioning structures and discussed the details with TAV Technologies. The meeting was held virtually on July 25, 2024...

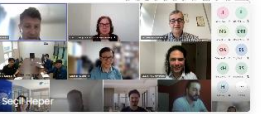
Jul 25, 2024



SOCFAI Project Presentation II: Block-chain based storage technologies

Korean partners in SOCFAI project presented their studies about block-chain based storage technologies and discussed the developments regarding the project with TAV Technologies. The meeting was held virt...

Jul 22, 2024



SOCFAI Project Presentation: Optimization Algorithms

TAV Technologies and Korean Consortium presented their studies in SOCFAI project. The presentation was about Optimization Algorithms. The meeting was held virtually on July 10, 2024...

Jul 10, 2024



Howard Low's Visit to Izmir Adnan Menderes Airport, in June 2024

Semih gave a brief introduction about the technologies developed by TAV Technologies, like airline login and passenger flow management system. He also supported Howard with an overview of the airport...

Jun 27, 2024



News

SOCFAI Project Presentation: Optimization Algorithms

Blogs: [All](#) [News](#) [News](#)

Search...



First ITEA 4 Project Progress Review for SOCFAI Project Was Held at TAV Technologies Headquarters

First ITEA 4 Project Progress Review meeting for SOCFAI Project was held at TAV Technologies Headquarters on June 5, 2024 with the presence of ITEA Officers and Turkish Consortium partners. The meetin...
Jun 11, 2024



Izmir Adnan Menderes Airport Site Visit & Requirement Gathering

As the Research and Development team at TAV Technologies and International SOCFAI project coordinators, we want to share an update on our recent three-day visit to Izmir Adnan Menderes Airport at the ...
Nov 1, 2023



Unveiling SOCFAI: Revolutionizing Airport Operations through AI-Powered Secure Collaboration

In an era where technological advancements continue to reshape industries, the aviation sector stands on the threshold of a groundbreaking transformation. On August 22nd, a virtual symposium marked th...
Aug 24, 2023



SOCFAI Kickoff

SOCFAI Kickoff Meeting Dear Stakeholders, We are excited to extend an invitation to you for the kickoff meeting of the SOCFAI (Situational Awareness and Operations Management Framework with AI Integra...
Aug 18, 2023

Google Drive

Drive

+ New

Home

My Drive

Computers

Shared with me

Recent

Starred

Spam

Trash

Storage

28.22 GB of 100 GB used

Get more storage

Search in Drive

Shared with me > SOCFAI Consortium

Type

People

Modified

Source

Name	Owner	Last modified	File size
Action List	me	Aug 12, 2025 me	—
TUBITAK	gokhan.koc	May 22, 2025 me	—
Korea Visit	uzun.ismail@gmail.com	May 4, 2025 uzun.ismail@g...	—
Meeting Notes	me	Oct 15, 2024 me	—
Singapore - Enverse	howard	Aug 14, 2024 howard	—
Data	gokhan.koc	Aug 13, 2024 gokhan.koc	—
Presentations	gokhan.koc	Jul 10, 2024 gokhan.koc	—
Siemens & TAV Tech Meeting	gokhan.koc	May 31, 2024 gokhan.koc	—
Videos	gokhan.koc	May 31, 2024 gokhan.koc	—
Surveys	gokhan.koc	May 31, 2024 gokhan.koc	—
PPR	gokhan.koc	May 31, 2024 gokhan.koc	—
Planning	gokhan.koc	May 31, 2024 gokhan.koc	—
Korea	gokhan.koc	May 31, 2024 gokhan.koc	—
Images	gokhan.koc	May 31, 2024 gokhan.koc	—
Deliverables	gokhan.koc	May 31, 2024 gokhan.koc	—
Contracts	gokhan.koc	May 31, 2024 gokhan.koc	—
PPP	gokhan.koc	May 31, 2024 gokhan.koc	—
Contacts.xlsx	gokhan.koc	Jul 7, 2025 me	31 KB
Stakeholders Included.docx	gokhan.koc	May 31, 2024 gokhan.koc	14 KB

Drive

+ New

Home

My Drive

Computers

Shared with me

Recent

Starred

Spam

Trash

Storage

28.22 GB of 100 GB used

Get more storage

Search in Drive

Shared with me > SOCFAI Consortium > TUBITAK

Type

People

Modified

Source

Name	Owner	Last modified	File size
2024-2	me	Aug 14, 2025 uzun.ismail@g...	—
2025-1	me	Aug 4, 2025 me	—
2024-1	secil.heper@tav.aero	Jul 26, 2024 secil.heper@ta...	—
2023-2	gokhan.koc	May 31, 2024 gokhan.koc	—

Drive

+ New

Home

My Drive

Computers

Shared with me

Recent

Starred

Spam

Trash

Storage

28.22 GB of 100 GB used

Get more storage

Search in Drive

Shared with me > SOCFAI Consortium > Meeting Notes

Type

People

Modified

Source

Name	Owner	Last modified	File size
SOCFAI Weekly Meeting Notes 26.08.2025.docx	me	10:52 AM me	1.2 MB
SOCFAI Weekly Meeting Notes 19.08.2025.docx	me	Aug 19, 2025 me	2.6 MB
SOCFAI Weekly Meeting Notes 12.08.2025.docx	me	Aug 12, 2025 me	1.7 MB
SOCFAI Weekly Meeting Notes 15.04.2025.docx	me	Apr 16, 2025 me	2 MB
SOCFAI Weekly Meeting Notes 25.03.2025.docx	me	Mar 25, 2025 me	3.9 MB
SOCFAI Weekly Meeting Notes 18.03.2025.docx	me	Mar 18, 2025 me	2.7 MB
SOCFAI Weekly Meeting Notes 11.03.2025.docx	me	Mar 11, 2025 me	2.3 MB
SOCFAI Weekly Meeting Notes 04.03.2025.docx	me	Mar 4, 2025 me	2.5 MB
SOCFAI Weekly Meeting Notes 25.02.2025.docx	me	Feb 26, 2025 me	2.7 MB
SOCFAI Weekly Meeting Notes 18.02.2025.docx	me	Feb 19, 2025 me	35 KB
SOCFAI Weekly Meeting Notes 11.02.2025.docx	me	Feb 11, 2025 me	1.4 MB
SOCFAI Weekly Meeting Notes 04.02.2025.docx	me	Feb 4, 2025 me	2.5 MB
SOCFAI Weekly Meeting Notes 28.01.2025.docx	me	Jan 28, 2025 me	2.1 MB
SOCFAI Weekly Meeting Notes 21.01.2025.docx	me	Jan 21, 2025 me	3.1 MB
SOCFAI Weekly Meeting Notes 07.01.2025.docx	me	Jan 7, 2025 me	3.6 MB
SOCFAI Weekly Meeting Notes 24.12.2024.docx	me	Dec 24, 2024 me	4.5 MB
SOCFAI Weekly Meeting Notes 10.12.2024.docx	me	Dec 12, 2024 me	2.8 MB
SOCFAI Weekly Meeting Notes 03.12.2024.docx	me	Dec 8, 2024 me	2.9 MB
SOCFAI Weekly Meeting Notes 26.11.2024.docx	me	Nov 26, 2024 me	1.3 MB

Drive

+ New

Home

My Drive

Computers

Shared with me

Recent

Starred

Spam

Trash

Storage

28.22 GB of 100 GB used

Get more storage

Search in Drive

Shared with me > SOCFAI Consortium > Presentations

Type

People

Modified

Source

Name	Owner	Last modified	File size
KICKOFF	me	May 16, 2025 me	—
SECOND ITEA REVIEW	me	May 16, 2025 me	—
FIRST ITEA REVIEW	me	May 16, 2025 me	—
TÜBİTAK DENETİM	me	Sep 30, 2024 me	—
SOCFAI Online Project Promotion Event.pptx	gokhan.koc	Jun 4, 2025 unverseckin@g...	31.2 MB
Airport Holistic & Online Optimization.pptx	gokhan.koc	Jun 4, 2025 unverseckin@g...	4.9 MB
SOCFAI Online Project Promotion Event v2.pptx	gokhan.koc	Dec 6, 2024 gozde.sayin	39.5 MB
Video_KR_SOCFAI_Promotion_Event(Use Case 5).mp4	lychong54	Sep 25, 2024 lychong54	44.4 MB
20240725_Trust_provisioning_Korea_Final.pdf	pau9%0810@gmail.com	Jul 24, 2024 pau9%0810@...	2.1 MB
20240710_Optimization_Algorithm_Korea_Final_PIC_v2.pptx	pau9%0810@gmail.com	Jul 10, 2024 pau9%0810@...	80 MB
ForReviewers.docx	gokhan.koc	May 30, 2024 gokhan.koc	1.8 MB

Drive

+ New

Home

My Drive

Computers

Shared with me

Recent

Starred

Spam

Trash

Storage

28.22 GB of 100 GB used

Get more storage

Search in Drive

Shared with me > SOCFAI Consortium > Deliverables

Type

People

Modified

Source

Name	Owner	Last modified	File size
D2.3 Each Partner	gokhan.koc	May 31, 2024 gokhan.koc	—
D5.3 Newsletter H1 _SOCFAI_files	gokhan.koc	May 31, 2024 gokhan.koc	—
Archive	gokhan.koc	May 31, 2024 gokhan.koc	—
D1.1-1.4	me	2:21 PM me	—
D2.1-2.6	me	2:21 PM me	—
D3.1-3.5	me	2:22 PM me	—
D4.1-4.5	me	2:24 PM me	—
D5.1-5.7	me	2:24 PM me	—
Template_SOCFAI.docx	gokhan.koc	Jan 23, 2024 gokhan.koc	350 KB
Template_SOCFAI_v1.docx	secl.heper@tava.aero	Jul 10, 2024 secl.heper@ta...	507 KB