SAFCO

ATHENS INTERNATIONAL AIRPORT

JIG MANAGEMENT TECHNICAL FORUM

INTO PLANE MAINTENANCE TOOLS & SUSTAINABILITY IMPROVEMENTS

PRESENTATION SCOPE

AIMMS CMMS Implementation & Start-Stop Fleet System

LOCATION & DATE

Rome | 9 June 2026

AGENDA

01

SAFCO CORPORATE PROFILE

Introduction to SAFCO, our joint venture structure (BP, EKO, Shell), 25-year operational scale at Athens International Airport, and current fleet and workforce resources.

PART 1 — SLIDES 3 - 4

02

AIMMS CMMS DIGITAL JOURNEY

Transitioning from paper to computerized maintenance. Phased rollout: pilot on a single vehicle, full fleet implementation, digital spare parts warehouse, procurement, and custom JIG-compliant safety features.

PART 2 — SLIDES 5 - 16

03

START-STOP FLEET SYSTEM

Our key sustainability initiative. Safety preparation via MOC & Risk Assessment, pilot phase, and multi-vehicle rollout (8 vehicles) featuring installations by both OEM and SAFCO's in-house technical team.

PART 3 — SLIDES 17 - 23

SAFCO AE — CORPORATE PROFILE

INTO-PLANE FUELLING LEADER

- **Spata Airport Fuelling Company (SAFCO):** Established in 2001, operating at Athens International Airport "Eleftherios Venizelos".
- **Main ITP Provider:** Serving 100% of Athens (ATH) fuelling needs from 2015 till 2025.
- **Joint Venture Shareholders:** BP, EKO, Shell.
- **Industry Standards:** Strictly adhering to JIG (Joint Inspection Group) standards, with Technical Support by TSA.

CORE CORPORATE POLICIES

Aviation safety, environmental care, and rigorous compliance dictate our daily operations:

HSSE Policy	**PED Compliance**
PPE Standards	**Drugs & Alcohol**
Security Policy	**Conflict of Interest**

SAFCO AE — FUEL SUPPLY CHAIN

1. EXTERNAL SUPPLY INFRASTRUCTURE

Pipeline Length	53.5 km
Flow Capacity	300 m³/hr
Refinery Sources	Helleniq Energy (Aspropyrgos& Elefsina), Motor Oil

The JET A-1 pipeline runs 53.5 km from the refineries directly to the Athens International Airport fuel farm (OFC), ensuring a continuous, high-capacity supply of aviation fuel.

2. THE COMPLETE SUPPLY ROUTE

01 Refineries & Pipeline

Fuel sourced from Petrola, HELPE and Motor Oil. Transported via the dedicated JET A-1 pipeline (53.5 km).

02 Airport Depot (OFC)

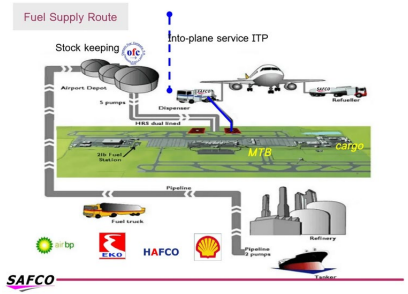
Stock keeping managed at the dual-lined Airport Fuel Farm (OFC) inside Athens International Airport.

03 Hydrant System

Fuel distributed across the apron via the underground Hydrant Refuelling System (HRS).

04 SAFCO Into-Plane Service

SAFCO dispensers perform the final delivery — directly into the aircraft wing.



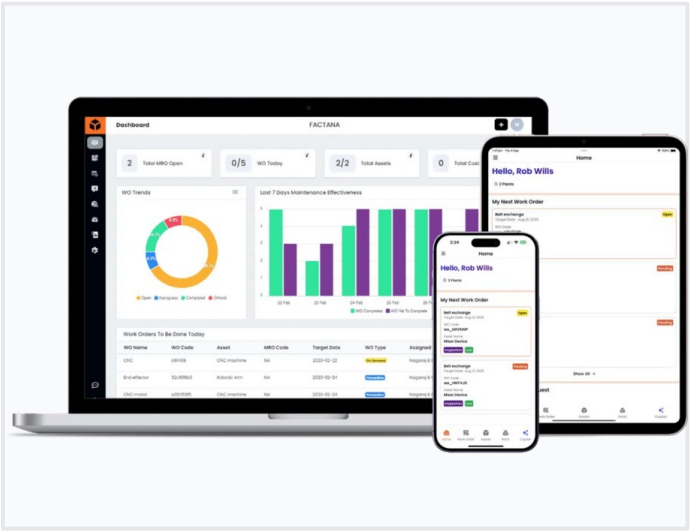
AIMMS CMMS — INTRODUCTION

WHAT IS AIMMS?

AIMMS (Asset & Infrastructure Maintenance Management System) is a leading web-based CMMS platform developed by **Atlantis Engineering**. It digitizes and streamlines the full lifecycle of technical operations, moving SAFCO from paper-based tracking to real-time digital management.

WHY SAFCO NEEDED A CMMS

- **Fleet Expansion:** Managing a fleet of complex aviation vehicles (Hydrant Dispensers & Fuellers).
- **JIG Compliance:** Ensuring rigorous, easily auditable maintenance records to meet strict JIG standards.
- **Structured Assets:** Establishing a clear topology tree to map every vehicle and its sub-systems.



MANAGEMENT OF CHANGE (MOC)

Transitioning from paper-based logs to a digital CMMS required a structured **Management of Change** process to align our team, migrate critical data, and ensure operational continuity.

STEP 01

Needs Assessment

Identified maintenance bottlenecks, paper inefficiencies, and JIG compliance gaps across fleet operations.

STEP 02

System Selection

Evaluated and selected Atlantis Engineering's AIMMS platform for its robust mobile capabilities and modular design.

STEP 03

Stakeholder Buy-In

Conducted alignment briefings with shift supervisors, technicians, and warehouse staff to communicate benefits.

STEP 04

Targeted Training

Delivered hands-on training sessions on tablets and smartphones for field technicians and warehouse operators.

STEP 05

Data Migration

Loaded full asset register, spare parts inventory, and preventive maintenance schedules into the database.

STEP 06

Go-Live Support

Partnered with Atlantis Engineering for on-site support during the initial pilot and subsequent fleet rollout phases.

KEY SUCCESS FACTORS: ✓ Clear communication of benefits ✓ Phased rollout strategy ✓ Dedicated internal AIMMS champion

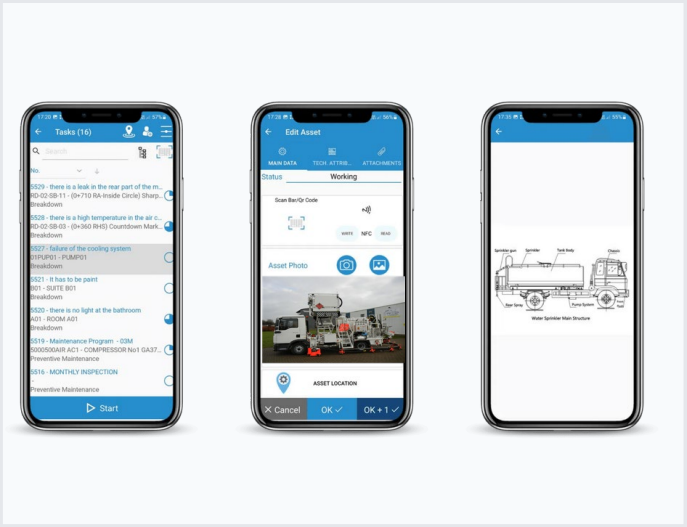
PHASE 1 — PILOT IMPLEMENTATION

PILOT SCOPE & SETUP

- **Hydrant Dispenser Vehicle:** Selected one primary hydrant dispenser as the pilot asset to test system integration and workflows.
- **Mobile Execution:** Technicians used the AIMMS mobile app on tablets to receive, execute, and close work orders directly on the ramp.
- **Digital Checklists:** Replaced paper-based JIG inspection sheets with structured digital forms on mobile devices.

PILOT OUTCOMES

- **Validated Usability:** Confirmed the system's suitability for high-frequency daily apron operations.
- **Team Confidence:** Built technician confidence and gathered valuable feedback before full fleet rollout.



HYDRANT DISPENSER VEHICLE

The core into-plane asset type selected for the AIMMS pilot phase

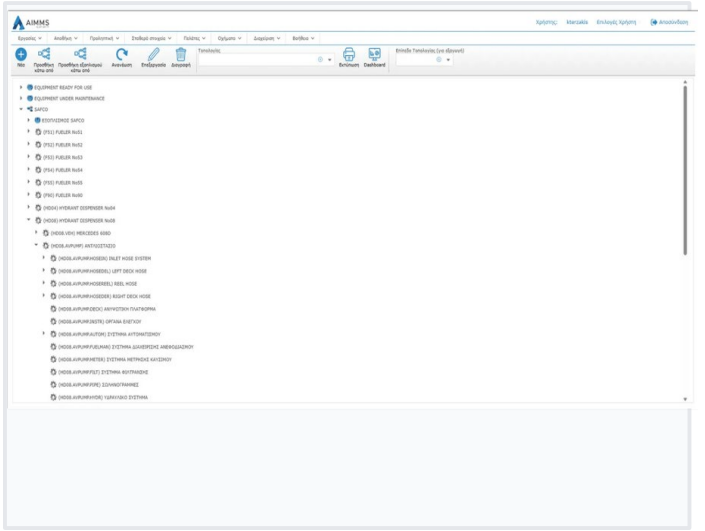
PHASE 2 — FULL FLEET ROLLOUT

ROLLOUT SCOPE

Following the successful pilot, AIMMS was extended to all aviation vehicles in SAFCO's fleet, including Hydrant Dispensers and Refuellers.

KEY FEATURES IMPLEMENTED

- **Asset Topology Tree:** Structured mapping of SAFCO → Vehicle Type → Individual Vehicle → Sub-components.
- **Preventive Schedules:** Configured per vehicle type (monthly checks, quarterly checks, coupling inspections, chassis maintenance).
- **Scheduled Tasks Calendar:** Real-time task planning and workload distribution as shown in the system interface.



SAFCO EQUIPMENT TOPOLOGY TREE

AIMMS hierarchical structure mapping Fuelers, Hydrant Dispensers, and components

PHASE 3 — SPARE PARTS WAREHOUSE

WAREHOUSE DIGITISATION

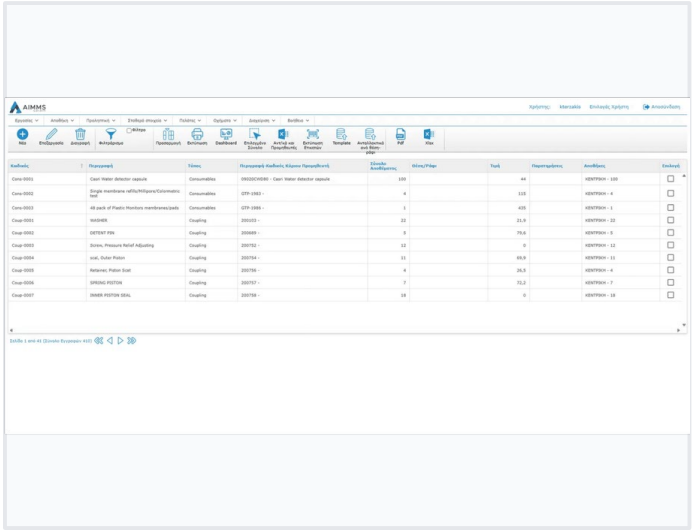
- **Full Catalogue:** Entered all spare parts (couplings, filters, seals, etc.) with unique codes, descriptions, and pricing.
- **Stock Thresholds:** Configured minimum and maximum stock levels for automatic reorder alerts.
- **Barcode Labeling:** Printed unique barcodes for all parts to enable rapid scanning and identification.

KEY BENEFITS

✓ Eliminated manual stock cards and error-prone spreadsheets.

✓ Instant visibility of stock levels per part and per warehouse location.

✓ Accurate cost allocation of spare parts directly to specific vehicle work orders.



AIMMS SPARE PARTS DATABASE

Real-time stock levels, locations, and pricing database

PHASE 4 — SPARE PARTS ORDERING & RECEIVING

DIGITAL PROCUREMENT WORKFLOW

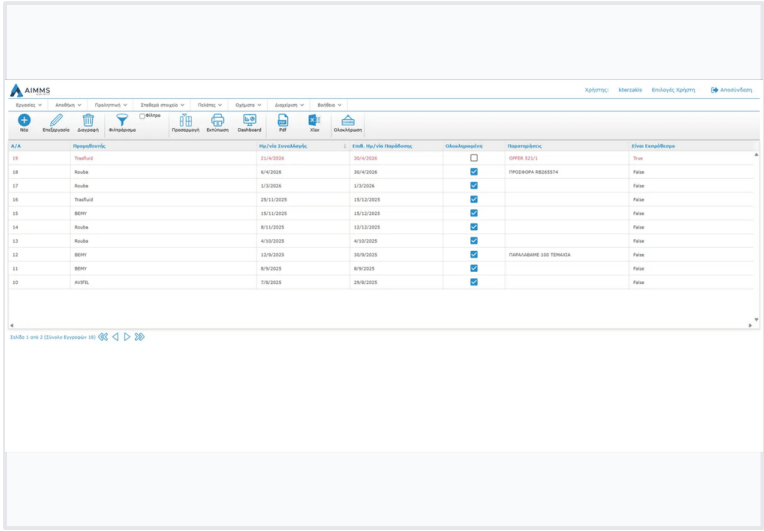
01 **Spare Part Request:** Technicians or supervisors raise digital requests directly from the field or office.

02 **Order Demand Management:** Requests are consolidated into purchase demands, preventing duplicate orders.

03 **Purchase Orders:** Formal orders are generated and sent to suppliers with preferred delivery dates.

04 **Delivery & Receipt:** Parts are received, checked, and stock levels are automatically updated in the warehouse database.

Key Benefit: Full end-to-end traceability from the initial technician request to the final delivery receipt, ensuring complete financial and operational accountability.



AIMMS PURCHASE ORDERS

Real-time tracking of supplier orders, delivery dates, and completion status

OVERCOMING CHALLENGES

IMPLEMENTATION CHALLENGES

1. STRINGENT AVIATION STANDARDS

JIG guidelines require zero compromise on maintenance tracking. Standard off-the-shelf CMMS software could not support the complex aviation-specific checklists.

2. WORKFORCE ADAPTABILITY

Transitioning technical personnel from traditional paper logs to digital tablets required intensive training and a robust change management process.

3. REAL-TIME FIELD EXECUTION

Operating in active airport apron areas demanded high reliability, offline capabilities, and instant synchronization once connected.

CUSTOM JIG FEATURES

1. JIG-COMPLIANT CHECKLISTS

Developed dynamic, non-bypassable inspection forms matching JIG Bulletin requirements (e.g., daily, weekly, monthly, and annual vehicle checks).

2. INTERLOCKED SAFETY WORKFLOWS

System blockades prevent vehicles from being dispatched or marked "Ready for Use" if critical JIG safety inspections or open work orders are pending.

3. AVIATION-SPECIFIC ASSET TAXONOMY

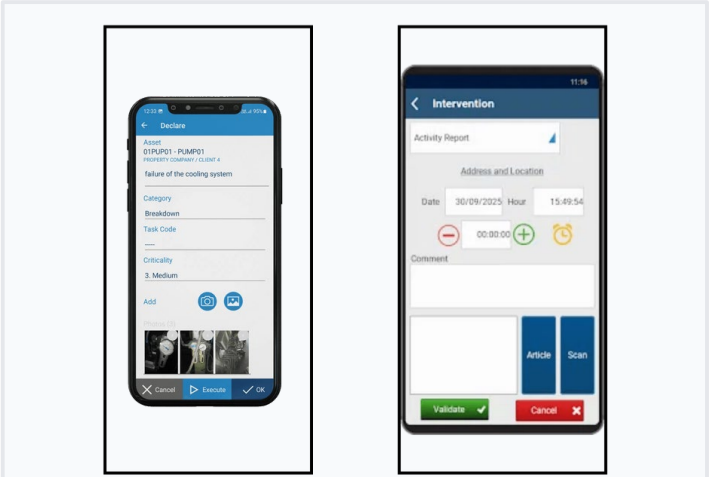
Customized the AIMMS equipment tree to reflect specialized Into-Plane refuelling components (AVPUMP, elevating platforms, deadman systems, filter vessels).

AIMMS GOES MOBILE

EMPOWERING TECHNICIANS IN THE FIELD

Technicians and supervisors access AIMMS directly on tablets and smartphones on the apron, enabling a fully paperless, real-time maintenance workflow.

- **Fault Declaration:** Report a new fault in 3 simple steps with voice typing and photo attachment directly from the vehicle.
- **Work Order Execution:** View assigned tasks, update progress, and record completion details in real time.
- **Periodic Inspections:** Perform scheduled preventive checks and record meter readings on the spot.
- **Spare Parts Consumption:** Charge parts directly to a work order from the field, updating stock levels instantly.



AIMMS MOBILE INTERFACE

Fault declaration (left) and hydrant dispenser maintenance (right) screens

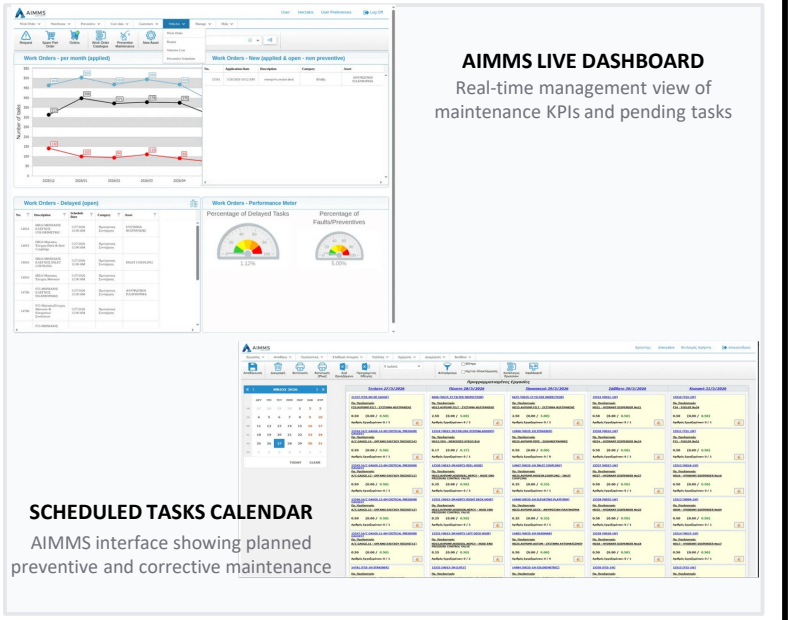
REAL-TIME VISIBILITY — THE AIMMS DASHBOARD

LIVE MONITORING PANELS

- **Work Orders per Month:** Bar/line chart tracking total, corrective immediate, and preventive tasks over the previous 6 months.
- **Work Orders — Delayed (Open):** Instant alert panel listing all overdue open tasks with scheduled dates and assets.
- **Work Orders — New (Today):** Real-time feed of newly declared tasks from the field over the last 48 hours.

PERFORMANCE METER KPIS

1.12%	5.00%
DELAYED TASKS	FAULTS VS PREVENTIVE



AIMMS LIVE DASHBOARD
Real-time management view of maintenance KPIs and pending tasks

SCHEDULED TASKS CALENDAR
AIMMS interface showing planned preventive and corrective maintenance

AIMMS IMPLEMENTATION ROADMAP

PHASED ROLLOUT TIMELINE

PHASE	SCOPE & FOCUS	STATUS
Phase 1	Pilot implementation on a single refuelling vehicle.	COMPLETED
Phase 2	Full fleet rollout across all aviation vehicles.	COMPLETED
Phase 3	Spare parts warehouse digitisation & inventory.	COMPLETED
Phase 4	Procurement workflow (Orders & Deliveries).	COMPLETED
Next Step	Power BI Reporting & advanced analytics integration.	IN PROGRESS

ACTIVE MODULES

- ✓ **Work Order Management:** Corrective & preventive tasks.
- ✓ **Vehicles Module:** Fleet-specific work orders & schedules.
- ✓ **Warehouse Spare Parts:** Digital catalogue & inventory.
- ✓ **Warehouse Provisions:** Requests, orders, and deliveries.
- ✓ **Mobile App:** Tablet & smartphone access on the apron.

AIMMS BENEFITS & MEASURABLE IMPACT

LIVE MONITORING

Real-time tracking of all maintenance work orders across the entire fleet. Supervisors and management have instant visibility of open, in-progress, and completed tasks.

ELIMINATED STATUS CALLS & DELAYS

PAPERLESS OPERATIONS

All work orders, inspection checklists, spare parts transactions, and procurement documents are now fully digital. Paper forms have been completely eliminated.

100% DIGITAL AUDIT TRAIL

INSPECTION EFFICIENCY

Structured digital workflows and mobile execution have reduced airliner inspection-related maintenance documentation time.

~50%

TIME SAVED

MAINTENANCE COST DATA

Accurate cost data per vehicle, per work order type, and per spare part. Enables precise budgeting, supplier negotiations, and total cost of ownership analysis.

DATA-DRIVEN FINANCIAL DECISIONS

SUMMARY & LOOKING AHEAD

WHAT WE HAVE ACHIEVED

- ✓ **Full CMMS Implementation:** Successfully deployed AIMMS across SAFCO's entire fleet and warehouse operations.
- ✓ **Paperless Operations:** Eliminated manual, paper-based logs across maintenance, warehouse, and procurement.
- ✓ **Improved JIG Compliance:** Established a robust, easily auditable digital record of all maintenance activities.
- ✓ **Data-Driven Decisions:** Gained accurate maintenance cost data per vehicle and per spare part.

LOOKING AHEAD

- **Power BI Integration:** Connecting AIMMS data to Power BI for advanced reporting, trend analysis, and predictive insights.
- **Schedule Optimisation:** Refining preventive maintenance schedules based on historical AIMMS performance data.

START-STOP FLEET SYSTEM

SUSTAINABILITY MANDATE

GROUND EMISSIONS REDUCTION

Targeting airport apron ground emissions by eliminating unnecessary fuel combustion during standby times.

IDLE-FREE AIRPORT APRON

Aligning with Athens International Airport's strict environmental guidelines and net-zero goals.

Objective: To significantly lower carbon footprint and fuel consumption without compromising into-plane refuelling safety or performance.

HOW THE SYSTEM WORKS

1. FUELING-TRIGGERED ENGINE STOP

The engine shuts down automatically **with the initiation of fuel feeding** to the aircraft, eliminating idling during the entire refuelling process.

2. AUXILIARY SYSTEM POWER

Critical safety systems, JIG-compliant communication devices, and electronic instruments remain fully powered by auxiliary batteries.

INSTANT RESTART: SEAMLESSLY STARTS UPON FUELING COMPLETION

MOC & RISK ASSESSMENT

MANAGEMENT OF CHANGE

01 TECHNICAL EVALUATION
Comprehensive compatibility assessment of vehicle electrical systems, starter motors, and auxiliary batteries.

02 OPERATOR TRAINING
Familiarizing into-plane refuelling operators with the automatic shut-off and instant restart sequence to avoid operational surprise.

03 TSA & JIG ALIGNMENT
Aligning the modification with TSA technical advisors and JIG Bulletin guidelines to maintain standard certifications.

TASK RISK ASSESSMENT (TRA)

JIG COMPLIANT

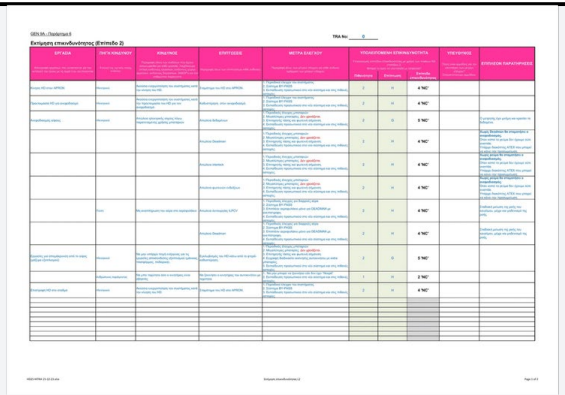


Fig: Official SAFCO Task Risk Assessment (TRA Level 2) for Start-Stop modification.

PHASE 1 — PILOT INSTALLATION

PILOT SETUP & SCOPE

SINGLE HYDRANT DISPENSER TRIAL

Selected one representative **Hydrant Dispenser vehicle** to act as the pilot testbed under daily operational cycles.

CONTINUOUS PARAMETER LOGGING

Monitored engine starter health, auxiliary battery charge/discharge cycles, and starter motor temperatures.

Trial Goal: To prove that the Start-Stop mechanism can operate safely on an airport apron without causing any refueling delays or system failures.

PILOT VALIDATION

100%	Zero
RESTART SUCCESS	REFUELLING DELAYS

- ✓ **Battery Integrity:** Auxiliary batteries successfully maintained power to all systems during engine shut-off.
- ✓ **Operator Feedback:** Positive feedback from drivers regarding reduced noise, vibration, and heat in the cabin during standby.

PHASE 2 — MULTI-VEHICLE ROLLOUT

THE 8-VEHICLE FLEET

01 PILOT VEHICLE	CONCEPT PROVED
05 VEHICLES — SUPERCONSTRUCTOR	OEM INSTALLED
02 VEHICLES — SAFCO TECHNICIANS	IN-HOUSE INSTALLED

TOTAL FLEET CAPACITY: 8 ACTIVE START-STOP VEHICLES

TECHNICAL EXECUTION

IN-HOUSE AUTONOMY

SAFCO technicians mastered wiring, PLC logic, and sensor calibration by installing 2 systems completely in-house, ensuring self-reliance.

⚠ CHALLENGE & INNOVATION

Air Leakage Challenge: Minor air leaks in vehicle systems had to be eliminated to ensure start-stop pneumatic reliability.

Engineering Solution: SAFCO successfully installed **15-litre air buffer tanks** on the vehicles to stabilize air pressure and guarantee flawless restarts.

DEMONSTRATING SAFCO'S IN-HOUSE ENGINEERING CAPABILITY

SUSTAINABILITY BENEFITS

15-20%

VEHICLE DIESEL SAVINGS

Reduction in annual diesel consumption on each equipped vehicle.

PER-VEHICLE DIESEL CUT

~8%

FLEET SCALE SAVINGS

Reduction in total SAFCO diesel consumption per refuelling or per delivered m^3.

OVERALL SAFCO EFFICIENCY

CO_2

EMISSIONS REDUCTION

Direct, proportional reduction in apron greenhouse gas emissions.

GREENHOUSE GAS CUT

ENGINE

WEAR & IDLE HOURS

Drastic reduction in engine running hours and mechanical wear.

EXTENDED ASSET LIFE

NEXT STEPS & FINANCIALS

FINANCIAL FEASIBILITY

HIGHLY COST-EFFECTIVE

Installation cost is **under €3,000 per vehicle** — significantly lower than purchasing a brand-new electric dispenser.

RAPID PAYBACK PERIOD

Full investment payback achieved in **less than 1 year**, factoring in immediate fuel savings and significantly reduced vehicle wear & tear.

LOW CAPEX + HIGH ROI = PROVEN BUSINESS CASE

NEXT STEPS

1 **GRADUAL FLEET ROLLOUT**

Progressively implement the Start-Stop system across the remaining hydrant dispensers in SAFCO's active fleet.

2 **IN-HOUSE STANDARDIZATION**

Standardize the installation procedure for SAFCO's technical team, leveraging the expertise gained from the first 2 in-house integrations.

TARGETING 100% START-STOP DISPENSER FLEET

SUMMARY & LOOKING AHEAD

KEY TAKEAWAYS

1. OPERATIONAL DIGITIZATION

AIMMS CMMS has fully digitized SAFCO's maintenance, spare parts, and JIG compliance workflows, reducing inspection times by nearly 50%.

2. ENVIRONMENTAL LEADERSHIP

The Start-Stop system proves that substantial fuel and CO_2 reductions (8% overall savings) can be achieved through low-cost, in-house engineering.

INNOVATION & EFFICIENCY AT ATHENS AIRPORT

FUTURE VISION

DIGITAL & GREEN SYNERGY

Integrating Start-Stop telemetry into the AIMMS CMMS platform to enable predictive maintenance and real-time fuel efficiency analytics.

INDUSTRY BENCHMARKING

Continuing to share our digital and sustainability milestones with JIG and TSA to set new operational benchmarks for ITP providers globally.

LEADING THE WAY IN SUSTAINABLE AVIATION SUPPORT

THANK YOU

JIG Management Technical Forum | Rome, 9 June 2026

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