

Sefik EGRIBOZ (M.Sc., PMP, PSPO, ITIL)

SENIOR PRODUCT OWNER & DELIVERY / PROGRAM MANAGER

Product Strategy & Ownership | Program & Delivery Leadership
Agile Delivery | Airline IT | Data Platforms

Istanbul, Türkiye | +90 (505) 849 2255 | sefik.egriboz@gmail.com | linkedin.com/in/sefikegriboz

Immediately available | Open to relocation



PROFESSIONAL SUMMARY

Key results: Ten years of **product ownership** on two **Tier-0** platforms | roadmaps for **six mission-critical systems** (1,000 users, **EUR 1M** budget) | **98%** fewer reported ATC confusion events with an AI product | **EUR 800K** first-year savings

Technical Product Owner and Program/Delivery Manager with 24 years in airline IT, the last ten as de facto product owner of two **Tier-0** operational data platforms (TKAODS, OFPDS), with delivery and program accountability for multimillion-euro platforms across scheduling, slot management, flight planning and IOCC.

Turns operational problems into product outcomes: roadmaps, OKRs and KPIs for **six mission-critical systems**, a five-vendor RFP (3 shortlisted, 2 POCs) with business cases, and user stories validated through UAT, on an integration estate of **200+ integration points**, **~50M annual transactions** and **99.8% availability**.

Product results in production: a fully AI-based callsign safety product for an **NP-hard** Quadratic Assignment Problem (**98%** fewer reported ATC confusion events), a real-time Early Warning System with zero restricted-airspace dispatch incidents, and **EUR 800K** first-year savings. PSPO I and PMP certified, with **50+ projects** managed from small to multimillion-euro budgets.

WORK EXPERIENCE

Career Break and Professional DevelopmentIstanbulSep 2024 – Present

- Planned break after 24 years with the Turkish Airlines Group, combining family time with structured upskilling: earned **AWS Certified AI Practitioner (AIF-C01)**, **Professional Scrum Product Owner I (PSPO I)** and **AWS Certified Cloud Practitioner (CLF-C02)** in 2026 and continued research on graph-based AI for aviation safety.

Principal Solutions ArchitectTurkish TechnologyIstanbul, TürkiyeJan 2023 – Sep 2024

Official title: Distinguished Expert, the highest technical grade at Turkish Technology.

- Owned product roadmaps, capability priorities, OKRs and KPIs for **six mission-critical operational systems** (1,000 users, ~100 concurrent, 5M annual transactions, EUR 1M budget), balancing them against **integration dependency management** and architectural constraints so new capabilities did not fragment the platform landscape.
- Ran the NetLine/Ops replacement selection (**5 vendors, 3 shortlisted, 2 POCs**) and vendor evaluation of flight planning platforms (Jeppesen, CAE formerly FPM, Lido) through RFP/RFI, vendor management and build-versus-buy business cases, advising VP-level leadership on technology strategy and long-term product and R&D strategy.
- Cut reported ATC confusion events by **98%** across up to ~1,500 daily flights at peak season, sustained in the years since, by replacing the 2011 heuristic season-start assignment with an in-house, fully AI-based callsign safety product aligned with EUROCONTROL CSST standards.
- Reframed callsign assignment as an **NP-hard** Quadratic Assignment Problem and built a scalable product on **Graph Neural Networks (GNN): Graph Attention Networks (GAT)** on Neo4j with PyTorch Geometric and feature engineering over phonetic, visual and semantic similarity.
- Led an **8-person cross-functional team** (project manager, 2 system analysts, 1 business analyst, 4 software engineers) as architecture and design decision owner: defined the implementation approach, mentored engineers hands-on and cleared complex technical blockers, with Scrum Master support as required.
- Protected schedule coherence across two carriers and two reservations systems during Ajet's migration from TROYA, the group's reservations and inventory platform, to a separate third-party PSS, running SchedConnect-based schedule synchronization, inter-carrier schedule distribution and schedule change management in a transition architecture.
- Shaped integration and technology strategy for next-generation aviation operations platforms as cross-airline **NetLine Subject Matter Expert** for Turkish Airlines, SunExpress and Ajet, and as Subject Matter Expert in callsign safety, IOCC and operational control systems.
- Established a design authority and design reviews that brought architecture decisions under ISO 27001 compliance, software quality management and enterprise architecture governance, and supported regulatory audits and ICAO compliance.

Senior Integration ArchitectTurkish TechnologyIstanbul, TürkiyeJan 2021 – Jan 2023

Official title: Senior Expert, Integration Architect.

- Achieved **99.8% availability**, including planned maintenance windows, for mission-critical operational platforms serving **500+ concurrent users** with **zero unplanned downtime**, by leading cross-functional delivery management across internal

and external integration platforms through production deployment under high availability, disaster recovery design and SLA/SLO management.

- Drove the enterprise integration transformation: standardized **200+ integration points across 86 systems (~50M annual transactions)** under a single integration governance and data governance model, with enterprise messaging and data streaming reference patterns adopted group-wide for interoperability, maintainability, observability and operational reliability.
- Extended PSS/DCS integration with the in-house PSS TROYA to irregular operations (IROPS/IRROPS) and disruption management, propagating IOCC decisions to inventory, reservations and departure control as they happened, so disrupted passengers, even those already en route to the aircraft, could re-accommodate online.
- Engineered a real-time Early Warning System across NetLine and FPM that cross-checks planned routes for up to **~1,500 daily** peak-season dispatch legs with hundreds of automated checks and alarms: **zero** flight dispatches into restricted airspace since go-live.
- Modernized the integration landscape onto an event-driven application and data integration platform on Apache Kafka (topic design, schema registry), IBM MQ and REST/SOAP APIs, sustaining **~50M annual transactions** with microservices, enterprise integration patterns, API-first design and lifecycle management, and API versioning and backward compatibility.
- Owned the solution architecture artefacts that kept decisions traceable to a maintained target state architecture: solution blueprints, architecture roadmaps, High-Level and Low-Level Design (HLD/LLD), Architecture Decision Records (ADR) and non-functional requirements (NFR).
- Set the estate's engineering and release practice: CI/CD architecture and DevOps release automation with Git-based (GitOps) configuration control, with automated testing strategies and performance and security testing gating releases.
- Built a real-time observability tool across all live enterprise integrations, using structured logging, correlation IDs and distributed tracing; directed delivery of Grafana dashboards, metrics and alerting to support proactive issue detection.

Lead Solutions Architect and Platform Owner	Turkish Airlines	Istanbul, Turkiye	Jun 2014 – Jan 2021
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Official title: Project Manager, Flight Operations.

- Acted as product owner of TKAODS and OFPDS for **ten years** (2014 – Sep 2024), with final authority over feature prioritization and architectural evolution, translating operational requirements into user stories with acceptance criteria.
- Ran agile delivery with backlog management and prioritization in **Jira** and product documentation in **Confluence**: sprint planning and Definition of Ready/Done criteria that turned changing operational requirements into sprint-ready work.
- Owned delivery scope, implementation planning, delivery dependencies, vendor activities, user acceptance testing (UAT), risk tracking and operational handover for multi-system releases across scheduling, flight planning, IOCC and downstream enterprise systems, through to production.
- Coordinated operational stakeholders and cross-squad dependencies for two Tier-0 platforms, translating changing requirements into platform direction and carrying delivery through production under ITIL-aligned **Site Reliability Engineering (SRE)** practices and continuous monitoring.
- Built **TKAODS** (Airline Operational DataStore) and **OFPDS** (Operational Flight Plan DataStore) into **Tier-0** 24/7 data platforms used by hundreds of users across overseas offices, General Management and IOCC, in front of the Lufthansa Systems NetLine suite and flight planning system.
- Owned enterprise-wide flight data distribution and a reporting layer on both platforms, serving **eleven main downstream domains** from one authoritative **single source of truth**: scheduling, crew, load control, PSS/DCS interfaces, cargo, maintenance, DWH, revenue and cost accounting, SAP finance, HR/payroll and regulatory reporting.
- Fed operational changes (delays, cancellations) to passenger-notification systems and flight data to loyalty and disruption hotel systems, so passenger notifications, loyalty and disruption hotel arrangements ran on the same data as operations.
- Processed **~100K update records a day** for up to **~1,500 flights a day** at peak, 24/7 and near-real-time, through source-to-target mappings, ETL/ELT pipelines and integration rules that consolidated, transformed and enriched every update across summer and winter seasons under data quality and metadata controls.
- Designed batch, near-real-time and real-time distribution patterns that absorbed **~22.5M** flight-data changes a year (~450K annual flights, ~50 changes per flight) before fan-out to large-scale distributed data processing and analytics, with consumer-specific horizons from a **rolling three-day window** to a **90-day window**.
- Designed the enterprise operational data and integration architecture on the AODB (Airline Operational DataStore) pattern, standardizing flight, leg, schedule and operational flight-plan data airline-wide: logical data models, entities and relationships, canonical data structures, and the ESB pattern applied twice.
- Managed NetLine's master and reference data (NetLine/Base) with the team: built and maintained the tables where users edit it and trained key users in master data management (MDM), keeping master data owned at its source.
- Drove technical direction, integration landscape and platform modernization for **multimillion-euro** airline operational systems across scheduling, slot management, flight planning and IOCC, with delivery accountability as lead architect.
- Coordinated the infrastructure teams' VMware-based solution as Turkish Airlines' NetLine product owner, keeping users working in NetLine throughout the pandemic.

Official title: Acting Team Leader.

- Led a **6-person team** through the full lifecycle of **100+ integrations**, from requirements and system analysis to design, development, testing and documentation, harmonizing project plans across functions and tracking cross-functional milestones for every project.
- Delivered **EUR 800K** in first-year savings with a multi-currency overflight cost engine, launched in 2012 and built on a data pipeline of country entry/exit timestamps and segment distances.
- Earned PMP in 2008 and ran scope definition, executive (C-level) stakeholder management, customer relationship management, vendor management, risk tracking, implementation planning and operational handover.
- Headed solution design and delivery for flight operations, crew and flight-planning integrations across global aviation vendors, building multithreaded real-time integration frameworks (2010) and contributing to an in-house Enterprise Service Bus (ESB) on Service-Oriented Architecture (SOA).
- Introduced SchedConnect in 2007 for inter-carrier schedule enrichment and distribution, establishing recurring schedule data exchange with partner carriers under IATA data standards.
- Architected the schedule-to-PSS (TROYA) message integration under IATA SSIM Chapter 4 (SSM) and Chapter 5 (ASM) over Type B messaging, keeping inventory and reservations in step with cancellations, re-timings, equipment and routing changes, reinstated flights and disruption reason codes.
- Developed the first heuristic Callsign Similarity & Assignment System (phonetic, visual and semantic similarity), delivered in 2011: the groundwork later rebuilt as the graph-based AI solution once reclassified as NP-hard.

Official title: Analyst Programmer.

- Contributed to the first production implementation of the Lufthansa Systems NetLine suite (NetLine/Sched, NetLine/Slot, NetLine/OPS & Base), the platform foundation behind fleet growth from **60 to 500+ aircraft** and passenger scale from 10M in 2000 to 85M in 2024.
- Drove the technical work of the first major legacy modernization from day one as an implementation team member, moving schedule and operations control off the IBM mainframe (ADABAS/Natural) onto Oracle on Unix (AIX) and the NetLine product family.
- Enabled SunExpress and later AJet to adopt the NetLine platform, establishing the cross-carrier SME role.
- Developed and maintained integrations from flight operations to DWH, SAP, MRP, PSS and DCS, a leg-to-flight online conversion platform supporting cargo integration, and backend components in Oracle, PL/SQL, Java and C on Unix/Linux, with incident analysis and performance tuning.
- Cut costs by **EUR 100K** a year by designing and building the timetable publication product from scratch: worldwide airline schedules and partner codeshare flights in, a downloadable timetable on the corporate website out (Java, C, PL/SQL).
- Set the calculation methodology for average passenger and baggage weights through statistical analysis of historical data.

CORE COMPETENCIES & TECHNICAL SKILLS (hands-on)

Product Vision, Strategy and Discovery: Product vision and strategy, capability roadmaps, priorities, OKRs and measurable outcomes, product lifecycle management, product portfolio management, capability planning, requirements analysis, operational problem framing and requirements discovery with operations stakeholders, validated through UAT.

Program and Delivery Governance: Program management, delivery and transformation governance, implementation planning and milestones, dependencies, risk and issue tracking, vendor management, UAT, release management and operational readiness, budget oversight, cross-functional program coordination, executive (C-level) stakeholder management, PMI/PMP methodologies, workshop facilitation.

Outcome-Based Product Management and Agile Delivery: Capabilities prioritized against operational KPIs, reliability, safety and financial outcomes, with post-release impact measured; backlog refinement, Agile/Scrum, continuous improvement.

Airline IT Products: Integrated Operations Control Center (IOCC), operational and tactical flight planning (Jeppesen flight planning; FPM, now CAE Flight Planning Solutions; Lido), schedule management.

Technical Platforms, Data & Architecture: Enterprise Data Architecture, Data Modeling, Canonical Data Model, Operational Data Store (ODS), Data Integration Architecture, Data Pipeline Architecture, Event-Driven Architecture, API Architecture, Apache Kafka, IBM WebSphere MQ, Enterprise Service Bus (ESB), REST and SOAP APIs.

AI and Data Product Innovation: Neo4j and graph databases, PyTorch and PyTorch Geometric, MLOps, feature engineering, data quality and metadata management.

Engineering Platforms & Languages: Oracle DB, Docker and containerization, Linux (RHEL) and Unix administration (AIX, HP-UX), application administration on Windows Server; Languages: Python, Java, C, PL/SQL, shell scripting (Bash, KSH), YAML and JSON; Git and Jenkins; UML; multithreaded real-time and database-driven systems.

EDUCATION

• Ph.D. (coursework)	Business Administration (Finance)	Yeditepe University	Istanbul	2002 – 2006
• M.Sc.	Management Engineering; thesis on data warehousing for mass customization	Istanbul Technical University	Istanbul	1997 – 2002
• B.Sc.	Computer Science Engineering	Istanbul University	Istanbul	1993 – 1997

LANGUAGES

• English	C1	Full Professional
• German	A2	Studying towards B1
• Turkish		Native

CERTIFICATIONS

• AWS Certified Cloud Practitioner (CLF-C02)	Amazon Web Services (AWS)	2026
• AWS Certified AI Practitioner (AIF-C01)	Amazon Web Services (AWS)	2026
• Professional Scrum Product Owner I (PSPO I), Credential ID 1347372	Scrum.org	2026
• AI and Cloud Foundations: OCI AI Foundations; Agentic AI Foundations; IBM SkillsBuild; PMI AI (CPMAI, GenAI)	Oracle, IBM, PMI	2025
• Docker Foundations Professional Certificate	Docker	2025
• Manager Ready (DDI) leadership simulation: exceptional rating	TAG Taurus Group	2024
• ITIL v3 Foundation, Credential ID 990453483		2013
• Project Management Professional (PMP), Credential ID 1225730	PMI	2008
• Lufthansa Systems SchedConnect vendor training (two weeks)	Lufthansa Systems	2007