

# AeroBOSS™

Airport Safety and

Operations Software Suite



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Selex ES Inc. is an international subsidiary of Leonardo S.p.A.

**Request More Info Here** 

AeroBOSS™ provides real-time situational awareness, monitoring and alerting through an integrated software suite. The AeroBOSS solutions improve safety, resource coordination and performance for airports and their stakeholders.

AeroBOSS is an enterprise level system that is composed of a set of modules. The modular design of AeroBOSS allows airports the ability to deploy the right tools for each department's specific needs without burdening users with unnecessary complexity. Airports can select from each of the following available modules.



# AIRPORT-WIDE SOLUTION FOR AIRPORT SURFACE MANAGEMENT ENABLING COLLABORATIVE DECISION MAKING

- > Provides airport-wide common operating platform unlimited, concurrent user licensing agreement
- > Enables command and control of airport operations, maintenance, and emergency resources
- > Increases speed and accuracy of emergency operations and snow removal teams
- > Monitors ground vehicles airport-wide, landside and airside (movement and non-movement) areas
- > Integrated Runway Incursion Warning System (RIWS) to prevent VPD Incursions
- > Interfaces with leading Safety Management Systems for automatic event reporting

## FLIGHT OPERATIONS MANAGEMENT







# REAL-TIME SURFACE MANAGEMENT SYSTEM (SMS)

AeroBOSS provides real-time situational awareness of flights and ground vehicles in and around an airport using a web-based application on any PC or mobile device. AeroBOSS provides a comprehensive view of the airport, its flight operations, ground vehicle movements, scheduled operations and NOTAM data, all using an intuitive map based display.



# Terminal Approach and Regional Display

### FLIGHT TRACKING (ADS-B, ASDE-X, A-SMGCS)

AeroBOSS can consume and display flight track and flight plan data from multiple data sources, like the FAA's SWIM Program, ASDE-X or ICAO/EuroControl Compliant A-SMGCS platforms. AeroBOSS can also consume and display data from Leonardo's own FAA certified ADS-B Stations or from operations management's ADS-B receivers. In addition, AeroBOSS can consume and display data from Surface Movement Radars (SMR) or millimeter FOD detection systems using industry standard ASTERIX or XML formats.

Integrated flight track and meta-data fusion allow an airport to leverage multiple surveillance systems and data feeds to achieve full surface coverage. That coverage is matched to flight plan information to provide users with an intuitive "one flight - one target" perspective of movements in and around the airfield or aerodrome.

#### **DIVERSION MANAGEMENT**

The AeroBOSS Diversion Management module helps airport personnel track flights during irregular operations at their facilities or at a facility that is receiving flights from another airport. Through the use of fused data, an airport receives the most accurate and timely data available for use in the planning, execution and recovery from irregular operations to help prevent Passenger Bill of Rights violations, improve passenger experience, reduce tarmac delays and to return to normal operations as effectively as possible.



#### **CAPABILITIES**

- > 100% Web-based without client downloads
- > Integrated GIS mapping engine
- > Full ownership of data by client

- > Command and Control functions
- > Customizable map views and data layers
- > Fully hosted in T-1 Data Center facility

## IN-VEHICLE TECHNOLOGY









# RUNWAY INCURSION WARNING SYSTEM (RIWS)

The AeroBOSS Runway Incursion Warning System (RIWS) is fully compliant with the FAA Advisory Circular 150/5210/25 to prevent runway incursions by ground vehicles. AeroBOSS RIWS alerts vehicle drivers of potential incursions before the vehicle enters a Runway Safety Area (RSA) or any other identified hazardous zone. AeroBOSS RIWS improves safety and efficiency by combining an RIWS platform with real-time flight and ground surveillance data, vehicle tracking capabilities, SafetyNet logic, precision GPS data and high-resolution maps of the airport.

# GROUND VEHICLE TRACKING TRANSPONDERS (VTT)

AeroBOSS Ground Vehicle Tracking Transponder (VTT) provides vehicle tracking capabilities in all areas of an airport, to improve safety and coordination of all types of operations.

AeroBOSS Vehicle transponders provide high precision GPS accuracy, a one second update rate to display the location of the vehicle on the AeroBOSS SMS Display as part of a fused image with flight tracking data.





#### **SNOW REMOVAL OPERATIONS (SNOWBOSS)**

SnowBOSS by Leonardo is designed specifically for snow removal team operations. In addition to providing optional RIWS capabilities for each vehicle, SnowBOSS offers key command and control capabilities for supervisors of convoys or fleets involved in winter operations.

SnowBOSS provides snow removal team leaders with the ability to track the location of each individual vehicle, and to coordinate and control key elements of RIWS alerts for all vehicles involved in snow and ice removal. Supervisor notifications and verification that runway safety areas are clear of vehicles further improve safety during winter operations.

#### **CAPABILITIES**

- > Mitigate runway incursions
- Improves safety of vehicle operations in reduced visibility
- Optimize convoy operations

- > Track all vehicle operations airside and landside
- > Customizable, unlimited types of alert areas
- > Fully functional with or without data services

# AIRPORT MANAGEMENT & COMMUNITY RELATIONS







# OPERATIONS MANAGEMENT / BI DASHBOARD

The AeroBOSS operations management Business Intelligence (BI) Dashboard provides administrators with highly configurable statistical reporting.

The AeroBOSS Airport Management Business Intelligence (BI) Dashboard provides a single repository for airport operational data and a visualization tool for intuitive and graphical representation of large amounts of information.





#### LANDING FEE REPORTING

The AeroBOSS Landing Fee Management (LFM) module allows an airport to accurately identify, categorize and process landing fee revenue in as little as 24 hours from the time of an operation.

Leveraging on-site ADS-B receivers, FAA and third-party meta-data, AeroBOSS provides near real-time operational counts, flight identification, aircraft airframe information and precise weights for use in fee calculations.

#### NOISE COMPLAINT MANAGEMENT

The AeroBOSS Noise Complaint Management module integrates an airport's flight tracking system with a public portal for noise complaint collection or an airport's current complaint entry system. The AeroBOSS Noise Complaint Management module also provides a simple and cost-effective way to inventory noise complaints, correlate complaints to flight tracks, generate a response form and perform statistical analysis on complaints.

A public facing flight tracking portal allows an airport to display flight data for public viewing. The public portal also offers the ability for a resident to replay flights and file a noise complaint.



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## **HOW CAN AeroBOSS™ HELP YOU?**

## Airport and airline managers can depend on AeroBOSS to:

- Improve efficiency and coordination of all airport stakeholders
- > Enhance safety of ground vehicles in the movement area by mitigating runway incursions
- Enable command and control of airport resources for operations, maintenance, and during emergency responses
- Increase accuracy of landing fee reporting and reduce payment delays
- Eliminate data silos through integration with Airport Operational Database (AODB), third party Safety Management Systems (SMS), and event management systems

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