Strategic Asset Management for Airports

EDI has worked in the airport industry for many years and has developed airport-specific solutions to common challenges in the industry. The EDI Strategic Asset Management (eSAM) for Airports solution incorporates those airport specific-solutions into a prepackaged, IBM Maximo-based software installation.

Airports are unique in that they have many operating departments such as Landside and Airside Operations, Facilities, Maintenance, Security, Concessions, Marketing, IT, and even Real Estate, which require managing asset classes in different ways. This variety of departments and assets may require disciplines and skill sets with varying, and often competing priorities to maintain them.

Airports also provide services to a variety of customers, not just passengers; stakeholders include airlines, concessionaires and other tenants such as fixed-base operators. The complex working environment is generally comprised of several unions with multiple business flow rules, certifications, work schedules, etc., presenting a challenge when trying to assign responsibilities across many locations. Airports are also driven by weather and outside events as well as regulations imposed by the FAA for Airfield Inspections, Safety Management System (SMS) requirements, and Airport Security. Simultaneously managing these functions can prove to be a daunting task.

eSAM for Airports Solves these problems by:
- Utilizing a best of breed solution in IBM's Maximo which is used by the vast majority of the largest airports worldwide.
- Adopting industry and maintenance best practices like ISO-55000.
- Significantly reducing the cost, complexity, and duration of the implementation and configuration of an enterprise class EAM application.

eSAM includes business process services, templates, and prebuilt solutions including:
- Airport Maintenance Organization Templates
- fully vetted Airport-Specific Job Plans, SOPs and supporting documentation
- Airport Location and Asset Hierarchies (Airside and Landside)
- provision for Risk Mediation with a built-in risk module to help identify the assets that are the greatest risk to the airport
- a Smart Number solution that identifies Assets without having limitations placed on Asset numbering.
- a predefined Airport Failure Class Hierarchy which saves a tremendous amount of time in design and development
- full support for MRO Parts and Inventory Management with:
  - types of MRO Parts
  - commodity groups and codes
  - categorizing and classifying
  - inventory
  - inventory flow

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- ERP EAM interface best practices
- purchasing and receiving
- kitting and issuing
- maintenance fees and billing chargeback of work and materials to airport tenants, airlines, concessionaires, etc.
- support for airport fleet operations including runway maintenance vehicles, fire and safety vehicles and all other common airfield vehicles
- enabling a fully mobile and paperless workforce
- airfield safety inspections (Part 139 & NOTAM)
- planning & scheduling
- FEMA event management & snow operations
- addressing Safety Management System (SMS) requirements
- airport security compliance for Part 1542
- an airport-specific, on-line work request module called SuiteReq that can be accessed by all airport clients including passengers, airlines and concessionaires
- comprehensive training with extensive manuals and documentation
- organizational change management program

eSAM Benefits:
- Provides crucial information associated with enterprise asset management to support long and short-term planning for all maintenance activities
- Helps work through challenges of automating processes and implementing organizational change in large union environments when coupled with EDI services
- Highlights work order responsibility for tenants to control costs. Through an interface with airport lease management systems, eSAM can highlight whether the reported problem is airport responsibility, tenant responsibility or

airport responsibility with cost recovery.
- Improves efficiencies through the ability to track specific labor certifications and qualifications within a trade prior to executing work on assets and includes Safety Plans, SOPs, and Qualifications functions.
- Significantly reduces the cost, complexity, and duration of the implementation and configuration of an enterprise-class EAM application.
- Provides comprehensive FAA regulatory compliance and reporting for Part 139 and Part 1542.
- Stabilizes airline rates and charges by tracking labor distribution and overall O&M costs.

▲ World Class Maintenance Model

The six boxes represent a "World-Class Maintenance Framework" and are found in EDI's logo as an integral part of the company culture. Implementing the connections between the six basic maintenance and asset management processes can be challenging. EDI focuses on process improvement and organizational change efforts designed to affect the Maintenance Framework to alleviate these challenges. Data that once was limited becomes a powerful source of information to support planning and scheduling and critical analysis functions.