

## SAFETY Safety Management System



Federal Aviation  
Administration

### FY 2008 Performance Target

"Apply safety risk management (SRM) to at least 6 significant changes in the National Airspace System (NAS)."

### Flight Plan Objective and Performance Target

**Objective 6:** Implement a Safety Management System (SMS) for the FAA.

**Performance Target:** By FY 2010, implement SMS in the Air Traffic Organization, Office of Aviation Safety, and Office of Airports. By 2012, implement Safety Management System (SMS) policy in all appropriate FAA organizations.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 <sup>1</sup>
<b>Target</b>	N/A	3	3	3	6
<b>Actual</b>	N/A	3	4	3	

<sup>1</sup>In FY 2008, the original Safety Risk Management measure was modified, and the name was changed to Safety Management System. For FY 2008 and FY 2009, the measure will remain the number of significant changes in the NAS SRM is applied to. Beginning in FY 2010, the measure will be redefined as the organizations targeted for the implementation of SMS.

### Definition of Measure

**Unit of Measure:** The number of significant changes to the NAS in which the SRM process has been applied. (The unit of measure will be redefined in FY 2010 – see note above.)

**Computation:** As a metric, the FAA will count the number of Safety Risk Management Documents (SRMDs), or safety cases, approved.

**Formula:** N/A

**Scope of Measure:** In FY 2004, the FAA developed the FAA SMS Manual. This manual describes the requirements for the various components/functions of the SMS, including SRM. The application of SRM will be measured against these requirements.

Since these are new requirements, training is necessary to allow the operational service units in the Air Traffic Organization (ATO) to meet them. The ATO will track who attends SMS and SRM training. In addition, the ATO Safety Service will measure and track the application of SRM.

### Why the FAA Chooses this Measure

SRM is a systematic, explicit, and comprehensive approach for managing safety risk at all levels and throughout the entire scope of an operation and lifecycle of a system. It requires the disciplined assessment and management of safety risk. The SRM process ensures that safety-related changes are documented; risk is assessed and analyzed; unacceptable risk is mitigated; hazards are identified and tracked to resolution; the effectiveness of the risk mitigation strategies is assessed; and the performance of the change is monitored throughout its lifecycle. Applying SRM prior to implementing changes to the NAS will ensure that unacceptable risk is not introduced. It will also improve the documentation of the processes used to ensure the safety of the NAS.

The ATO will also track who attends SMS and SRM training. While this measure is not part of the Flight Plan Safety Management System performance target, the number of employees trained has a direct impact on the application of SRM to safety-significant changes. Personnel must be trained in SRM before they can be expected to complete the safety analysis required. The ATO Safety Service is working with the ATO Workforce Planning Directorate to track attendance for both the SMS Overview course and the SRM training. In addition, the Safety Service will measure and track the application of SRM by reviewing data on changes to the NAS, identifying which are safety-significant, and auditing those changes.

The original Safety Risk Management performance target was a new requirement in FY 2005. While FAA organizations regularly apply processes to assure the safety of the NAS, these processes are not specifically included in SRM as described in the FAA SMS Manual. Given the FAA's decades long safety record, which has ensured that the NAS is among the safest airspace system in the world, SRM will build upon these existing processes. The performance targets were developed based on lessons learned from international service providers, as well as from similar organization-wide implementations in the FAA

#### **Source of the Data**

The ATO Safety Service is working with ATO operational service units to compile a repository of hazards associated with changes to the NAS in a database known as the FAA Hazard Tracking System. In addition, WebCM, a configuration management tool, is being updated to require SRM on all NAS Change Proposals. These data will then be used to audit the application of SRM.

#### **Statistical Issues**

N/A

#### **Completeness**

Each ATO Service Unit is responsible for ensuring that safety analyses are documented, complete and accurate.

#### **Reliability**

ATO-S will approve certain SRMDs and will check for Service Unit compliance with SRM via the Safety Risk Management Compliance audit process created in FY 2007.