



Agenda Item 3: Implementation of Air Traffic Flow Management (ATFM)

SKYFUSION

(Presented by IATA)

SUMMARY	
<p>This information paper presents a service named SkyFusion developed from a strategic cooperation between IATA and Harris. This tool offers an ideal solution that harnesses Air Traffic Flow Management (ATFM), Collaborative Decision Making (CDM) and System Wide Information Management (SWIM) concepts. SkyFusion enables the benefits of heightened situational awareness, explores ways to proactively manage capacity issues, and provides access to the technology that enables seamless communication across air traffic borders, in a single platform.</p>	
References:	
<ul style="list-style-type: none"> • SAM/IG meetings reports • Bogotá Declaration 	
ICAO Strategic Objectives:	<p><i>A - Safety</i> <i>E - Environmental protection</i></p>

1. Background

1.1 In accordance with Bogotá declaration, 100% of South American ACCs should provide ATFM service by the end of 2016. Progress has not been as expected. However, in the last year, Ecuador, Panama (FMP in the Panama FIR between 12.30 UTC and 0100UTC), Peru, and Uruguay had joined FMP implementation, raising the ATFM implementation level in the Region to 63%, as shown in the following table:

Percentage of States that have implemented ATFM Flow Management Units (FMU) or Flow Management Positions (FMP)

May 2016	ARG	BOL	BRA	CHI	COL	FGY	ECU	GUY	PAN	PAR	PER	SUR	URU	VEN
56%	NO	NO	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES	YES

1.2 The SAM/IG/17 meeting took note that Argentina was planning to implement an ATFM unit by May 2017 at the Ezeiza FIR. Bolivia informed of its plans to implement an ATFM position (FMP) at the La Paz FIR by February 2017. Argentina informed of its plans to implement ATFM in EZEIZA ACC and reported that they had installed an FMP at the Jorge Newbery airport for operations at Aeroparque.

2. Discussion

2.1 Most of the ATFM Flight Management Units in South America do not count on an automated system that provides the basic functionalities and supporting tools for a provision of an ATFM Services.

2.2 SkyFusion is a situational awareness service (SaaS) developed to support ATFM and CDM from a strategic cooperation between IATA and Harris that could be an option to fulfil the States/ANSPs ATFM needs through utilizing cloud secured technologies

2.3 SkyFusion an ideal solution that harnesses Air Traffic Flow Management (ATFM), Collaborative Decision Making (CDM) and System Wide Information Management (SWIM) concepts. SkyFusion enables the benefits of heightened situational awareness, explores ways to proactively manage capacity issues, and provides access to the technology that enables seamless communication across air traffic borders, in a single platform.

2.4 With borderless information, SkyFusion transforms the landscape of collaborative decision-making and optimization. It provides an integrated view of the ATM system, beginning with three key tools offering valuable information for aircraft operators, airports and ANSPs.

2.4.1 Traffic Display

The Traffic Display tool provides users with a map view of airborne air traffic, as well as quick view insights into airport status, enabling users to:

- Filter and observe select traffic flows (e.g., by airport and airway);
- Rapidly visualize airport congestion status over the next four hours;
- Overlay a graphical view of the route and other flight information for individual flights.
- Visualize this information across borders, supporting regional ATFM and CDM

2.4.2 Traffic Monitor

The Traffic Monitor provides predicted information for airport arrivals and departures, enabling users to:

- Monitor predicted air traffic demand and capacity over time for airports and airspace elements(ANSP's, airports or airlines);
- Examine flights that constitute the air traffic demand for an airport or airspace element.
- Proactively participate in a CDM process to proactively develop traffic management measures to balance demand and capacity.
- Visualize this information across borders, supporting regional ATFM and CDM

2.4.3 Information System

The Information System provides communications capabilities for airspace and airport status, traffic management plans globally and for an entire region, enabling users to:

- Current and expected average airport delays, by arrivals and departures;
- Information on current or planned traffic management measures;

- Equipment outages and runway closures;
- Miscellaneous notifications, including route availability, special operations and volcanic ash activity.

2.4.4. Open Applications Environment

In addition to the initial applications provided on the SkyFusion platform the open architecture allows unlimited additions of new and value-added application services to the platform. Given this scalability, ANSP's, Airlines, Airports and other applications developers can provide additional relevant functionality to the platform, increasing user benefits. This is the basis of a truly open architecture.

2.4.5. System-to-System data sharing

Stakeholders can also opt to utilize this SWIM configured platform as an efficient and cost effective method of sharing ANSP-to-ANSP, ANSP-to-airline, and ANSP-to-airport information to use currently integrated tools and avoid costly and laborious point-to-point connections between stakeholders.

2.5 It is important to recall, for example, that SAM/ATFM/IG meetings recommended States to hold teleconferences among flow management units/positions as part of the ATFM implementation process in the Region. The SAM/IG/06 and SAM/IG/07 meetings considered that, for different reasons, States were not ready yet to conduct daily teleconferences, but concluded that ATFM teleconferences between flow management units or positions (FMUs/FMPs) should be held on a weekly basis. Likewise, the SAM/IG/08 meeting agreed that e-mail or SKYPE were valid tools that States could use to start handling flow management information. These tools have been considered as the simplest way of disseminating the ATFM philosophy in the Region. Also in SAM/IG/8 meeting, the SAM/ATFM/IG had adopted an ATFM data exchange form that was being used by some SAM States (Argentina, Bolivia, Chile, Paraguay, Peru and Venezuela) in a more or less regular manner, depending on the State. All attempts to establish, at least, a suitable means of communication among ACCs were unsuccessful, due to lack of an appropriate tool.

2.6 In this sense, the Information System of the SkyFusion could fulfil the needs of providing an effective ATFM/CDM information system among FMU's, taking into consideration that it is a borderless tool.

2.7 More information regarding the SkyFusion is attached as an appendix to this information paper and will be provided by IATA through a ppt presentation.

3. **Suggested action**

- a) the Meeting is invited to take note of the information contained in this information paper;
