

SESAR		Achieved							ECAC		
FCM01		Implement enhanced tactical flow management services									
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP	

## Subject matter and scope

Implement enhanced tactical flow management services based on the introduction of real-time aircraft position and meteorological data to adjust flow regulation.

Out of all Stakeholder Lines of Action that are allocated to ANSPs, the most beneficial ones at European level are those dealing with correlated position data (FCM01-ASP01 & FCM01-ASP02), reception and processing ATFM data from the NM (FCM01-ASP03) and sending of flight activations and estimates to the NM (FCM01-ASP04). Therefore States are invited to complete them as a priority.

**NOTE FOR MILITARY AUTHORITIES:** It is the responsibility of each Military Authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the Military Authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to MIL Authorities.

## Applicability Area(s) & Timescale(s)

<b>Applicability Area</b>	All ECAC+ States except: Moldova		
<b>Timescales:</b>	<b>From:</b>	<b>By:</b>	<b>Applicable to:</b>
Initial operational capability	01/08/2001		Applicability Area
Full operational capability		31/12/2006	Applicability Area

## References

### European ATM Master Plan

Ol step -	<a href="#">[IS-0102]-Improved Management of Flight Plan After Departure</a>									
Enablers -	NIMS-02 FCM03, FCM06.1	NIMS-20 FCM06.1	PRO-005							

Legend:	WXYZ-001	Covered by SLoA(s) in this objective	WXYZ-002 zzz	Covered by SLoA(s) in another objective Objective covering the enabler	WXYZ-003	Not covered in the Implementation Plan
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### Applicable legislation

-none-

### Essential Operational Changes

- none -

### SESAR Solution

### ICAO GANP - ASBUs

NOPS-B0/2	Collaborative Network Flight Updates
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### Deployment Programme

- none -

### European Plan for Aviation Safety

- none -

### Operating Environments

Airport
En-Route
Network
Terminal Airspace

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### Stakeholder Lines of Action (SLoAs)

SLoA ref.	Title	From	By
<b>FCM01-ASP01</b>	Supply ETFMS with Basic Correlated Position Data	01/08/2001	31/12/2004
<b>FCM01-ASP02</b>	Supply ETFMS with Standard Correlated Position Data	01/08/2001	31/12/2006
<b>FCM01-ASP03</b>	Receive and process ATFM data from the NM	01/03/1995	31/12/2001
<b>FCM01-ASP04</b>	Inform NM of flight activations and estimates for ATFM purposes	01/03/1995	31/12/1999
<b>FCM01-ASP05</b>	Inform NM of flight activations and additional estimate updates for ATFM purposes	<b>DELETED</b>	
<b>FCM01-ASP06</b>	Inform NM of re-routings inside FDPA for ATFM purposes	01/03/2001	31/12/2006
<b>FCM01-ASP07</b>	Inform NM of aircraft holding for ATFM purposes	01/03/2003	31/12/2006
<b>FCM01-ASP08</b>	Supply NM with Departure Planning Information (DPI)	01/03/2005	04/07/2014
<b>FCM01-AGY01</b>	Implement ETFMS Phase 1A	<b>FINALISED</b>	
<b>FCM01-AGY02</b>	Implement ETFMS Phase 1B	<b>FINALISED</b>	
<b>FCM01-AGY03</b>	Implement ETFMS Phase 1C	<b>FINALISED</b>	
<b>FCM01-AGY04</b>	Implement ETFMS Phase 2	<b>FINALISED</b>	

Description of finalised and deleted SLoAs is available on the eATM Portal @ [https://www.eatmportal.eu/working/depl/essip\\_objectives](https://www.eatmportal.eu/working/depl/essip_objectives)

### Expected Performance Benefits

<b>Safety:</b>	Reduced unexpected overload situations.
<b>Capacity:</b>	Reduced wasted capacity; reduced delays.
<b>Operational Efficiency:</b>	-
<b>Cost Efficiency:</b>	Reduction of costs induced by delays.
<b>Environment:</b>	N/A.
<b>Security:</b>	N/A

### Detailed SLoA Descriptions

<b>FCM01-ASP01</b>	<b>Supply ETFMS with Basic Correlated Position Data</b>	From: 01/08/2001	By: 31/12/2004
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Provide ETFMS with correlated Position Data for all airborne flights inside its Flight Data Processing Area. For the initial implementation of ETFMS, the NM accepts a limited number of existing message formats.		
	<b>Note :</b> The implementation of this SLoA is no longer needed as soon as FCM01-ASP02 has been completed in a given State or ACC.		
<b>Specific applicability:</b>	ECAC States, IFR/GAT only.		
<b>Finalisation criteria:</b>	1 - Reception of CPRs by NM has been ensured.		
<b>FCM01-ASP02</b>	<b>Supply ETFMS with Standard Correlated Position Data</b>	From: 01/08/2001	By: 31/12/2006
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Provide ETFMS with Correlated Position Data for all airborne flights inside its Flight Data Processing Area in ASTERIX Category 062 format.		
<b>Specific applicability:</b>	ECAC States, IFR/GAT only.		
<b>Finalisation criteria:</b>	1 - Reception of CPRs in ASTERIX Category 062 format by NM has been ensured.		
<b>FCM01-ASP03</b>	<b>Receive and process ATFM data from the NM</b>	From: 01/03/1995	By: 31/12/2001
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Ensure that all ATFM messages received from the NM are automatically correlated to the ATC Flight Plan data. The ATFM data is automatically presented to the Air Traffic Controllers (as a minimum to the TWR Controllers) on strips or on electronic displays.		
	<b>Note :</b> The SLoA can be considered as not applicable if the amount of IFR/GAT traffic does not justify automation.		
<b>Finalisation criteria:</b>	1 - Automatic presentation of the ATFM data correlated to flight data to at least TWR controllers has been ensured.		
<b>FCM01-ASP04</b>	<b>Inform NM of flight activations and estimates for ATFM purposes</b>	From: 01/03/1995	By: 31/12/1999
<b>Action by:</b>	<b>ANS Providers</b>		

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<b>Description &amp; purpose:</b>	Send to NM a First System Activation (FSA) message as evidence of flight activations in the local ATC system. The FSA informs the NM of the actual position of the aircraft (i.e: the actual time of departure or the time and flight level at the FDPA entry co-ordination point).		
<b>Specific applicability:</b>	<a href="#">ECAC States, IFR/GAT only.</a>		
<b>Finalisation criteria:</b>	1 - Reception of FSA messages by NM has been ensured.		
<b>FCM01-ASP06</b>	<b>Inform NM of re-routings inside FDPA for ATFM purposes</b>	<b>From:</b> 01/03/2001	<b>By:</b> 31/12/2006
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Send an FSA message for flights for a route change which does not affect the exit point and when this information has not already been sent by an AFP message.		
<b>Specific applicability:</b>	<a href="#">ECAC States, IFR/GAT only.</a>		
<b>Finalisation criteria:</b>	1 - Reception of FSA messages by the NM for route changes has been ensured.		
<b>FCM01-ASP07</b>	<b>Inform NM of aircraft holding for ATFM purposes</b>	<b>From:</b> 01/03/2003	<b>By:</b> 31/12/2006
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Send an FSA to inform the NM that the flight is holding.		
<b>Specific applicability:</b>	<a href="#">ECAC States, IFR/GAT only.</a>		
<b>Finalisation criteria:</b>	1 - Reception of FSA messages by the NM for holding of flights has been ensured.		
<b>FCM01-ASP08</b>	<b>Supply NM with Departure Planning Information (DPI)</b>	<b>From:</b> 01/03/2005	<b>By:</b> 04/07/2014
<b>Action by:</b>	<b>ANS Providers</b>		
<b>Description &amp; purpose:</b>	Supply the NM/ETFMS with flight data related updates that are only available shortly before departure. The DPI is used to supply the NM with the taxi-time and SID per flight and with the Take-Off Time based upon the departure sequence.		
	<a href="#">Note :This SLoA is similar to AOP05-APO05 "Define and implement the exchange of messages, Flight Update Message (FUM) and Departure Planning Information (DPIs) between NM and the airport in accordance with Airport CDM manual guidelines". However AOP05-APO05 concerns the full CDM implementation while FCM01-ASP08 is intended for the implementation of "Advanced - Tower" systems.</a>		
<b>Specific applicability:</b>	<a href="#">Airports that can provide DPI data with the required accuracy, IFR/GAT only.</a>		
<b>Finalisation criteria:</b>	1 - Reception of the DPI messages by NM has been ensured.		
<b>FCM01-AGY01</b>	<b>Implement ETFMS Phase 1A</b>	<b>From:</b> 01/01/2000	<b>By:</b> 31/12/2001
<b>Action by:</b>	<b>EUROCONTROL Agency</b>		
<b>Description &amp; purpose:</b>	Integrate correlated position data in ETFMS profiles and use it for slot allocation; implement entry node communication; perform operational evaluation.		
<b>Finalisation criteria:</b>	1 - Reception of first correlated position data on the ETFMS operational system.		
<b>FCM01-AGY02</b>	<b>Implement ETFMS Phase 1B</b>	<b>From:</b> 04/07/2014	<b>By:</b> 31/03/2002
<b>Action by:</b>	<b>EUROCONTROL Agency</b>		
<b>Description &amp; purpose:</b>	Integrate METEO data in ETFMS profile calculation.		
<b>Finalisation criteria:</b>	1 - Successful installation of CFMU 8.0 release.		
<b>FCM01-AGY03</b>	<b>Implement ETFMS Phase 1C</b>	<b>From:</b> 04/07/2014	<b>By:</b> 31/03/2003
<b>Action by:</b>	<b>EUROCONTROL Agency</b>		
<b>Description &amp; purpose:</b>	Improve route extrapolation, additional counts and other improvements.		
<b>Finalisation criteria:</b>	1 - To be defined.		
<b>FCM01-AGY04</b>	<b>Implement ETFMS Phase 2</b>	<b>From:</b> 04/07/2014	<b>By:</b> 31/03/2004
<b>Action by:</b>	<b>EUROCONTROL Agency</b>		
<b>Description &amp; purpose:</b>	Redistribution of ETFMS data to Service Providers. This may include the transmission of the Flight Update Message (FUM) to ANSPs.		
<b>Finalisation criteria:</b>	1 - Transmission of ETFMS data by the ETFMS operational system to the first ANSP.		