NMD/NOM/NMOC	Operational Instruction						Permanent	Doc. ID: OI/25-002
Issued on: 15/01/2025 By: WOO	Subject **IFPS Message Distribution to ETFMS Update to the IFPS User Manual and ATFCM Operations Manual**						Validity From:25/02/2025 To: UFN	NOP Portal: Yes Briefing: No
Applicability	AD		FM	✓	FP	✓	**TLP status**	**White**

1. Introduction

IFPS functionalities will be merged into ETFMS as of iNM Wave2.1 (4 Nov 2025), delivering a Single Flight Database (SFDB) merged Product.

Today, IFPS distributes flights to ETFMS up to a maximum of 2 days before the EOBT of the flight. Before Wave2.1 transition, we must immediately send flights to ETFMS to ensure database synchronisation.

To prepare for the SFDB migration, flights will be sent from IFPS to ETFMS up to 5 days in advance of the flight EOBT.

The Change will be introduced as part of iNM_Wave1.1 (25 Feb 2025).

The purpose of this OI is to communicate the updates to the IFPS User Manual and ATFCM Operations Manual.

2. Update to the IFPS User Manual – Section 5

5 MESSAGE DISTRIBUTION BY THE IFPS

(1) General

One of the aims of IFPS is the distribution of flight plans and associated messages. The distribution has three main components:

- Via AFTN/IATA type-B
- Via NM B2B Services (Publish/Subscribe principle)
- Internal to ETFMS

Each component has its own specificities (timing, format, etc…) which are described hereafter.

Distribution via AFTN/IATA type-B:

The IFPS builds a four-dimensional profile.

This profile is constructed for several purposes, one of which is to calculate those airspaces that flight shall penetrate, and therefore to identify which air traffic services units shall require a copy of the flight plan or any associated messages for that flight. In identifying all the relevant ATCUs, the IFPS shall calculate at what time prior to the arrival of that flight in any of those airspaces to send the flight data to that controlling ATCU. The time parameter in this calculated distribution of messages is a time specified by each ATCU and held in the NM CACD.

The distribution of messages according to the specified times for each airspace shall depend upon how far in advance of the EOBT of the flight plan or associated messages are submitted to the IFPS for processing.

Where a flight plan is filed sufficiently in advance of the EOBT of that flight, the IFPS shall calculate a timed distribution of that message to the ATCUs along the trajectory of that flight and shall distribute that flight plan at the time specified by each unit.

In the event of a late-filed flight plan or associated message, the IFPS may send that message out to all the relevant ATCUs immediately; as such, messages may arrive in the IFPS within the required receipt time of the relevant ATCUs.

The distribution of messages is done in the preferred format as specified by the recipient (info held in the NM CACD). The preferred format may be set to ICAO or ADEXP. When the address is unknown in NM CACD, then by default, messages are distributed in ICAO format.

Should an associated message cause a change in the trajectory of an existing flight that has already been distributed to the relevant ATCUs along the route, to the extent that the flight is re-routed out of some airspaces and into new ones, the IFPS shall send a modification message (CHG) to those airspaces within which the trajectory of the flight has altered, and a flight plan to those previously-unaddressed airspaces that will handle that flight on any part of the revised trajectory.

When the flight plan data source is eFPLs (FIXM format) and the recipient wishes to receive eFPLs, then the recipient shall use the NM B2B Publish/Subscribe services. Further details can be found in the appendix FF-ICE, eFPL Distribution.

Should an associated message cause a change in the trajectory of an existing flight that has already been distributed to the relevant ATCUs along the route, to the extent that the flight is re-routed out of some airspaces and into new ones, the IFPS shall send a modification message (CHG) to those airspaces within which the trajectory of the flight has altered, and a flight plan to those previously-unaddressed airspaces that will handle that flight on any part of the revised trajectory.

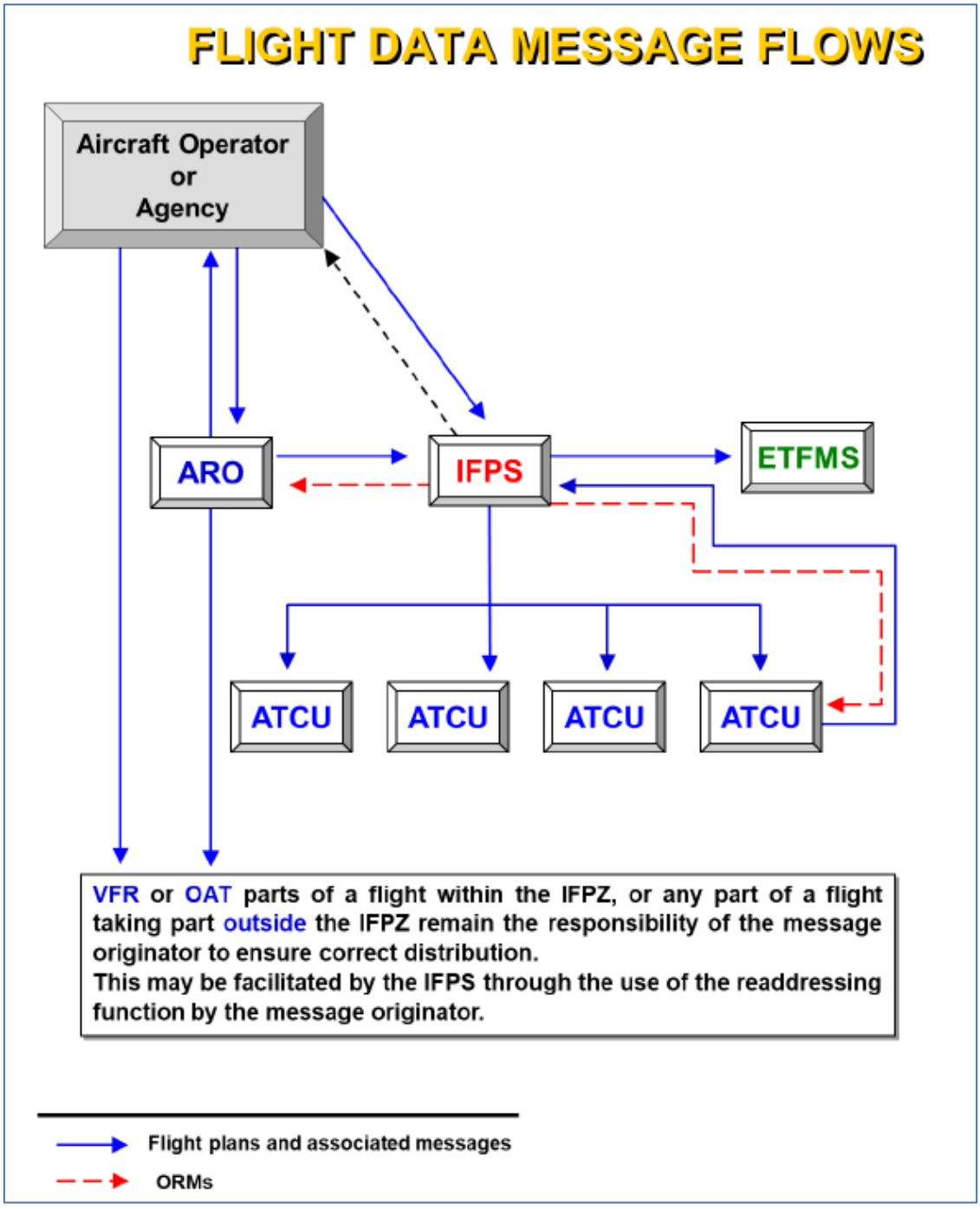

Figure 1 – Flight Data Message Flows

The IFPS shall not process those flight plans that indicate only VFR or OAT conditions, however, where a flight plan is submitted for a flight that is IFR/GAT-iOAT, then the IFPS shall process that part or parts of that flight plan. For mixed IFR/VFR and GAT/OAT flight plans, the IFPS shall only calculate the addressing for the distribution of that flight plan within the part or parts that are planned to operate as IFR/GAT-iOAT; it shall not calculate any addressing for distribution to those parts of a flight that are planned to operate under VFR or as OAT (non iOAT).

However, where the departure or destination aerodrome is an identifiable ICAO indicator, and the flight is planned to depart or arrive under VFR conditions, the IFPS shall include that departure or destination aerodrome in the message distribution, where that aerodrome has a specified requirement to receive such flight data messages from the IFPS.

After a VFR portion, the current level of the flight is not known at the point where the flight returns to IFR. To ensure that flight plan messages are addressed to all ATC units that may be impacted by the flight, the IFPS shall address all the AUAs from ground to the current RFL at the point where the flight changes to IFR.

The IFPS shall only automatically distribute messages to those addresses within the IFPZ area for those flights or parts thereof operating under IFR as GAT/iOAT. Where an IFR/GAT flight exits the IFPZ at any point or points, the IFPS shall not automatically include the addresses of any ATCUs relevant to that flight that are external to the IFPZ (see Note below for some exceptions) unless they have been specified by the message originator in the re-addressing function or have special arrangements for the copy of flight plan messages agreed with EUROCONTROL.

Note NM has agreed to distribute a copy of flight plans it receives that penetrate Rostov, Kaliningrad or Belarus airspaces. These messages shall be output to the addresses UUUWZDZX (for Rostov and Kaliningrad) and to UMMMZDZX (Belarus), with any necessary further distribution within that airspace being undertaken by the Rostov, Kaliningrad or Belarus authorities. AOs have still the legal responsibility to ensure that all flight plans and associated messages for flights within Rostov, Kaliningrad and Belarus airspaces are being addressed to the appropriate ATC Units responsible for these flights.

It should be noted that IFPS shall not automatically distribute flight plan and associated messages to any specified alternate aerodrome(s). Should a message originator require a flight plan or associated message to be sent to the alternate destination aerodrome(s), then the message originator should use the re-addressing function and insert the relevant AFTN addresses [see section RE-ADDRESSING].

It should be noted that on processing an arrival message, the IFPS shall distribute that message only to the aerodrome control tower, approach and ATS reporting office of the aerodrome of departure and en-route ATCUs, where the units have specified a requirement to receive such messages and is located within the IFPZ. The IFPS shall also send a copy of the arrival message to any addresses included in the re-addressing function. Diversion arrival messages are distributed to all recipients of the initial FPL, not taking into consideration of the unit's requirement to receive ARR messages.

It should be noted that under specific conditions, the NM may create departure messages and distribute them to ATS units outside of the IFPZ. For more details [see section Departure (DEP)].

Airborne messages; those messages affecting a flight in progress; processed by the IFPS shall only be distributed by the IFPS to those affected ATCUs downstream of the unit submitting the message; the unit submitting the airborne message shall not be sent a copy of the processed message, other than an ORM.

Both the Kaliningrad and Rostov FIRs are not considered to be within the IFPZ, and although messages are sent by the IFPS to the Kaliningrad and Rostov FIRs, they are only copies that are sent to a central address from which domestic distribution is made by the relevant authorities.

The Department of Aviation of the Ministry of Transport and Communications of the Republic of Belarus has an agreement with EUROCONTROL to enable the provision of flight plan messages to Minsk ACC in order to improve the completeness and accuracy of flight plan information held by Minsk ACC and the Flight Planning Unit of Minsk ACC.

Distribution via NM B2B services:

The distribution of flight data via the NM B2B services follows the publish/subscribe mechanism: the information is published as soon as it becomes available or at least with no significant delay. Therefore, all the information about timing/time parameter depicted under the distribution via AFTN/IATA type-B is not applicable to NM B2B services.

The flight data can be received either in the NM B2B format or in FIXM format.

For more details on NM B2B services please go to NM B2B Services - Home (sharepoint.com)

Distribution to ETFMS:

The IFPS shall also send a copy of each processed message to the ETFMS in order that any relevant flow management restrictions may be applied to that flight as appropriate. The time parameter specified by the ETFMS for distribution of messages by the IFPS is set at 120 hours in advance of EOBT.

All associated messages shall also be transmitted by the IFPS to the ETFMS to maintain a real picture of that flight and any impact it may have on flow management.

Message distribution from IFPS to ETFMS is in ADEXP format.

3. Update to the ATFCM Operations Manual – Annex A, 12.1

Annex A: Flight Data

12.1 Flight Data Information

All flight plans for IFR/GAT flights or parts thereof intending to operate within the IFPZ shall be submitted to the IFPS for processing. When a message submitted to the IFPS for processing has been acknowledged, the IFPS shall send a copy to the ETFMS, at the earliest 120 hours before EOBT.

The IFPS shall build a four dimensional profile for every flight, based on the profile calculated from the flight plan. Where an associated message is processed, the existing profile shall be re-calculated, incorporating the revised data held in that associated message e.g. DLA, CHG, CNL and DEP.

Note: The IFPS invalidates DLA and CHG messages that indicate a negative EOBT (an EOBT that is earlier than the current EOBT) or changes greater than 20 hours in the future.

Note: Where the IFPS shall invalidate DLA / CHG messages that indicate a new EOBT that becomes in the past compared to the current system time (as a result of manual processing delays), those messages will be invalidated with the error message:

'EFPM223: EOBT IN THE PAST COMPARED TO IFPS SYSTEM TIME'

ATC may also send messages to ETFMS to update the flights according to ATC events.

Some AOs are sending Aircraft (operator) Position Report (APR) messages to ETFMS. APR messages will be sent for long haul flights departing outside the NM area and which are planned to enter the NM area (i.e. all departures excluding the one's from E*, L* and GC*).

The APR message is expected to be sent 2 to 3 hours before the flight enters the NM area and contains estimate of the arrival time (ETA) of the flight or actual times over geographical positions at a distance from the NM area.

This data will then be used by the ETFMS to update the current flight model (CTFM) of the flight and also all other times (ETOs) in the flight profile are updated accordingly.

Upon the flight's entry into the NM area, the flight's profile is then updated by FSA and CPR messages where applicable.

Where a flight plan is found to be missing ATC shall send an ATC FPL Proposal (AFP) message to the IFPS providing the information for this flight.

The result for the IFPS is called APL (ATC FPL) and is distributed to all ATC Units. The same may apply when a route is changed by ATC once the flight is airborne. Then it is called an ATC Change (ACH).

Flight Notification Message (FNM) from Gander and Message From Shanwick (MFS) are messages that are received for trans-Atlantic flights which provide an estimate for the oceanic exit point. These estimates are also used by the ETFMS to update flight profiles.

Note: An internal NM model for terminal procedures have been aligned to AIXM. Namely, NM supports an additional terminal procedure type - Instrument Approach Procedure (IAP). IAP starts at the Initial Approach Fix (IAF) and ends at the RWY. Old terminal procedure model are still supported for backwards compatibility reasons. Having IAP in NM systems, will increase precision of the flight trajectory calculations and landing time estimation.

The close time of a flight in IFPS shall either be upon successful processing of an arrival message, 2 hours after the flight is terminated in the ETFMS, or, 8 hours after the total Estimated Elapsed Time (EET) of that flight; whichever comes first.

Head of NMOC