

**AIC A-07 / 01. Updating of the Central Flow Management Unit (CFMU) System, March/April 2001 (*Ændring af flyveplan- og TACT meldinger*)**

*(Denne AIC udgives kun på engelsk da den henvender sig til brugere der flyver efter Instrument Flyve Reglerne (IFR). Den af Statens Luftfartsvæsen udgivne publikation af marts 1998, "Vejledning vedrørende Flyveplaner og AFTM TACT-meldinger" vil blive opdateret senere)*

**1. Introduction****1.1 General**

This AIC describes the new or modified functions that will be delivered in the CFMU 7.0 software release scheduled for implementation in March/April 2001. The objective is to provide users of the Central Flow Management Unit (CFMU) Systems with advance notice of modifications that will have an impact upon their operational procedures and/or systems.

The CFMU 7.0 version does not comprise one single major development, but includes several changes arising from different sources including the CFMU Development Plan, requests from the different users of the system or from the European Air Traffic Management Programme (EATMP) developments.

The main change in the CFMU 7.0 is the start of the implementation of the Enhanced Tactical Flow Management System (ETFMS). This major modification of the Air Traffic Flow Management (ATFM) process will not be visible to the outside world until the Air Navigation Service Providers starts to provide real time flight position report data. This is planned to start at the end of 2001.

The ETFMS will have a large impact on the ATFM quality of service, by improving the protection of the Air Traffic Control Units (ATCUs) and by reducing the delays for the airspace users.

Amongst the major visible modifications are:

- Direct (DCT) limits per Flight Information Region/Upper Flight Information Region (FIR/UIR).
- Implementation of a warning mode in Operational Reply Messages (ORM) due to implementation in Europe/EUR of the Reduced Vertical Separation Minimum (RVSM).
- Modification to the syntax of the Slot Allocation Message (SAM), the Slot Revision Message (SRM) and the Flight Shift Message (FSH).
- Internet access in "read only" mode.

Reference AIP Denmark (ENR 1.9) and the CFMU Handbook.

The new functions are described for each CFMU System.

**2. Integrated Initial Flight Plan Processing System (IFPS) – Implementation 2 April 2001****2.1 Make DCT Limit per FIR/UIR**

Each FIR will have the potential for a maximum DCT limit to be specified (default 200 NM). In addition, an attribute will be introduced to specify that DCTs are not permitted across a FIR/UIR boundary, where such a requirement exists.

**2.2 European Reduced Vertical Separation Minimum (RVSM)**

Full detail of EUR RVSM implementation can be found on the EUROCONTROL web site. The implementation of CFMU 7.0 prepares the CFMU Systems for full implementation of EUR RVSM. In particular, during 2001 checks will be made for the RVSM approval in FPLs ("W" in FIELD 10) versus penetration of designated EUR RVSM airspace.

**In the first Phase (end November 2000 – January 2002):**

- Collection of CFMU data to monitor equipage rate following the requirement for AOs to insert "W" in FIELD 10a of the FPLs for appropriately approved aircraft.

**In the second Phase (April 2001 – October 2001):**

- Warnings will be output in the Integrated Initial Flight Plan Processing System (IFPS) Operational Reply Message (ORM) if IFPS detects that a Non-RVSM approved aircraft would incorrectly penetrate EUR RVSM airspace once the RVSM rules become fully operational.

**In the third Phase (October 2001 – January 2002):**

- In addition to the warning provided in Phase 2, several new additional warning texts will be output in IFPS ACK messages if a potential violation of any of the IFPS checking rules against EUR RVSM is detected.

**In the fourth Phase (from January 2002 onwards):**

- IFPS may invalidate a flight plan that does not comply with the EUR RVSM requirements.

**3. Repetitive Flight Plan (RPL)**

None of the changes planned for the Repetitive Flight Plan (RPL) System will have an impact for external users.

**4. CFMU – Tactical System (TACT) - Implementation 28 March 2001****4.1 ETFMS Phase 1A**

The first Phase of the Enhanced Tactical Flow Management System (ETFMS) will be implemented with the CFMU 7.0 release. ETFMS is an upgrade of the present TACT – Computer Assisted Slot Allocation (CASA) System, which will enable the system to take into account the real time position of the flights once airborne. The main functions that are developed within this first phase are:

- Use of real time position data to update the flight plan profile in TACT.
- Optimisation of the slot allocation process using the real time updates of the flights. Late departure notification or modification of the airborne path through position reports will be used to improve Ready Message (REA) flights and other non-departed flights with the current Slot Improvement Proposal Message (SIP)/Slot Revision Message (SRM) procedures and messages.
- Improve accuracy of the counts and flight lists on Remote Client Application (RCA)/Remote Terminal Access (RTA) and TACT workstations to reflect the current and future position of the flights.

**4.2 Consistency in Slot Messages**

When small modifications of the Calculated Take-Off Time (CTOT) are taking place, CFMU terminal displays are updated but SRMs are not sent, creating confusion on the real CTOT. The process will improve the consistency between slot messages and RCA displays to prevent such discrepancies.

### 4.3 Modification of the Most Penalising Regulation

When the most penalising regulation changes, for whatever reason, an SRM will be issued to inform the AO and the concerned ATC Units. If the change does not affect the CTOT then, within the SRM issued, only the fields –REGUL and –REGCAUSE will be modified, all the other fields will contain the same information as provided in the previous SAM/SRM. The benefit is a better understanding of the cause of the ATFM delay.

### 4.4 Modifications in the Slot Revision Process

When modifications for individual flights or for regulations are made by the CFMU, some flights may be unduly delayed by the system. The purpose of the modification is to provide tools to the CFMU – Flow Management Division (FMD) controller in order to prevent such occurrences.

### 4.5 Miscellaneous Improvements in Low Visibility Situations

In some special situations, the process was not working as expected (slots are kept booked on receipt of non-compliant Runway Visual Range (RVR)). Corrective actions will be implemented to improve the process.

### 4.6 Modification of the SAM, SRM and FSH Messages

When a flight is shifted and regulated only the SAM/SRM is issued. As there is no clear evidence of the reason of the shift and the subsequent CTOT, the New Estimated Off-Block Time (NEW-EOBT) and, optionally, the New Estimated Off-Block Date (NEW-EOBD) fields will be added indicating that the CTOT is based on an Estimated Off-Block Time (EOBT) provided by the CFMU. In addition, when the shift is due to an insufficient RVR, the RVR field will be added in SAM/SRM and a Flight Shift Message (FSH) indicating the minimum RVR required as currently provided in the Flight Suspension Message (FLS).

## 5. Remote Client Application (RCA) - Implementation 28 March 2001

### 5.1 Shortcut Keys on RCA

Shortcut key functions will be implemented to access displays instead of using the pull-down menus.

### 5.2 Improvement in the AOWIR Access

AOWIR will be available for "Trial" of a new routing 6h00 prior to the EOBT.

It will be available for "Apply" 3h00 before the EOBT.

### 5.3 Display Aerodrome Parameters

The value of the following parameters will be available for aerodromes:

- TAXITIME
- TRS (Time to Remove from the Sequence)
- TIS (Time to Insert in the Sequence)

They will be shown together with their periods of validity. International Air Transport Association (IATA) code of the airports will also be shown.

### 5.4 Filling and Sorting of the ANM

Functions will be developed in order to ease the access to individual parts of the ANM (FMP, name, ...).

### 5.5 Access to the CFMU Systems via the Internet Site

The CFMU data will be accessible via the Internet. The available applications will be a subset of the RTA ones:

- Departure Flight List
- Arrival Flight List
- Regulation Flight List
- ARCID Flights
- Flights
- CRAM
- AIM List
- ANM Display
- ANM List
- CASA Messages

This access will be restricted to authorised users only. Further information will be communicated in due time on the way and conditions to access.

## 6. Route Catalogue

Some improvements will be made to the way the Route Catalogue is managed providing an increase in the number of routes available. None of the modifications will affect the user systems.

## 7. Further Information

Further information and documentation can be obtained from:

EUROCONTROL – CFMU  
User Relations Bureau  
96, rue de la Fusée  
B-1130 Brussels  
FAX: +32 2 729 91 89  
E-mail: [cfmu.opsdoc@eurocontrol.be](mailto:cfmu.opsdoc@eurocontrol.be)

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