

International Civil Aviation Organization



**THE FIRST MEETING OF AERONAUTICAL
COMMUNICATION SERVICE(ACS)
IMPLEMENTATION CO-ORDINATION GROUP
OF APANPIRG (ACSICG/1)**



Seoul, Republic of Korea, 13-16 May 2014



Agenda Item 4: Review States' ATN/AMHS Implementation Status, Transition and Operational Issues

EUROCONTROL AMC DATABASE UPGRADE PLAN

(Presented by AEROTHAI, Thailand)

SUMMARY

This paper presents the EUROCONTROL plan to upgrade the AMC Database for the MTS (message lifetime timer) at the end of MAY 2014.

1. Introduction

1.1 Message lifetime timers in the EUROCONTROL AMC database indicate the time during which a message or report is stored for transmission retry. When the timer expires the message is rejected by the MTA and a non-delivery report is generated. There are four distinct message lifetime timers. Three of the lifetime timers are set for each message priority lever (Urgent, Normal, Non-urgent), and one lifetime timer is for reports. The timers are set in minutes and the present maximum value is 5760 which corresponds to 4 days.

1.2 Refer to The Aeronautical Communication Panel (ACP) 20th Meeting of Working Group M (Maintenance) Montréal, Canada, 23-25 January 2013 Agenda Item 3: ATN/OSI Document 9880 Update Status, information paper 07 (IP07): AMHS - Recommended setting of MTS timers. IP07 recommends new settings as follows:

Message priority	Message lifetime
Urgent	168 hours (7 days)
Normal	168 hours (7 days)
Non-urgent	168 hours (7 days)
Report	168 hours (7 days)

Table 1: Recommended Message Lifetime per priority

IP/07 notes that recommended value for the message lifetime should ensure that:

- Temporary communication failure / maintenance action do not cause timer expiry;
- Direct Users do not receive unnecessary NDR (if values too small);
- Message lifetime does not conflict with ‘latest delivery’ (optional Element of Service)

1.2 The EUROCONTROL AMC Database plan is to upgrade the program concerned with AMHS Capabilities (Message Lifetime) according to the recommended values at the end of MAY 2014. The maximum value will be extended to 10080 (corresponds to 7 days).

2. Action by the Meeting

2.1 The meeting is invited to note the information contained in this paper.

ATTACHMENT/ANNEX/FIGURES

- A. IP/07: AMHS - Recommended setting of MTS timers.
Agenda Item 3: ATN/OSI Document 9880 Update Status.
The Aeronautical Communication Panel (ACP) 20th Meeting of Working Group M
(Maintenance) Montréal, Canada, 23-25 January 2013



INFORMATION PAPER

AERONAUTICAL COMMUNICATIONS PANEL (ACP)

20th MEETING OF WORKING GROUP M (Maintenance)

Montréal, Canada, 23-25 January 2013

Agenda Item 3: ATN/OSI Document 9880 Update Status

AMHS - Recommended setting of MTS timers

(Presented by Jean-Marc Vacher, France)

SUMMARY

This paper aims at informing ACP WG-M about the recommended setting of MTS timers for AMHS, which has been agreed in Europe and is in process of being entering in the EUR AMHS Manual (ICAO EUR Doc 020).

The AFSG/Operations Group (OG) and Planning Group (PG) supported the proposal to set the timer for the MTS message lifetime to 7 days in order to avoid an expiry of AMHS messages during normal queuing. This should ensure that:

1. temporary communication failure / maintenance action do not cause timer expiry;
2. Direct Users do not receive unnecessary NDR (if values too small);
3. message lifetime does not conflict with 'latest delivery' (optional Element of Service).

This recommended timer setting ensures that in normal situation no NDR is generated with diagnostic code 'maximum-time-expired'. Any AMHS COM Centre operator can act in accordance with the procedures, when a message queue is detected.

The related change proposal to the EUR AMHS Manual is attached to this IP. Considering that a global approach could be beneficial for consistency of AMHS operation worldwide, this information is also presented for information to WG-M.

ACTION

The working group is invited to note the information provided.

CP-AMHSM-12-007

Title: Recommended setting of MTS timers

Reference: CP-AMHSM-12-007

Originator reference: CP-AMHSM-12-xxx_MTS timer settings.doc

Submission date: 28/08/2012

Submitting State/Organization: AFSG Operations Group

Author: Roland Elentner, Austria
(in coordination with the OG Rapporteur)

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Experts involved:

Status: RESOLVED

Priority: LOW

Document reference: EUR AMHS Manual, v7.0

Description of defect: Currently, there is no guidance how to configure the MTS timer in the AMHS in EUR/NAT Region. Due to the consequences for AMHS operations the Operations Group proposed to set the MTS message lifetime equally in each MTA with a predefined value of 7 days. This recommendation should be documented in a specific Section of the EUR AMHS Manual.

Assigned expert(s): Operations Group, Planning Group (including Manufactures)

Task history:

20/06/2012 At the first Operations Group meeting after AFSG/16 Austria presented a WP concerning the relation between NDRs and MTS timer settings. The Group supported the proposal to set the timer for the MTS message lifetime to 7 days in order to avoid an expiry of AMHS messages during normal queuing. It was proposed to document the values in the EUR AMHS Manual.

27/06/2012 The Planning Group supported the OG's proposal and asked the OG to draft a CP for inclusion of the proposed MTS timer values into the EUR AMHS Manual.

28/08/2012 The CP was submitted to the Operations Group for comments and forwarded to the Planning Group for further processing.

19/09/2012 At its 48th meeting the Planning Group noted the CP created by the Operations Group and set to status 'accepted'. The Planning Group members were invited to review and comment the CP to the next meeting.

13/12/2012

At its 49th meeting the Planning Group noted that no further comments were received so far and set the CP to status 'resolved'.

Proposed solution:

Following new Section should be inserted in the EUR AMHS Manual:

8.3 Recommended setting of timers

8.3.1 Message related timers

8.3.1.1 MTS Timer related to Message lifetime

8.3.1.1.1 If the MTS (Message Transfer Service) cannot deliver a message within a determined period of time, a NDR will be returned to the originator.

8.3.1.1.2 If this timer is different per priority and potentially different at each MTA an AMHS user will receive NDRs depending on the different settings which could confuse him due to the unpredictable behaviour and could result in an inaccurate NDR handling.

8.3.1.1.3 In order to ensure that the behaviour of the MTS is predictable it is recommended that every MTA in the AMHS network should use the same timer values. The following values of the message lifetime are recommended:

Message priority	Message lifetime
Urgent	168 hours (7 days)
Normal	168 hours (7 days)
Non-urgent	168 hours (7 days)
Report	168 hours (7 days)

Table 1: Recommended Message Lifetime per priority

8.3.1.1.4 This recommended value for the message lifetime should ensure that:

- temporary communication failure / maintenance action do not cause timer expiry;
- Direct Users do not receive unnecessary NDR (if values too small);
- message lifetime does not conflict with 'latest delivery' (optional Element of Service);

8.3.1.1.5 This recommended timer setting ensures that in normal situation no NDR is generated with diagnostic code 'maximum-time-expired'. Any AMHS COM Centre operator can act in accordance with the procedures, when a message queue is detected.

8.3.1.2 Usage of the Latest Delivery Time

8.3.1.2.1 As outlined in Doc 9880 the Element of Service "latest delivery time" should never be set in a MTCU.

8.3.1.2.2 Furthermore, it is recommended not to set this parameter in an UA by default.

8.3.2 Network related timers

Tbd.