



ICAO

*International Civil Aviation Organization***Twenty Sixth Meeting of the Communications/  
Navigation and Surveillance Sub-group (CNS SG/26) of  
APANPIRG**

Video Tele-Conference, 5 – 9 September 2022

**Agenda Item 3:** Aeronautical Fixed Service (AFS)

3.3 Other AFS related issues

**ATS MESSAGING MANAGEMENT CENTRE (AMC) UPDATING**

(Presented by the Secretariat)

**SUMMARY**

This paper presents the main points of State Letter Ref.: EUR/NAT 22-0239.TEC (NIA/SAN) and the action required by the letter regarding the Management and update of Air Traffic Services (ATS) Message Handling System (AMHS) address and routing information.

**1. INTRODUCTION**

1.1 A State Letter with Ref.: EUR/NAT 22-0239.TEC (NIA/SAN) dated 29 June 2022 was issued by the ICAO European and North Atlantic Office (EUR/NAT) regarding the *Management and update of Air Traffic Services (ATS) Message Handling System (AMHS) address and routing information*.

1.2 This State Letter was distributed to the States accredited to ICAO EUR/NAT as well as other ICAO Regional Office for further distribution to the States in regions. ICAO APAC Office forwarded the State Letter through [apac@icao.int](mailto:apac@icao.int) for attention and action.

**2. DISCUSSION**

2.1 ATS Messaging Management Centre (AMC) is implemented by EUROCONTROL in 2007 to provide off-line network management services in support of the ground ATS Messaging network of Air Navigation Service Providers (ANSPs). The key functions of the AMC are address management and routing management. AMC integrates the Aeronautical Fixed Telecommunications Network (AFTN), the Common ICAO Data Interchange Network (CIDIN) and the ATS Message Handling System (AMHS) to transparently deliver operational ATS Messages on a global basis.

2.2 AEROTHAI on behalf of the Asia/Pacific COM Centres performs as the regional focal point to update the AFTN/AMHS information via AMC website based on the AIRAC cycle.

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2.3 There are 50 COM Centres registered in the AMC in EUR/NAT Regions with AMHS capabilities as well as 85 COM Centres registered outside of the EUR/NAT Regions. In APAC, 26 COM Centres in 23 States/Administrations established AMHS connections (refer to WP05 of ACSICG/9, and WP/06 of this CNS SG/26 ).

2.4 Since the introduction of global routing, there had been good participation from External COM Centres (States outside the ICAO EUR Region), and the AMC encouraged external COM Centres to continue to participate in the AMC operation.

2.5 It was highlighted that with the introduction of IWXXM, FTBP capabilities are of greater importance to the AFS. In this regard, all COM Centres were invited to update their FTBP capabilities information under the AMC Network Inventory section.

2.6 It was noted that some COM centres outside of the EUR Region have not uploaded the correct addressing tables in accordance with the AMC cycle. In this regard, it was recalled that the ICAO State Letter Ref.: AN 7/49.1-09/34 dated 14 April 2009 (Management and update of air traffic services (ATS) message handling system (AMHS) address information) should be re-iterated.

2.7 After coordination with ICAO HQ, the ICAO European and North Atlantic Office issued this State Letter with Ref.: EUR/NAT 22-0239.TEC (NIA/SAN) dated 29 June 2022 regarding the *Management and update of Air Traffic Services (ATS) Message Handling System (AMHS) address and routing information*, which is provided in **Appendix A** to this paper.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) ensure the international COM Centres in States:
  - are registered via <https://www.eurocontrol.int/tool/air-traffic-services-messaging-management-centre> as AMC users;
  - Participate regularly in the AMC procedures for AMHS Address and Routing Management as outlined in the EUR ATS Messaging Management Manual (EUR Doc 021).
- c) discuss any relevant matter as appropriate.

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*When replying please quote*

Reference : EUR/NAT 22-0239.TEC (NIA/SAN)

29 June 2022

Subject : **Management and update of Air Traffic Services (ATS) Message Handling System (AMHS) address and routing information**

Action required : Para 3 refers

Dear Madam/Sir,

1. I wish to refer to the outcome of the Fourth meeting of the ICAO EASPG Programme Coordination Group (PCG), related to the global management of the Air Traffic Services (ATS) Message Handling System (AMHS).

2. In this regard, I would like to draw your attention to the ICAO State letter AN 7/49.1-09/34, dated 14 April 2009 (**Appendix A** refers), which stated that:


- a) ICAO will utilize the European ATS Messaging Management Centre (AMC), provided by EUROCONTROL, to coordinate the allocation and management of AMHS addresses;
- b) All States are invited to designate representatives to register as AMC users; and
- c) ICAO, in cooperation with EUROCONTROL, has established procedures for the coordination and synchronization of AMHS addresses.

3. In order to maintain a safe and reliable global ICAO AFTN/AMHS Network, States are invited to ensure that their international COM Centres:

- a) are registered via <https://www.eurocontrol.int/tool/air-traffic-services-messaging-management-centre> as AMC users, and
- b) Participate regularly in the AMC procedures for AMHS Address and Routing Management as outlined in the EUR ATS Messaging Management Manual (EUR Doc 021).

Yours faithfully,

Appendix A- ICAO State letter AN 7/49.1-09/34

  
Elkhan Nahmadov  
2022.06.29  
13:16:31 +02'00'

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Regional Director  
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Ref.: AN 7/49.1-09/34

14 April 2009

**Subject:** Management and update of air traffic services (ATS) message handling system (AMHS) address information

**Action required:** Register a COM Centre representative to become a user of the ATS messaging management centre (AMC) using the procedures outlined in Attachment B

Sir/Madam,

1. I have the honour to invite your attention to a recent development regarding the global management of the emerging air traffic services (ATS) message handling system (AMHS). The methods and procedures outlined in this letter will become important to those involved in the planning and operation of your message switching systems.

2. The transition from the ageing aeronautical fixed telecommunication network (AFTN) to the AMHS is under way and continuing at a good pace. For the orderly operation of the AMHS on a global scale, it is necessary to coordinate and synchronize the allocation of AMHS addresses. In response to this, ICAO, in cooperation with the European Organisation for the Safety of Air Navigation (EUROCONTROL), has established procedures for the coordination and synchronization of AMHS addresses in the short- to medium-term.

3. Before discussing the procedures, I would like to provide you with the background to this development. State letter SP 54/1-03/39, dated 30 May 2003, sought input from States and interested international organizations, to allow ICAO to establish the AMHS Management Domains and Addressing Information Register. This register has now been established and is now available on the ICAO-Net, at the following URL: [www.icao.int/anb/panels/acp/amhs/amhs.cfm](http://www.icao.int/anb/panels/acp/amhs/amhs.cfm).

4. With the register established, a means of address coordination was necessary. At the forty-ninth meeting of the European Air Navigation Planning Group (EANPG), two conclusions were reached which dealt with the following:

**Conclusion 49/23 – AMHS Address Coordination**

That ICAO be invited to utilize the European ATS Messaging Management Centre facility at the earliest opportunity, in support of the initial AMHS implementation and based on the proposed draft AMHS address coordination procedures between the ICAO AMHS MD Register and the ATS Messaging Management Centre.

**Conclusion 49/24 – AMHS Messaging Management Centre Users**

That ICAO be invited to address States outside the ICAO EUR Region to register with the ATS Messaging Management Centre as external COM centre operators, as soon as possible.

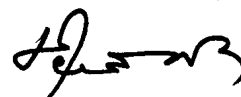
5. This State letter is a response to the EANPG conclusions above. In the short- to medium-term, ICAO will utilize the European ATS Messaging Management Centre (AMC), provided by EUROCONTROL, to coordinate the allocation and management of AMHS addresses. All States are therefore invited to designate representatives to register as AMC users using the procedure described in Attachment B.

6. The procedures for AMHS address coordination through the AMC are given in Attachment A. Users need to be trained before they are actually allowed to enter data in the AMC (<http://www.eurocontrol.int/amc>). A two-day training session will be delivered from 3 to 4 June 2009 (free of charge) to all registered users. The training session will be held at the EUROCONTROL Institute of Air Navigation Services (IANS), located in Luxembourg.

7. All States and/or ANSPs, operating international COM Centres, with the intention of implementing AMHS in the foreseeable future, should engage themselves into the AMHS address coordination process without delay.

8. For the long-term, a truly global method of AMHS address management will be required. Staff within the CNS/AIRS Section of the Air Navigation Bureau will take the necessary action to develop appropriate recommendations for the establishment of management centres in the ICAO Regions and also the cooperation between such centres.

Accept, Sir/Madam, the assurances of my highest consideration.



Taïeb Chérif  
Secretary General

**Enclosures:**

- A — Proposed short-term procedures for global AMHS address coordination
- B — Registration procedure

**PROPOSED SHORT-TERM PROCEDURES FOR  
GLOBAL AMHS ADDRESS COORDINATION**

*(Based on Appendix O to the EANPG/49 Report)*

**1. INTRODUCTION**

1.1 This paper was developed by the air traffic services (ATS) message handling system (AMHS) Inter-Regional Coordination Team (in short, the IRC Team) formed to address inter-regional air traffic services (ATS) message handling system (AMHS) issues under coordination by the ICAO European and North Atlantic Office (Paris) (EUR/NAT) Office, with the endorsement of the European Air Navigation Planning Group (EANPG).

1.2 The IRC Team action plan included, as part of the definition of short-term working arrangements for the global use of the ATS messaging management centre (AMC) for the AMHS Management Domain (MD) Register, draft procedures to be developed for global AMHS address management in the short term using AMC<sup>1</sup>.

1.3 The AMC is a concept defined in the *ATS Messaging Management Manual* (ICAO EUR Doc 021), for the off-line management of the integrated, heterogeneous messaging environment made of the aeronautical fixed telecommunication network (AFTN), common ICAO data interchange network (CIDIN) and AMHS. The concept describes the management organization and includes a set of functions and procedures which are implemented in AMC systems to deliver services to AMC users in ANSPs, and particularly in their international communications (COM) centres.

1.4 This paper provides the proposed procedures. The overall goal of these procedures is to ensure for the short-term that the global AMHS address management is performed in a consistent manner, both from an operational viewpoint and from an official (institutional) viewpoint.

1.5 For the medium and longer term a task force will be set up by the Air Navigation Bureau to develop appropriate recommendations regarding the future evolution of AMHS address management, including the potential establishment of management centres in ICAO Regions, if needed. This task force should be composed of representatives of ICAO Contracting States in various regions.

**2. BACKGROUND ON GLOBAL AMHS ADDRESS  
MANAGEMENT IN THE SHORT-TERM USING  
AMC**

2.1 The approach for global AMHS address management in the short-term is the following:

- a) for operational purposes, there is an agreement to use the AMC in the short-term by the European (EUR) and the Asia/Pacific (ASIA/PAC) Regions, as well as by the United States Federal Aviation Administration (FAA). Other regions which have not discussed AMHS management so far should be encouraged to use the AMC as soon as they start studying AMHS implementation; and

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<sup>1</sup> More information is available at <http://www.eurocontrol.int/amc/>

- b) for institutional aspects, ICAO intends to publish, on its web site, an official version of the register.

2.2 Furthermore, the official ICAO Register and the operational AMC contain the same data and must be periodically aligned.

2.3 The working arrangements proposed in this paper are designed for a global AMHS address management using AMC. This implies that **the use of AMC should be strongly recommended to every ICAO Contracting State worldwide, as soon as there is an AMHS project or implementation in that State.** The procedures rely upon the fact that all States be involved in AMHS, i.e. all States which may declare changes in AMHS addressing are AMC users.

2.4 The basis for these procedures should be that AMC is used operationally and that ICAO Headquarters publishes the AMHS MD Register officially on its website using AMC data.

### 3. SCOPE OF ENVISAGED AMHS ADDRESS CHANGES

3.1 The possible changes in AMHS addresses which need to be managed as part of the AMHS address management are classified in two categories and include the following modifications:

- a) Major changes (should not be frequent):

- 1) Modification<sup>2</sup> of PRMD-name,
- 2) Change of addressing scheme, among those defined in ICAO Docs 9705/9880, from “XF” to “CAAS” or vice-versa (less likely to happen);

- b) Minor changes (should be more frequent):

- 1) Modifications in CAAS table (associations between location indicator – “OU” address attribute value and “O” address attribute value).

3.2 Major changes have either an institutional impact or a major operational impact.

3.3 Minor changes have only an operational impact, which may be much more limited, depending on the magnitude of changes which may be roughly assessed on the basis of:

- a) the number of location indicators impacted by the change; and/or
- b) the frequency of messages to/from users in the locations of which the location indicators are impacted.

3.4 Exceptionally, a minor change may have an institutional impact. However this should be very rare and as no specific procedure is defined for this such situations will be handled case by case on an ad hoc basis.

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<sup>2</sup> The term “modification” should be understood here in a general way, meaning addition, modification or deletion.

## 4. ASSUMPTIONS RELATED TO THE PROCEDURES

### 4.1 Official interactions

4.1.1 Major changes, due to their institutional impact or major operational impact, must be subject to official interactions between the States and ICAO. These interactions are assumed to be based on the exchange of written documents by fax or letter. Pro formas for such documents are provided in Attachment A to this letter.

### 4.2 Systems

4.2.1 In the short-term, only two systems are available to contribute to AMHS address management, as mentioned above:

- a) the AMC implemented by EUROCONTROL under the aegis of the ICAO EUR Office (Paris), for all operational purposes, following an EANPG/45 conclusion; and
- b) the ICAO AMHS MD Register, for official purposes. This system is loaded with AMC data to ensure consistency with the operational status of the AMHS network.

### 4.3 Participants

4.3.1 The procedures rely upon the fact that all States/ANSPs involved in AMHS participate in AMC activity. Participants to the procedures are expected to be:

- a) States, both as the potential initiators of changes in AMHS addressing and as implementers of AMHS systems. The notion of “State” therefore includes:
  - 1) the people in charge of official declarations, for major changes;
  - 2) Cooperating COM Centre (CCC) Operators<sup>3</sup> in charge of operational management of AMHS. They use AMC data to configure their message switches and AFTN/AMHS gateways;
  - 3) Other AMC users, such as AMHS project managers, engineers involved in AMHS projects, COM Centre personnel, etc. (several AMC user categories are defined for them, including “AMF-I User<sup>4</sup>” and “Read-only user”);
- b) ICAO Regional Offices as a possible interface for the States in each ICAO Region. The regional office is represented by the CNS Officer;
- c) ICAO Headquarters, represented by the Air Navigation Bureau and more specifically (if needed) by its Communications, Navigation and Surveillance/Aeronautical Information Resource Services Section (CNS/AIRS) Section;
- d) AMC Operators, responsible for overall operation of the AMC and of associated procedures.

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<sup>3</sup> In the current AMC terminology, the term CCC is limited to Europe, and External COM Centre is used for States outside Europe. This distinction should disappear, and the terminology/documentation should be updated, when global use of AMC is started based on these procedures.

<sup>4</sup> The term “AMF-I User” denotes an AMC user specifically involved in AMHS Off-Line Management – Implementation Support functions, on behalf of his/her State or ANSP, e.g. the project leader for AMHS implementation.

## 5. PROCEDURE FOR MAJOR CHANGES

5.1 A simplified diagram of the proposed procedure for major changes is provided in Figure 1. The main stages are as follows:

1. an accredited person in the considered State declares the change to ICAO, using a standard written pro forma – “ICAO” in this case means the regional office for the ICAO Region where the State is located. The pro forma includes the applicability date of the change (an AIRAC date);
2. the CNS Officer in the regional office, in coordination with ICAO Headquarters as appropriate<sup>5</sup>, validates the acceptability of the declared change from an official and institutional viewpoint;
3. after validation, the CNS Officer forwards the declaration of change to the AMC operator, using appropriate means such as fax, e-mail, etc. (different from data entry in AMC);
4. the AMC operator enters data in the AMC based on the input received from the regional office, at the appropriate time considering the applicability date of the change and using the AMC operational procedures;
5. at the date of applicability, i.e. at each AIRAC cycle date, the ICAO Headquarters CNS/AIRS Section retrieves an AMHS address management export file from the AMC and uploads it to the ICAO Official AMHS MD Register.

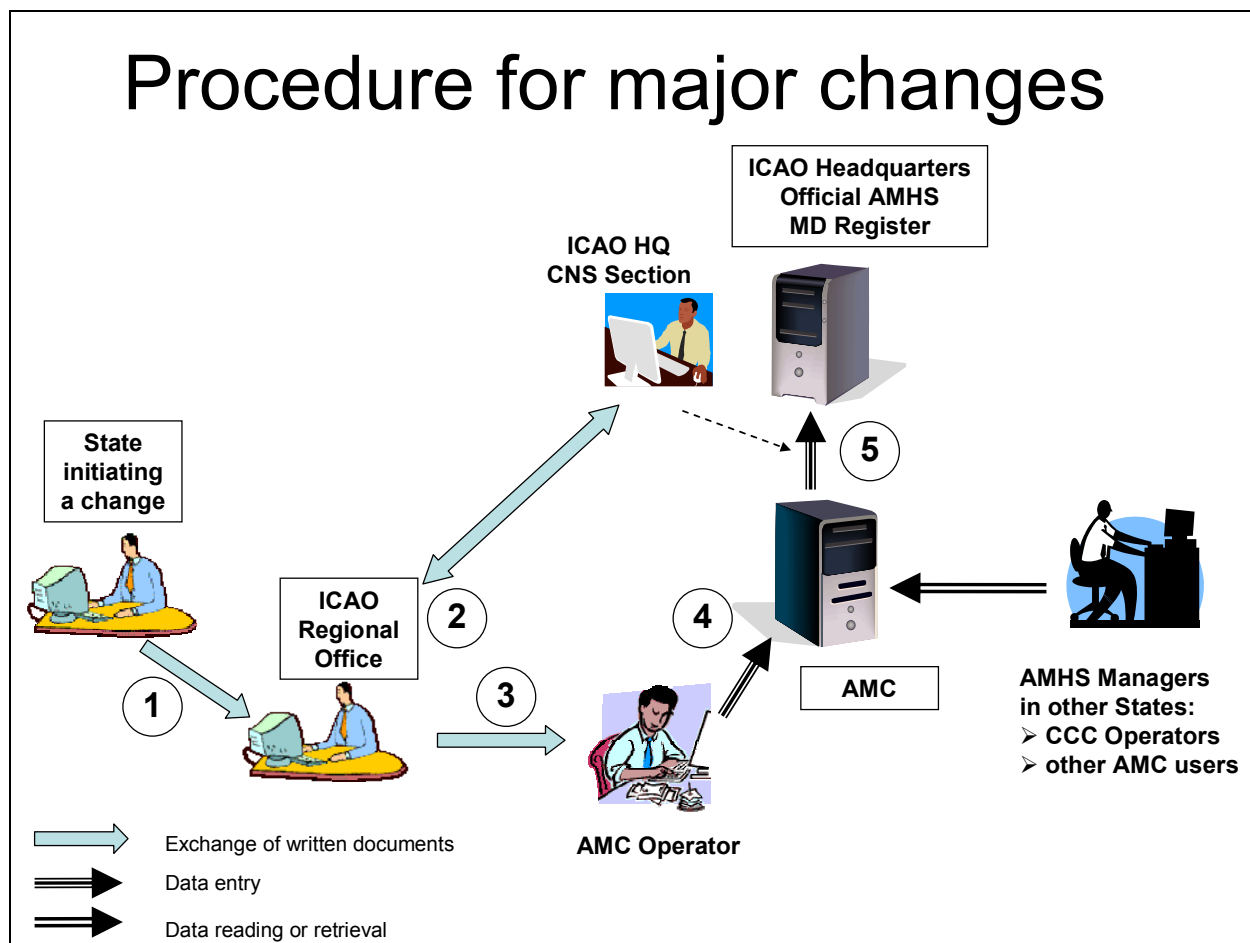
5.2 Steps 3 to 5 are performed as part of the normal AMC operation. This means that, in parallel with this process, standard AMC procedures are followed by the AMC operator and by AMHS managers in other States. The CCC operators exploit the AMC data reflecting the change, together with other AMHS management data, to update their systems.

5.3 At each stage, coordination may take place, if needed, between the different parties involved to ensure the correctness of the proposed change.

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<sup>5</sup> e.g. to ensure global uniqueness of a requested PRMD-name with respect to other requests under consideration in other regions.

Figure 1: Procedure to handle major AMHS address changes



## 6. PROCEDURE FOR MINOR CHANGES

6.1 A simplified diagram of the proposed procedure for minor changes is provided in Figure 2. The main stages are as follows:

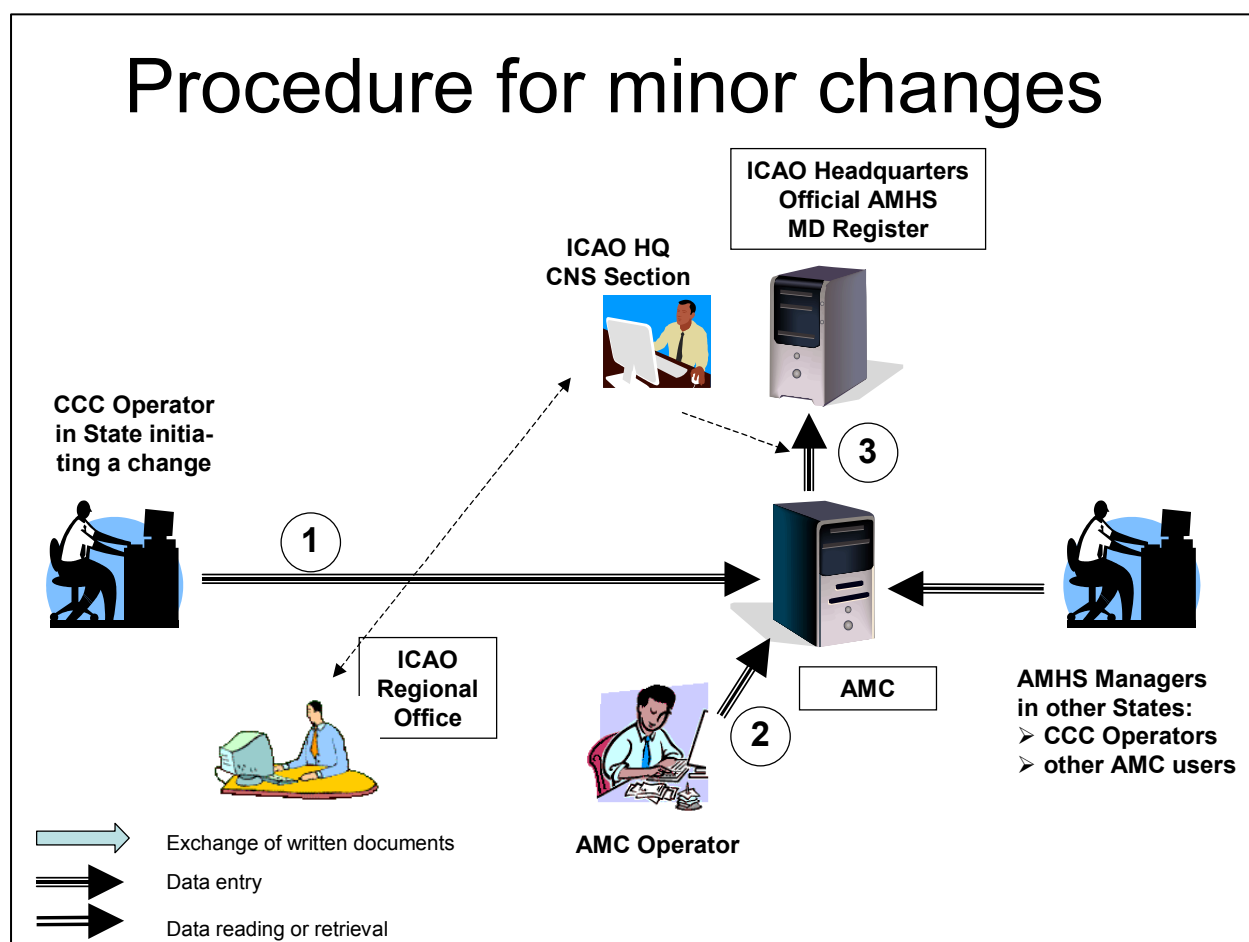
1. the CCC operator in the considered State enters data corresponding to the intended change in the AMC, using the standard AMC operational procedures, taking into account the applicability date of the change (an AIRAC date);
2. the AMC operator performs the standard AMC operational procedures, such that the status of changed data is passed to “operational” at the applicability date;
3. at the date of applicability, i.e. at each AIRAC cycle date, the ICAO HQ CNS/AIRS Section retrieves an AMHS address management export file from the AMC and uploads it to the ICAO Official AMHS MD Register (this is identical to stage 5 in the procedure for major changes).

6.2 This is performed as part of normal AMC operation. This means that in parallel with this process, standard AMC procedures are followed by the CCC operators and other AMC users to exploit

the AMC data reflecting the change, together with other AMHS management data, to update their systems.

6.3 At each stage, coordination may take place if needed between the different parties involved, and with the CNS Officer in the regional office if needed<sup>6</sup>, to ensure the correctness of the proposed change.

**Figure 2: Procedure to handle minor AMHS address changes**



<sup>6</sup> The regional office needs to be involved only in exceptional cases, such as institutional impact of a minor change.

**Part 1: Modification of PRMD-name Registration**

State: .....

Nationality letters: .....

PRMD-name registered before modification: .....

Please consider the following options in case of modification:

Option A: the PRMD-name to be the following reserved identifier.

Option B: the PRMD-name to be modified as proposed below, after validation by the Secretariat.

Option C: the PRMD-name to remain unchanged (only the addressing scheme is modified, see Part 2).

Please specify your choice (A, B or C):

If choice is B, please specify the proposed PRMD-name identifier:

P =
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Proposed applicability date for the modification (an AIRAC date): .....

Name of organization managing the AMHS MD (if applicable): .....

The contact point: .....

Postal/electronic mail address and telephone/fax number: .....

Additional comments:

<b>Part 2: Modification of declaration of addressing scheme</b>
-----------------------------------------------------------------

State: .....

Nationality letters: .....

PRMD-name registered before modification: .....

Addressing scheme declared before modification: .....

Please select one of the following options in case of modification:

Choice A: AMHS user addresses to be allocated by application of the (recommended) CAAS addressing scheme in the AMHS MD operated in the above State.

Choice B: AMHS user addresses to be allocated by application of the (default) XF addressing scheme in the AMHS MD operated in the above State.

Choice C: the addressing scheme to remain unchanged (only the PRMD-name is modified, see Part 1).

Please specify your choice (A, B or C):

If choice is A (CAAS), please fill in the following table for all location indicators found in Doc 7910 under the above nationality letters.

<b>Organization-name for the group of locations</b>	<b>location indicators</b>

(table to be expanded as appropriate)

Proposed applicability date for the modification (an AIRAC date): .....

Name of organization managing the AMHS MD (if applicable): .....

The contact point: .....

Postal/electronic mail address and telephone/fax number: .....

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**ATTACHMENT B** to State letter AN 7/49.1-09/34

**REGISTRATION PROCEDURE**

(based on *ATS Messaging Management Manual*, section 2.5.2.4)

1. In order to carry out the procedures described in Attachment A, each State/ANSP should designate an AMC User associated to its COM Centre. A second person may also be designated as a back-up.
2. The AMC User has to register using the following link:  
  
[https://extranet.eurocontrol.int/http://chow.mis.eurocontrol.be:8095/elsh\\_live/elsh/registerNewUserForApplication.do?eurocontrolresourceid=amc\\_users](https://extranet.eurocontrol.int/http://chow.mis.eurocontrol.be:8095/elsh_live/elsh/registerNewUserForApplication.do?eurocontrolresourceid=amc_users)
3. Once this is performed, the user accreditation procedure defined in section 2.5.2 of the *ATS Messaging Management Manual* will start.
4. After the accreditation of the user, an AMC account will be created by EUROCONTROL AMC Support Team and details of the account will be sent to the users. Training of the user will also be planned at this stage.
5. After training, the user can start accessing the AMC using <http://www.eurocontrol.int/amc/>.

— END —



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Ref.: SP 54/1-03/39

30 May 2003

**Subject:** Establishment of an ICAO register for addresses and management domain identifiers used in the air traffic services (ATS) message handling system (AMHS)

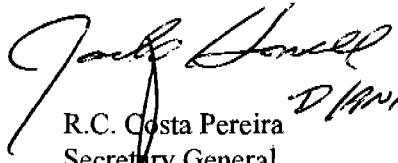
**Action required:** Complete and return the attached pro formas by 15 September 2003

Sir/Madam,

1. I have the honour to inform you that preparatory work for the establishment of a central registry for air traffic services (ATS) message handling system (AMHS), which is the ground portion of the aeronautical telecommunication network (ATN) and is envisaged to replace the ageing aeronautical fixed telecommunication network (AFTN), has now been completed. The register, which is to contain a list of addressing schemes and management domain identifiers, will be published and updated as necessary.
2. This work has been undertaken as a follow-up to Recommendation 5/3 of the third meeting of the Aeronautical Telecommunication Network Panel (ATNP) (Montreal, 7 to 18 February 2000) calling for ICAO to establish such a register and the action taken on 1 June 2000 by the Air Navigation Commission thereon at the seventh meeting of its 154th Session.
3. It is understood that the transition from the existing AFTN to the new AMHS will be gradual. However, for a systematic and orderly implementation of the global AMHS, it would be desirable if all States could review the attached material and either confirm the assigned values or declare new ones, even if they do not plan to implement the system in the near future.
4. In this regard, you are requested to peruse Attachment A, which provides explanatory notes on AMHS management domain identifiers and addressing schemes, and complete the two pro formas provided in Attachment B (using provisional register entries shown in Attachments C and D). It should be noted that Attachment C is the current version of the draft register while Attachment D provides details of the common AMHS addressing scheme (CAAS) that is to be used in several States and one international organization. Both those attachments have been compiled using the information provided by technical experts participating in the work of the ATNP.

5. It would be appreciated if your completed pro formas could be forwarded to reach the Secretary General by 15 September 2003. In the absence of a reply or incomplete pro formas, the default entries in the draft register shown in Attachments C and D will be assumed and published accordingly.

Accept, Sir/Madam, the assurances of my highest consideration.

  
R.C. Costa Pereira  
Secretary General

*per* *D/AMC*

**Enclosures:**

- A — Explanatory notes on AMHS management domains and addressing schemes
- B — Pro formas for registration of private management domain (PRMD) and addressing scheme
- C — Draft ICAO register for AMHS management domains and addressing schemes
- D — Detailed addressing information for AMHS management domains (MDS) implementing the common AMHS addressing scheme (CAAS)

**EXPLANATORY NOTES ON AMHS MANAGEMENT DOMAINS  
AND ADDRESSING SCHEMES**

**1. INTRODUCTION**

1.1 Air traffic services (ATS) message handling system (AMHS) is the ground portion of the aeronautical telecommunication network (ATN) which has been standardized for ICAO to enable global and seamless exchange of aeronautical messages over various similar or dissimilar subnetworks. Standards and Recommended Practices (SARPs) for ATN are contained in Annex 10, Volume III, Part I, Chapter 3. Those SARPs are supplemented by detailed technical specifications contained in the *Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN)* (Doc 9705) and guidance material contained in the *Comprehensive Aeronautical Telecommunication Network (ATN) Manual* (Doc 9739). To facilitate the orderly, systematic and worldwide implementation of the AMHS, which is to replace ageing aeronautical fixed telecommunication network (AFTN) and common ICAO data interchange network (CIDIN), ICAO is in the process of establishing registers for management domain (MDs) and addressing schemes.

***Register of AMHS MD identifiers***

1.2 The goal of this register is to facilitate the establishment of a uniform and global scheme for Contracting States and Air Traffic Service Organizations (ATSOs) to operate under the “ICAO” Administrative Management Domain (ADMD) name that has been registered at International Telecommunications Union - Telecom Standards (ITU-T) for ICAO as an international organization.

1.3 This register will maintain a list of all Management Domains contributing to the AMHS, and of the MD identifiers allocated to each ICAO Contracting State, or ATSO operating under the aegis of ICAO, for the implementation of an AMHS Management Domain. The register will include an entry for each State or ATSO and will be updated and published by ICAO as necessary.

1.4 The allocation of an MD identifier is a preliminary registration that does not imply an immediate implementation of an AMHS MD. The MD identifier takes the form of a Private Management Domain (PRMD) name and needs to be unique in the ICAO ADMD.

1.5 Following the provisions of the *Manual of Technical Provisions for the Aeronautical Telecommunication Network (ATN)* (Doc 9705), a PRMD name has been reserved for each State and is referred to as nationality letters.

1.6 The PRMD name can be modified upon request, using the pro forma shown in Attachment B. However, such a proposed value should comply with the provisions contained in the Doc 9705, Third Edition. The ICAO Secretariat will advise, if the proposed identifier is improper or not unique.

1.7 The full AMHS MD identifier for the AMHS MD operated in a State will be:

C = XX / A = ICAO / P = [nationality letters]  
or  
C = XX / A = ICAO / P = [proposed new identifier (if valid)]

1.8 This MD identifier will be associated with the nationality letters currently allocated to your State, as per the *Location Indicators* (Doc 7910).

1.9 For the initial publication of the register, modification requests should be received at the ICAO Secretariat by 15 September 2003. In the case of no reply being received by the Secretariat by that date, reserved values will be deemed accepted by the State concerned and will be published accordingly.

***Declaration of AMHS addressing schemes***

1.10 The ICAO Register of AMHS MDs must also include the declaration of the addressing scheme under which AMHS user addresses will be allocated in each AMHS MD. It will therefore be highly desirable for all States to declare the addressing scheme selected for their AMHS MDs.

1.11 The addressing scheme called the “Common AMHS Addressing Scheme” (CAAS) and specified in Doc 9705, Third Edition, is the most commonly selected one. It would be desirable that such a scheme could be established at an early stage of AMHS planning and implementation activities.

1.12 This addressing scheme allows to group the (existing or future) AMHS user locations in each State, identified by the respective ICAO 4-character location indicator, (specified in Doc 7910), into geographical units or more generally into groups of locations using the same (existing or future) ATS Message Server. Guidance and examples on how to define such groups of locations may be found in the *Comprehensive Aeronautical Telecommunication Network (ATN) Manual* (Doc 9739).

1.13 The detailed addressing information associating a group of location indicators to an “organization-name” should be declared for publication in conjunction with the ICAO Register of AMHS Management Domains. The second pro forma contained in Attachment B should be used for this purpose.

1.14 In case such an addressing scheme has not been defined, perhaps due to lack of any near-term AMHS implementation plan in certain States, the “XF Addressing Scheme” shown in Doc 9705 will be used as the default addressing scheme. This will allow interoperability between all existing AFTN (or CIDIN) COM Centres and new AMHS systems.

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**ATTACHMENT B** to State letter SP 54/1-03/39

**PRO FORMAS FOR AMHS MANAGEMENT DOMAIN IDENTIFIER AND ADDRESSING SCHEME**

**Part 1: PRMD-name Registration**

State: .....

Nationality letters: ..... [as per Attachment C]

The initially reserved PRMD-name value for the AMHS MD in the State identified above is:

C = XX / A = ICAO / P = [nationality letters as per Attachment C]

Please consider the following options:

Choice A: the PRMD-name to be the reserved identifier as indicated above.

Choice B: the PRMD-name to be modified as proposed below, after validation by the Secretariat.

Please specify your choice (A or B):

If choice is B, please specify the proposed PRMD-name identifier:

P =

Name of organization managing the AMHS MD (if applicable):.....

The contact point: .....

Postal/electronic mail address and telephone/fax number: .....

Additional comments:

**Part 2: Declaration of addressing scheme**

State: .....

Nationality letters:..... [as per Attachment C]

Please select one of the following options:

Choice A: AMHS user addresses to be allocated by application of the (recommended) CAAS addressing scheme in the AMHS MD operated in the above State.

Choice B: AMHS user addresses to be allocated by application of the (default) XF addressing scheme in the AMHS MD operated in the above State.

Please specify your choice (A or B):

If choice is A (CAAS), please fill in the following table for all location indicators found in Doc 7910 under the above nationality letters.

Organization-name for the group of locations	Location indicators

(table to be expanded as appropriate)

Name of organization managing the AMHS MD (if applicable):.....

The contact point: .....

Postal/electronic mail address and telephone/fax number: .....



**DRAFT ICAO REGISTER OF AMHS MANAGEMENT  
DOMAINS AND ADDRESSING SCHEMES**

**1. EXPLANATION OF AMHS ADDRESSING SCHEMES**

**1.1 XF-scheme**

1.1.1 Default addressing scheme, used for States not operating AMHS and/or having not declared their use of the CAAS. It is briefly described in the following table.

Attribute	Attribute value.	Remark
<b>Country-name (C)</b>	C = "XX", as already obtained by ICAO from ITU-T	
<b>ADMD-name (A)</b>	A = "ICAO", as already registered by ICAO at ITU-T	
<b>PRMD-name (P)</b>	P = a name to be defined by each State/ATSO and registered by ICAO. Such a name will identify a State, an Organization, or an organization within a State.	In the absence of such a name being registered by the State at ICAO, a default value will be used to ensure that the attribute value is always defined. This default value is the ICAO Nationality letters, as may be found in Doc 7910 (see attached tables). In cases where the Nationality letters are ambiguous, a designator made of four characters replaces the Nationality letters.
<b>Organization-name (O)</b>	O = "AFTN", taking the 4-character value "AFTN" encoded as a Printable String.	
<b>Organizational-unit-name (OUI)</b>	OUI = the 8-letter AF-address (or AFTN indicator) of the considered user.	

Example: XF AMHS Address for a Tower located in Erfurt  
/C=XX/A=ICAO/P=ED/O=AFTN/OU=EDDEZTZX

## 1.2 The Common AMHS Addressing Scheme (CAAS)

1.2.1 The Common AMHS Addressing Scheme (CAAS) is defined in the Third Edition of Doc 9705. It is briefly described in the following table.

Attribute	Attribute value	Remark
<b>Country-name (C)</b>	C = "XX", as already obtained by ICAO from ITU-T	
<b>ADMD-name (A)</b>	A = "ICAO", as already registered by ICAO at ITU-T	
<b>PRMD-name (P)</b>	P = a name to be defined by each State/ATSO and registered by ICAO. Such a name will identify a State, an Organization, or an organization within a State.	In the absence of such a name being registered by the State at ICAO, a default value will be used to ensure that the attribute value is always defined. This default value is the ICAO Nationality letters, as may be found in Doc 7910 (see attached tables). In cases where the Nationality letters are ambiguous, a designator made of four characters replaces the Nationality letters.
<b>Organization-name (O)</b>	O = a value corresponding to local/national geographical information, e.g. a region or a geographical area within a State where the user is located.	The syntax and value are to be defined by the considered State/ATSO. The table associating such an organization-name to each ICAO location indicator (4 characters) is registered and published by ICAO (see attached tables).
<b>Organizational-unit-name (OU1)</b>	OU1 = the ICAO location indicator (4 characters) of the considered user;	
<b>Common-name (CN)</b>	Either, CN = the 8-letter AF-address (or AFTN indicator) of the considered user, irrespective of whether it is a direct or indirect user. Or, CN = the 5-letter CIDIN Ax address of the user in case of a CIDIN user being an indirect AMHS user.	

Example: MF AMHS Address of Albi's ARO (belongs to Toulouse region):  
/C=XX/A=ICAO/P=France/O=LFBO/OU=LFCI/CN=LFCIZPZX

1.2.2 The relation between the different address objects and the 4-letter location indicator and/or 8-letter AFTN Address is defined by the States concerned. Default values that are currently available are shown in Attachment D.

**Table of PRMDs and Addressing Schemes**  
(listed in alphabetical order by Nationality Letters)

State/Territory/ Geographic Location	AMHS Address Specification						
	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Solomon Islands	AG	XX	ICAO	AG	XF		
Nauru	AN	XX	ICAO	AN	XF		
Papua New Guinea	AY	XX	ICAO	AY	XF		
Greenland (Denmark)	BG	XX	ICAO	BG	XF		
Iceland	BI	XX	ICAO	BI	XF		
Canada	C*	XX	ICAO	C	XF		
Algeria	DA	XX	ICAO	DA	XF		
Benin	DB	XX	ICAO	DB	XF		
Burkina Faso	DF	XX	ICAO	DF	XF		
Ghana	DG	XX	ICAO	DG	XF		
Côte d'Ivoire	DI	XX	ICAO	DI	XF		
Nigeria	DN	XX	ICAO	DN	XF		
Niger	DR	XX	ICAO	DR	XF		
Tunisia	DT	XX	ICAO	DT	XF		
Togo	DX	XX	ICAO	DX	XF		
Belgium	EB	XX	ICAO	EB	XF		
Eurocontrol	EBBD	XX	ICAO	CFMU	CAAS		see Attachment D
Germany	ED	XX	ICAO	GERMANY	CAAS		see Attachment D
Estonia	EE	XX	ICAO	EE	XF		
Finland	EF	XX	ICAO	EF	XF		
United Kingdom	EG	XX	ICAO	EG	CAAS		see Attachment D
Netherlands	EH	XX	ICAO	EH	XF		
Ireland	EI	XX	ICAO	EI	XF		
Denmark	EK	XX	ICAO	EK	XF		
Luxembourg	EL	XX	ICAO	EL	XF		
Norway	EN	XX	ICAO	EN	XF		
Poland	EP	XX	ICAO	EP	XF		
Sweden	ES	XX	ICAO	ES	XF		
Germany	ET	XX	ICAO	GERMANY	CAAS		see Attachment D
Europe	EU	XX	ICAO	EU	XF		
Latvia	EV	XX	ICAO	EV	XF		
Lithuania	EY	XX	ICAO	EY	XF		
South Africa	FA	XX	ICAO	FA	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Botswana	FB	XX	ICAO	FB	XF		
Congo	FC	XX	ICAO	FC	XF		
Swaziland	FD	XX	ICAO	FD	XF		
Central African Republic	FE	XX	ICAO	FE	XF		
Equatorial Guinea	FG	XX	ICAO	FG	XF		
Ascension I. (U.K.)	FH	XX	ICAO	FH	XF		
Mauritius	FI	XX	ICAO	FI	XF		
British Indian Ocean Territory	FJ	XX	ICAO	FJ	XF		
Cameroon	FK	XX	ICAO	FK	XF		
Zambia	FL	XX	ICAO	FL	XF		
Comores	FMC*	XX	ICAO	FMC	XF		
Reunion (France)	FME*	XX	ICAO	FME	XF		
Madagascar	FM	XX	ICAO	FM	XF		
Angola	FN	XX	ICAO	FN	XF		
Gabon	FO	XX	ICAO	FO	XF		
Sao Tome and Principe	FP	XX	ICAO	FP	XF		
Mozambique	FQ	XX	ICAO	FQ	XF		
Seychelles	FS	XX	ICAO	FS	XF		
Chad	FT	XX	ICAO	FT	XF		
Zimbabwe	FV	XX	ICAO	FV	XF		
Malawi	FW	XX	ICAO	FW	XF		
Lesotho	FX	XX	ICAO	FX	XF		
Namibia	FY	XX	ICAO	FY	XF		
Dem. Republic of the Congo	FZ	XX	ICAO	FZ	XF		
Mali	GA	XX	ICAO	GA	XF		
Gambia	GB	XX	ICAO	GB	XF		
Canary Islands (Spain)	GC	XX	ICAO	AENA	CAAS		see Attachment D
Spain	GE	XX	ICAO	AENA	CAAS		see Attachment D
Sierra Leone	GF	XX	ICAO	GF	XF		
Guinea-Bissau	GG	XX	ICAO	GG	XF		
Liberia	GL	XX	ICAO	GL	XF		
Morocco	GM	XX	ICAO	GM	XF		
Sénégal	GO	XX	ICAO	GO	XF		
Mauritania	GQ	XX	ICAO	GQ	XF		
Sahara Occidental	GS	XX	ICAO	GS	XF		
Guinea	GU	XX	ICAO	GU	XF		
Cape Verde	GV	XX	ICAO	GV	XF		
Ethiopia	HA	XX	ICAO	HA	XF		
Burundi	HB	XX	ICAO	HB	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
	Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context
Somalia	HC	XX	ICAO	HC	XF		
Djibouti	HD	XX	ICAO	HD	XF		
Egypt	HE	XX	ICAO	HE	XF		
Eritrea	HH	XX	ICAO	HH	XF		
Kenya	HK	XX	ICAO	HK	XF		
Libyan Arab Jamahiriya	HL	XX	ICAO	HL	XF		
Rwanda	HR	XX	ICAO	HR	XF		
Sudan	HS	XX	ICAO	HS	XF		
United Rep. of Tanzania	HT	XX	ICAO	HT	XF		
Uganda	HU	XX	ICAO	HU	XF		
United States	K *	XX	ICAO	K	XF		
Albania	LA	XX	ICAO	LA	XF		
Bulgaria	LB	XX	ICAO	LB	XF		
Cyprus	LC	XX	ICAO	LC	XF		
Croatia	LD	XX	ICAO	LD	XF		
Spain	LE	XX	ICAO	AENA	CAAS		see Attachment D
France	LF	XX	ICAO	FRANCE	CAAS		see Attachment D
Eurocontrol	LFPYZMF	XX	ICAO	CFMU	CAAS		see Attachment D
Greece	LG	XX	ICAO	LG	XF		
Hungary	LH	XX	ICAO	LH	XF		
Italy	LI	XX	ICAO	LJ	XF		
Slovenia	LJ	XX	ICAO	LJ	XF		
Czech Republic	LK	XX	ICAO	LK	XF		
Israel	LL	XX	ICAO	LL	XF		
Malta	LM	XX	ICAO	LM	XF		
Monaco	LN	XX	ICAO	LN	XF		
Austria	LO	XX	ICAO	LO	XF		
Portugal (Madcira & Açores)	LP	XX	ICAO	LP	XF		
Bosnia-Herzegovina	LQ	XX	ICAO	LQ	XF		
Romania	LR	XX	ICAO	LR	XF		
Switzerland	LS	XX	ICAO	LS	XF		
Turkey	LT	XX	ICAO	LT	XF		
Republic of Moldova	LU	XX	ICAO	LU	XF		
Areas Under the Control of the Palestinian Authority	LV	XX	ICAO	LV	XF		
The former Yugoslav Republic of Macedonia	LW	XX	ICAO	LW	XF		
Gibraltar (United Kingdom)	LX	XX	ICAO	LX	XF		
Federal Republic of Yugoslavia	LY	XX	ICAO	LY	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Slovakia	LZ	XX	ICAO	LZ	XF		
Slovenia	L...	XX	ICAO	L...	XF		
Andorra	L...	XX	ICAO	L...	XF		
San Marino	L...	XX	ICAO	L...	XF		
Turks and Caicos Islands (U.K.)	MB	XX	ICAO	MB	XF		
Dominican Republic	MD	XX	ICAO	MD	XF		
Guatemala	MG	XX	ICAO	MG	XF		
Honduras	MH	XX	ICAO	MH	XF		
Jamaica	MK	XX	ICAO	MK	XF		
Mexico	MM	XX	ICAO	MM	XF		
Nicaragua	MN	XX	ICAO	MN	XF		
Panama	MP	XX	ICAO	MP	XF		
Costa Rica	MR	XX	ICAO	MR	XF		
El Salvador	MS	XX	ICAO	MS	XF		
Haiti	MT	XX	ICAO	MT	XF		
Cuba	MU	XX	ICAO	MU	XF		
Cayman Islands (U.K.)	MW	XX	ICAO	MW	XF		
Bahamas	MY	XX	ICAO	MY	XF		
Belize	MZ	XX	ICAO	MZ	XF		
Cook Islands	NC	XX	ICAO	NC	XF		
Fiji	NF	XX	ICAO	NF	XF		
Tonga	NFT*	XX	ICAO	NFT	XF		
Kiribati	NG	XX	ICAO	NG	XF		
Tuvalu	NGF*	XX	ICAO	NGF	XF		
Niue Island (New Zealand)	NI	XX	ICAO	NI	XF		
Iles Wallis and Futuna (France)	NL	XX	ICAO	NL	XF		
American Samoa	NST*	XX	ICAO	NST	XF		
Samoa	NS	XX	ICAO	NS	XF		
French Polynesia	NT	XX	ICAO	NT	XF		
Vanuatu	NV	XX	ICAO	NV	XF		
New Caledonia (France)	NW	XX	ICAO	NW	XF		
New Zealand	NZ	XX	ICAO	NZ	XF		
Afghanistan	OA	XX	ICAO	OA	XF		
Bahrain	OB	XX	ICAO	OB	XF		
Saudi Arabia	OE	XX	ICAO	OE	XF		
Iran (Islamic Rep of)	OI	XX	ICAO	OI	XF		
Jordan	OJ	XX	ICAO	OJ	XF		
Kuwait	OK	XX	ICAO	OK	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Lebanon	OL	XX	ICAO	OL	XF		
United Arab Emirates	OM	XX	ICAO	OM	XF		
Oman	OO	XX	ICAO	OO	XF		
Pakistan	OP	XX	ICAO	OP	XF		
Iraq	OR	XX	ICAO	OR	XF		
Syrian Arab Republic	OS	XX	ICAO	OS	XF		
Qatar	OT	XX	ICAO	OT	XF		
Yemen	OY	XX	ICAO	OY	XF		
Alaska (U.S.)	PA	XX	ICAO	PA	XF		
Alaska (U.S.)	PF	XX	ICAO	PA	XF		
Alaska (U.S.)	PO	XX	ICAO	PA	XF		
Alaska (U.S.)	PP	XX	ICAO	PA	XF		
Mariana Islands (U.S.)	PG	XX	ICAO	PG	XF		
Hawaii (U.S.)	PH	XX	ICAO	PH	XF		
Johnston Island (U.S.)	PJ	XX	ICAO	PJ	XF		
Marshall Islands (U.S.)	PK	XX	ICAO	PK	XF		
Kiribati	PL	XX	ICAO	PL	XF		
Line Islands (U.S.)	PL	XX	ICAO	PL	XF		
Midway Islands (U.S.)	PM	XX	ICAO	PM	XF		
Micronesia (Federated States of)	PT	XX	ICAO	PT	XF		
Palau Islands (U.S.)	PTR*	XX	ICAO	PTR	XF		
Wake Island (U.S.)	PW	XX	ICAO	PW	XF		
China	RC	XX	ICAO	RC	XF		
Japan	RJ	XX	ICAO	RJ	XF		
Republic of Korea	RK	XX	ICAO	RK	XF		
Japan	RO	XX	ICAO	RJ	XF		
Philippines	RP	XX	ICAO	RP	XF		
Argentina	SA	XX	ICAO	SA	XF		
Brazil	SB	XX	ICAO	SB	XF		
Chile	SC	XX	ICAO	SC	XF		
Ecuador	SE	XX	ICAO	SE	XF		
Falkland Islands (U.K.)	SF	XX	ICAO	SF	XF		
Paraguay	SG	XX	ICAO	SG	XF		
Colombia	SK	XX	ICAO	SK	XF		
Bolivia	SL	XX	ICAO	SL	XF		
Suriname	SM	XX	ICAO	SM	XF		
French Guyana	SO	XX	ICAO	SO	XF		
Peru	SP	XX	ICAO	SP	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Uruguay	SU	XX	ICAO	SU	XF		
Venezuela	SV	XX	ICAO	SV	XF		
Guyana	SY	XX	ICAO	SY	XF		
Antigua and Barbuda	TA	XX	ICAO	TA	XF		
Barbados	TB	XX	ICAO	TB	XF		
Dominica	TD	XX	ICAO	TD	XF		
French Antilles	TF	XX	ICAO	TF	XF		
Grenada	TG	XX	ICAO	TG	XF		
Virgin Islands (U.S.)	TI	XX	ICAO	TI	XF		
Puerto Rico (U.S.)	TJ	XX	ICAO	TJ	XF		
St. Kitts and Nevis	TK	XX	ICAO	TK	XF		
St. Lucia	TL	XX	ICAO	TL	XF		
Aruba (Netherlands, Kingdom of the)	TNCA	XX	ICAO	TNCA	XF		
Netherlands Antilles	TN	XX	ICAO	TN	XF		
Anguilla I. (U.K.)	TQ	XX	ICAO	TQ	XF		
Montserrat I. (U.K.)	TR	XX	ICAO	TR	XF		
Trinidad and Tobago	TT	XX	ICAO	TT	XF		
Virgin Islands (U.K.)	TU	XX	ICAO	TU	XF		
St. Vincent and the Grenadines	TV	XX	ICAO	TV	XF		
Bermuda (U.K.)	TX	XX	ICAO	TX	XF		
Kazakstan	UA	XX	ICAO	UA	XF		
Kyrgyzstan	UAF*	XX	ICAO	UAF	XF		
Azerbaijan	UB	XX	ICAO	UB	XF		
Russian Federation	UE	XX	ICAO	UE	XF		
Georgia	UG	XX	ICAO	UG	XF		
Armenia	UGE*	XX	ICAO	UGE	XF		
Georgia	UGGG	XX	ICAO	UG	XF		
Armenia	UGGN	XX	ICAO	UGE	XF		
Georgia	UGM*	XX	ICAO	UG	XF		
Georgia	UGS*	XX	ICAO	UG	XF		
Russian Federation	UH	XX	ICAO	UE	XF		
Russian Federation	UI	XX	ICAO	UE	XF		
Ukraine	UK	XX	ICAO	UK	XF		
Russian Federation	UL	XX	ICAO	UE	XF		
Belarus	UM	XX	ICAO	UM	XF		
Russian Federation	UMKK	XX	ICAO	UE	XF		
Russian Federation	UN	XX	ICAO	UE	XF		
Russian Federation	UO	XX	ICAO	UE	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
Russian Federation	UR	XX	ICAO	UE	XF		
Russian Federation	US	XX	ICAO	UE	XF		
Tadjikistan	UTD*	XX	ICAO	UTD	XF		
Turkmenistan	UTA*	XX	ICAO	UTA	XF		
Uzbekistan	UT	XX	ICAO	UT	XF		
Russian Federation	UU	XX	ICAO	UE	XF		
Russian Federation	UW	XX	ICAO	UE	XF		
India	VA	XX	ICAO	VA	XF		
Sri Lanka	VC	XX	ICAO	VC	XF		
Cambodia	VD	XX	ICAO	VD	XF		
India	VE	XX	ICAO	VA	XF		
Bangladesh	VG	XX	ICAO	VG	XF		
Hong Kong (China)	VH	XX	ICAO	VH	XF		
India	VI	XX	ICAO	VA	XF		
Lao People's Dem. Rep.	VL	XX	ICAO	VL	XF		
Macau (China)	VM	XX	ICAO	VM	XF		
Nepal	VN	XX	ICAO	VN	XF		
India	VO	XX	ICAO	VA	XF		
Bhutan	VQ	XX	ICAO	VQ	XF		
Maldives	VR	XX	ICAO	VR	XF		
Thailand	VT	XX	ICAO	VT	XF		
Viet Nam	VV	XX	ICAO	VV	XF		
Myanmar	VY	XX	ICAO	VY	XF		
Indonesia	WA	XX	ICAO	WA	XF		
Malaysia	WB	XX	ICAO	WB	XF		
Brunei Darussalam	WBAK	XX	ICAO	WBSB	XF		
Brunei Darussalam	WBSB	XX	ICAO	WBSB	XF		
Indonesia	WI	XX	ICAO	WA	XF		
Malaysia (Peninsular)	WM	XX	ICAO	WM	XF		
East Timor	WP	XX	ICAO	WP	XF		
Indonesia	WR	XX	ICAO	WA	XF		
Singapore	WS	XX	ICAO	WS	XF		
Australia	Y*	XX	ICAO	Y	XF		
China	ZB	XX	ICAO	ZB	XF		
China	ZG	XX	ICAO	ZB	XF		
China	ZH	XX	ICAO	ZB	XF		
China	ZB	XX	ICAO	ZB	XF		

State/Territory/ Geographic Location	AMHS Address Specification						
Name	Nationality Letters or Designator	Country -name attribute	ADMD -name attribute	PRMD -name attribute	Addressing scheme	ATN Directory naming -context	Comments
China	ZB	XX	ICAO	ZB	XF		
China	ZB	XX	ICAO	ZB	XF		
China	ZB	XX	ICAO	ZB	XF		
China	ZB	XX	ICAO	ZB	XF		
Dem. People's Rep. of Korea	ZK	XX	ICAO	ZK	XF		
China	ZL	XX	ICAO	ZB	XF		
Mongolia	ZM	XX	ICAO	ZM	XF		
China	ZP	XX	ICAO	ZB	XF		
China	ZS	XX	ICAO	ZB	XF		
China	ZU	XX	ICAO	ZB	XF		
China	ZW	XX	ICAO	ZB	XF		
China	ZY	XX	ICAO	ZB	XF		

**ATTACHMENT D** to State letter SP 54/1-03/39

**DETAILED ADDRESSING INFORMATION FOR AMHS  
MANAGEMENT DOMAINS (MDS) IMPLEMENTING THE COMMON  
AMHS ADDRESSING SCHEME (CAAS)**

**Relations between Organization-name and Organization-unit-name  
(Location Indicator) for Spain**

Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
GCCC	GCCC
	GCFV
	GCGC
	GCHI
	GCLA
	GCLB
	GCLP
	GCMP
	GARR
	GCTS
	GEXO

LECB	LEAB
	LEAL
	LEAP
	LEAT
	LEBL
	LEBN
	LEBT
	LECB
	LECD
	LECF
	LECH
	LECL
	LECN
	LECO
	LEGE
	LEIG
	LELC
	LELL
	LEMP
	LEMS
	LEMU
	LEOT
	LEPO
	LERI
	LESA
	LESM
	LESU
	LEVA
	LEVC
	LEVM

Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
LECM	LEAC
	LEAN
	LEAO
	LEAR
	LEAS
	LEBB
	LEBG
	LEBR
	LECI
	LECM
	LECO
	LECR
	LECT
	LECU
	LECV
	LECX
	LECY
	LEDF
	LEDM
	LEEE
	LEFF
	LEFM
	LEGT
	LEGU
	LEHC
	LEIM
	LELN
	LELO
	LEMA
	LEMC
	LEMD
	LEMM
	LEMR
	LEMN
	LEOC
	LEPC
	LEPI
	LEPP
	LEPZ
	LERM
	LERO
	LESA
	LEST
	LETI

Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
LECP	LECP
	LEIB
	LEMH
	LEPA
	LEPM
	LESB
	LESJ
	LESL

LECS	GEHM
	GEML
	LEAE
	LEAM
	LEBA
	LEBE
	LEBZ
	LECS
	LEEC
	LEFA
	LEGA
	LEGC
	LEGR
	LEJR
	LEJU
	LELI
	LEMF
	LEMG
	LEML
	LEMO
	LEPR
	LERT
	LESV
	LEZL
	LXBG

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Region/ Organization	Location Indicator/ Organization Unit
	LETO
	LETP
	LETZ
	LEVD
	LEVF
	LEVI
	LEVL
	LEVS
	LEVT
	LEVX
	LEXJ
	LEXX
	LEZG
	LEZM
	LEZZ

**Relations between Organization-name and Organization-unit-name  
(Location Indicator) for the United Kingdom**

Region/ Organization	Organization Unit
<b>O</b>	<b>OUI</b>
EG	EGAA
	EGAC
	EGAE
	EGBB
	EGBE
	EGBJ
	EGBM
	EGBO
	EGBS
	EGBW
	EGCC
	EGCD
	EGCK
	EGCS
	EGDG
	EGDH
	EGDL
	EGDM
	EGDN
	EGDR
	EGDY
	EGEC
	EGFC
	EGFF
	EGFH
	EGGA
	EGGC
	EGGD
	EGGF
	EGGG
	EGGN
	EGGO
	EGGP
	EGGQ
	EGGR
	EGGT
	EGGW
	EGGX
	EGGY
	EGHD
	EGHE
	EGHG
	EGHH
	EGHI
	EGHJ
	EGHL
	EGHN
	EGHR
	EGIT

Region/ Organization	Organization Unit
<b>O</b>	<b>OUI</b>
EG	EGLK
	EGLL
	EGLN
	EGLW
	EGMC
	EGMD
	EGMH
	EGNC
	EGNE
	EGNH
	EGNJ
	EGNL
	EGNM
	EGNN
	EGNO
	EGNR
	EGNS
	EGNT
	EGNV
	EGNX
	EGOM
	EGOS
	EGOV
	EGOY
	EGPA
	EGPB
	EGPC
	EGPD
	EGPE
	EGPF
	EGPH
	EGPI
	EGPK
	EGPL
	EGPM
	EGPN
	EGPO
	EGPR
	EGPT
	EGPU
	EGPW
	EGPX
	EGQK
	EGQL
	EGQM
	EGQN
	EGQP
	EGQQ
	EGQS

Region/ Organization	Organization Unit
<b>O</b>	<b>OUI</b>
EG	EGSG
	EGSH
	EGSL
	EGSS
	EGSX
	EGSY
	EGTB
	EGTC
	EGTD
	EGTE
	EGTF
	EGTG
	EGTK
	EGTO
	EGTR
	EGTT
	EGTU
	EGUC
	EGUF
	EGUH
	EGUL
	EGUN
	EGUU
	EGUW
	EGVA
	EGVC
	EGVE
	EGVN
	EGVO
	EGVP
	EGWD
	EGWO
	EGWU
	EGWX
	EGXA
	EGXC
	EGXE
	EGXH
	EGXJ
	EGXO
	EGXT
	EGXU
	EGXW
	EGYC
	EGYD
	EGYM
	EGYP
	EGYY
	EGZB

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Region/ Organization	Organization Unit
	EGJA
	EGJB
	EGJJ
	EGKA
	EGKB
	EGKH
	EGKK
	EGKR
	EGLC
	EGLD
	EGLF
	EGLI

Region/ Organization	Organization Unit
	EGRA
	EGRC
	EGRG
	EGRH
	EGRO
	EGRR
	EGRS
	EGRT
	EGRY
	EGSB
	EGSC
	EGSF

Region/ Organization	Organization Unit
	EGZM
	EGZZI
	EGZYI



Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
LFMM	LFKA
	LFKB
	LFKC
	LFKF
	LFKJ
	LFKO
	LFMA
	LFMB
	LFMC
	LFME
	LFMI
	LFML
	LFMM
	LFMO
	LFMV
	LFMX
	LFMY
	LFNA
	LFTC
	LFTF
	LFTH
	LFTR
	LFTS
	LFTT
	LFTW
	LFYC

LFMN	LFMD
	LFMJ
	LFMN
	LFMQ
	LFNM

LFMT	LFMP
	LFMT
	LFMU
	LFMW
	LFNB
	LFNG
	LFXN

LFPG	LFAD
	LFEI
	LFOQ
	LFPB
	LFPG
	LFPT

Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
LFQQ	LFAB
	LFAC
	LFAG
	LFAG
	LFAK
	LFAM
	LFAT
	LFAV
	LFAY
	LFOB
	LFOH
	LFOP
	LFOY
	LFQQ
	LFQT
	LFRC
	LFRF
	LFRG
	LFRK
	LFXD

LFRR	LFEQ
	LFIE
	LFRB
	LFRD
	LFRH
	LFRJ
	LFRL
	LFRO
	LFRQ
	LFRR
	LFRT
	LFRX
	LFYB

LFRS	LFEY
	LFJR
	LFOD
	LFOS
	LFOU
	LFOV
	LFRA
	LFRE
	LFRI
	LFRN
	LFRS
	LFRU
	LFRV
	LFRZ

Region/ Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
LFSB	LFGA
	LFCB
	LFGJ
	LFLLH
	LFSB
	LFSB
	LFGQ
	LFGH
	LFGV
	LFQW
	LFSB
	LFSB
	LFSM
	LFSO
	LFSU
	LFSX

LFST	LFGC
	LFGK
	LFGS
	LFJL
	LFQP
	LFSC
	LFSG
	LFSI
	LFSJ
	LFSL
	LFSN
	LFST

**Relations between Organization-name and Organization-unit-name  
(Location Indicator) for Eurocontrol Central Flow Management Unit (CFMU)**

Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OUI</b>
CFMU-BRETIGNY	LFPY
CFMU-HAREN	EBBD

**Relations between Organization-name and Organization-unit-name  
(Location Indicator) for Germany**

Organization	Location Indicator/ Organization Unit
<b>O</b>	<b>OU1</b>
<b>EDBB</b>	<b>EDA*</b>
	<b>EDB*</b>
	<b>EDC*</b>
	<b>EDD*</b>
	<b>EDDB</b>
	<b>EDDC</b>
	<b>EDDE</b>
	<b>EDDI</b>
	<b>EDDP</b>
	<b>EDDT</b>
	<b>EDO*</b>
	<b>EDU*</b>

<b>EDDD</b>	<b>EDDA</b>
	<b>EDDD</b>
	<b>EDII</b>
	<b>EDZZ</b>

<b>EDDX</b>	<b>EDDX</b>
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<b>EDDZ</b>	<b>EDDZ</b>
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<b>EDFF</b>	<b>EDDF</b>
	<b>EDDR</b>
	<b>EDDS</b>
	<b>EDE*</b>
	<b>EDF*</b>
	<b>EDG*</b>
	<b>EDQ*</b>
	<b>EDR*</b>
	<b>EDS*</b>
	<b>EDT*</b>

<b>EDI I</b>	<b>EDI I</b>
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<b>EDLL</b>	<b>EDDG</b>
	<b>EDDK</b>
	<b>EDDL</b>
	<b>EDK*</b>
	<b>EDL*</b>

<b>EDMM</b>	<b>EDDM</b>
	<b>EDDN</b>
	<b>EDM*</b>
	<b>EDN*</b>
	<b>EDP*</b>

Organization	Location Indicator/ Organization Unit
EDUU	EDUU

EDVV	EDVV
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EDWW	EDDH
	EDDV
	EDDW
	EDH*
	EDV*
	EDW*
	EDX*

EDYY	EDYY
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EDZO	EDZ*
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ETCC	ET* *
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\* to be assigned locally.