



INTEROPERABILITY STANDARDS FOR VOIP ATM COMPONENTS

VOLUME 2: TELEPHONE

CHANGE 1

This document is the exclusive intellectual and commercial property of EUROCAE.

It is presently commercialised by EUROCAE.

This electronic copy is delivered to your company/organisation for internal use exclusively.

In no case it may be re-sold, or hired, lent or exchanged outside your company.

Change 1 to ED-137/2C

May 2020

INTEROPERABILITY STANDARDS FOR VOIP ATM COMPONENTS

VOLUME 2: TELEPHONE

CHANGE 1

This document is the exclusive intellectual and commercial property of EUROCAE.

It is presently commercialised by EUROCAE.

This electronic copy is delivered to your company/organisation for internal use exclusively.

In no case it may be re-sold, or hired, lent or exchanged outside your company.

Change 1 to ED-137/2C

May 2020

FOREWORD

1. This document was prepared by EUROCAE Working Group 67 “Voice over IP in ATM” and was approved by the Council of EUROCAE on 07 May 2020.
2. EUROCAE is an international non-profit making organisation in Europe. Membership is open to manufacturers and users of equipment for aeronautics, trade associations, national civil aviation administrations, and, under certain conditions, non-European organisations. Its work programme is principally directed to the preparation of performance specifications and guidance documents for civil aviation equipment, for adoption and use at European and world-wide levels.
3. The findings of EUROCAE are resolved after discussion amongst Members of EUROCAE and in collaboration with RTCA Inc, Washington D.C., and/or the Society of Automotive Engineers (SAE), Warrendale PA, U.S.A., through their appropriate committees.
4. This document complements ED-137/2C INTEROPERABILITY STANDARDS FOR VOIP ATM COMPONENTS VOLUME 2: TELEPHONE (March 2019).
The document has been updated to provide further clarifications on the implementation of specific facilities.
As compared with the previous version, the main changes can be found in the Change Summary chapter.
5. EUROCAE performance specifications and other documents are recommendations only. EUROCAE is not an official body of the European Governments. Its recommendations are valid as statements of official policy only when adopted by a particular government or conference of governments.
6. Copies of this document may be obtained from:

EUROCAE

9 – 23 rue Paul Lafargue

93200 Saint-Denis

France

Telephone: +33 1 49 46 19 65

Email: eurocae@eurocae.net

Website: www.eurocae.net

TABLE OF CONTENTS

FOREWORD	I
CHAPTER 1 CHANGE SUMMARY	1
CHAPTER 2 CHANGE DETAILS	2
2.1 CHAPTER 3.4 SUPPORTED HEADER FIELDS	2
2.2 CHAPTER 4.7 CALL PICKUP	2
2.3 CHAPTER 4.7.1 MESSAGE SEQUENCE CHARTS	2
2.4 CHAPTER 5.2.1 INTEROPERABILITY GENERAL REQUIREMENTS	3
2.5 CHAPTER 5.2.2.3 SELECTIVELY RELEASE A CONFERENCE PARTICIPANT	4
2.6 CHAPTER 5.2.2.4 TERMINATE A CONFERENCE	5
2.7 CHAPTER 5.2.4 MESSAGE SEQUENCE CHARTS	5
2.8 CHAPTER 5.3.1 INTEROPERABILITY GENERAL REQUIREMENTS	6
2.9 CHAPTER 6.2.1 LOOP SOURCE (SID) ID LIST	7
2.10 CHAPTER 6.3.1 ECHO REDUCTION (RID) ID LIST	7
2.11 CHAPTER 6.4.1 ID LIST STRUCTURE AND ENCODING	7
2.12 CHAPTER 6.4.2 UNIQUE IDENTIFIER FORMAT	8
2.13 CHAPTER 6.7.1 INTEROPERABILITY GENERAL REQUIREMENTS	9
2.14 CHAPTER 6.7.3 MESSAGE SEQUENCE CHARTS	9
2.15 CHAPTER 6.8.2 NOTIFICATION	13
APPENDIX A WG-67 MEMBERSHIP	15
IMPROVEMENT SUGGESTION FORM	18

LIST OF FIGURES

(Note: These figures are those contained in ED-137C Volume 2)

FIGURE 4.17: CALL PICKUP: A CALLS B AND C PICKS UP FROM B (SUBSCRIPTION PRIOR TO CALL)	3
FIGURE 5.9: CALLING PARTY LEAVES IN-USE BROADCAST CONFERENCE CALL (CONFERENCE_STAYS_WHEN_INITIATOR_LEAVES).....	6
FIGURE 6.11: CALL FORWARD REQUEST BY A	10
FIGURE 6.12: CALL FORWARD RELEASE BY A	10
FIGURE 6.13: CALL FORWARD UPDATE BY B	10
FIGURE 6.14: B2 FORWARDS TO A2	11
FIGURE 6.15: A1 FORWARDS TO B2	11
FIGURE 6.16: A2 TRIES TO FORWARD TO A1	12
FIGURE 6.17: B2 RELEASES FORWARD TO A2	12
FIGURE 6.18: A2 INITIATES CALL TO A1; A1 REDIRECTS TO B2.....	13

LIST OF TABLES

No table of tables entries found.

CHAPTER 1

CHANGE SUMMARY

Change 1 to ED-137/2C is summarized as follows:

Description of change	Affected chapters, paragraphs
Supported header fields (redaction)	Chapter 3.4
Use of dialog event subscription in a Call Pickup	Chapter 4.7 and 4.7.1
Termination of a Broadcast Conference	Chapter 5.2.1, 5.2.2.3 and 5.2.2.4
Broadcast Conference MSC title	Chapter 5.2.4
Preset Conference membership terminology	Chapter 5.3.1
Creation of ID lists and examples	Chapter 6.2.1, 6.3.1, 6.4.1 and 6.4.2
Basic Call Forward negotiation examples	Chapter 6.7.1 and 6.7.3
Conference and call state notification	Chapter 6.8.2

CHAPTER 2

CHANGE DETAILS

2.1 CHAPTER 3.4 SUPPORTED HEADER FIELDS

The requirements of RFC 3261 [8], RFC 2976 [7], RFC 6665 [10], RFC3326 [11], RFC 3428 [12], RFC 3515 [13], RFC 3891 [21] and RFC3911 [22] **SHALL** apply with modifications as specified in the following sub-clauses.

As indicated in RFC 3261 [8], header field values and parameter values **SHALL** be case-insensitive.

TABLE 3.2, TABLE 3.3, TABLE 3.4, and TABLE 3.5 compile and summarize the minimum set of header fields that **SHALL** be supported in requests and responses.

NOTE: According to the indicated RFCs, all the mandatory header fields appear as mandatory in the tables. Besides, Content-Length, Priority and Subject header fields (indicated as optional in the RFCs) appear here as mandatory for specific requests; this is indicated by an 'mm' in bold face type.

2.2 CHAPTER 4.7 CALL PICKUP

The Call Pickup services enables a user not involved in an early dialog to answer calls on behalf of other parties and **MAY** apply to Routine Direct/Indirect Access Calls.

Call Pickup between VCS domains **SHALL** be handled as indicated in SECTION 2.16 ("Call Pickup") of RFC 5359 Session Initiation Protocol Service Examples [29], subject to VCS specification.

The party wishing to pick up the call sends a SUBSCRIBE to the remote entity to retrieve the dialog information (refer to RFC 4235 [24]). In addition, the party wishing to pick up an early dialog sends an INVITE with a Replaces Header to the calling party (refer to RFC 3891 [22]).

NOTE: The subscription can occur before or after the call to be picked up is initiated. In the case subscription had been established prior to a call, the subscription duration (Expires header value) is subject to VCS specification and in any case greater than zero. This is different to the example given in RFC 5359, which indicates a scenario where the subscription occurs after the call to be picked up with an Expires header value set to zero.

In the case Call Pickup on a call between different VCS domains occurred internal to a VCS, the indication of the connected source **SHALL** be handled as in 4.8, subject to VCS specifications.

2.3 CHAPTER 4.7.1 MESSAGE SEQUENCE CHARTS

The figures below show some typical message sequences that can occur for the Call Pickup interworking between SIP ends. Each information flow in a Message Sequence Chart (MSC) is named according to the corresponding message sent to or received from a peer UA.

Solid grey lines with bold arrows represent signalling messages that are mandatory to the call scenario. The arrow indicates the direction of message flow.