INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

H.239 Implementors' Guide

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(30 January 2004)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Infrastructure of audiovisual services – Communication procedures

Implementors' Guide for ITU-T Recommendation H.239 ("Role management and additional media channels for H.300-series terminals")

Summary

This document is a compilation of reported defects identified with Recommendation H.239 last approved in July 2003. It is intended to be read in conjunction with the Recommendation to serve as an additional authoritative source of information for implementors.

The changes, clarifications and corrections defined herein are expected to be included in future versions of Recommendation H.239.

Change Log

Revision	Date	Description
1.0	30 January 2004	Approved by ITU-T Study Group 16 (TD 77/PLEN)

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IMPLEMENTORS GUIDE FOR
ITU-T RECOMMENDATION H.239

1.   Introduction

This document is a compilation of reported defects identified with the 2003 edition of the ITU-T Recommendation H.239. It is intended to be read in conjunction with the Recommendations to serve as an additional authoritative source of information for implementors. The changes, clarifications and corrections defined herein are expected to be included in future versions of Recommendation H.239.

This is the first version of the guide. Wide distribution of this document is expected and encouraged.

In this document, changes are shown against the version of Rec. H.239, as available from the ITU Publications Online web site (http://www.itu.int/publications/online) as of 15 January 2004. Users of Rec. H.239 may find this complete set of corrections of help.

2.   Scope

This guide resolves defects in the following categories:

•   editorial errors;

•   technical errors such as omissions or inconsistencies;

•   ambiguities.

In addition, the Guide may include explanatory text found necessary as a result of interpretation difficulties apparent from the defect reports.

This Guide will not address proposed additions, deletions or modifications to the Recommendations that are not strictly related to implementation difficulties in the above categories. Proposals for new features should be made in the normal way through contributions to the ITU-T.

3.   Policies for updating this document

This document is managed by the ITU-T Study Group 16 Question 1 Rapporteurs Group. It can be revised at any recognized Q.1/16 Rapporteurs Group meeting provided the proposed revisions are unanimously accepted by the members of the group. A revision history cataloguing the evolution of this document is included.

4.   Defect resolution procedure

Upon discovering technical defects with any components of Recommendation H.239, please provide a written description directly to the editor(s) of the affected Recommendation with a copy to the Q.1/16 Rapporteur. The template for a defect report is enclosed. Contact information for these parties is included in this document. Return contact information should also be supplied so a dialogue can be established to resolve the matter and an appropriate reply to the defect report can be conveyed. This defect resolution process is open to anyone interested in Recommendation H.239. Formal membership in the ITU is not required to participate in this process.

5.   References

This document refers to the following Recommendations:

- ITU-T Recommendation H.320 (1999), *Narrow-band visual telephone systems and terminal equipment*
- ITU-T Recommendation H.239 (2003), *Role management and additional media channels for H.300-series terminals*
- ITU-T Recommendation H.242 (1999), *System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s*

6.   Nomenclature

In addition to traditional revision marks, the following marks and symbols are used to indicate to the reader how changes to the text of a Recommendation should be applied:

Symbol	Description
[Begin Correction]	Identifies the start of revision marked text based on extractions from the published Recommendations affected by the correction being described.
[End Correction]	Identifies the end of revision marked text based on extractions from the published Recommendations affected by the correction being described.
...	Indicates that the portion of the Recommendation between the text appearing before and after this symbol has remained unaffected by the correction being described and has been omitted for brevity.
--- SPECIAL INSTRUCTIONS --- {instructions}	Indicates a set of special editing instructions to be followed.

7.   Technical and editorial corrections

7.1   Clarify use of VIA, VIA2, VIA3 in context of multiple video channels

The use of the pre-existing (pre-H.239) VIA2 and VIA3 symbols is not changed by H.239 – this text clarifies this.

The AMC-C&I facility is intended to provide complete separation between the video C&I which applies to the main video channel and the video C&I which applies to the AMC channel.
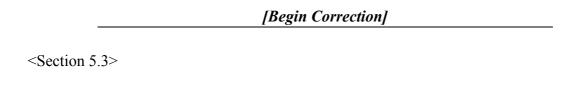
[Begin Correction]

<Section 5.3>

...

Table 2 provides a reference for corresponding H.245 and H.242/H.230 messages mentioned in this Recommendation.

Table 2/H.239 – Corresponding H.245 and H.320 video signals

H.245 name	H.320/H.230 mnemonic
cancelMultipointConference	cancel-MCC
cancelMultipointModeCommand	cancel-MMS
logicalChannelActive	VIA, VIA2, VIA3
logicalChannelInactive	VIS
multipointConference	MCC
multipointModeCommand	MMS
terminalYouAreSeeing	VIN
videoFastUpdatePicture	VCU
videoFreezePicture	VCF

NOTE: H.320 symbols VIA2 and VIA3 signal activity of alternate video sources (for example a document camera, VCR, or DVD player) on a single video channel, as described in 4.4/H.320. They do not indicate activity on alternate video channels. Activity of the primary video source on any video channel should be signalled with VIA.
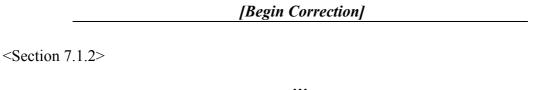

[End Correction]

7.2   Correct & clarify description of <h239ExtendedVideoCapability> structure

The original text incorrectly stated that the list of video capabilities immediately follows the roleLabel, which is inconsistent with the (correct) statement that the 0 byte marks the end of the last **GenericParameter**.

This mistake also led to confusion regarding the possibility of more than one **GenericParameter** in the <h239ExtendedVideoCapability> structure.

The syntax of the **GenericParameter** sequence was intended to use the signalling defined in Annex A, which was not designed for carriage of existing H.221 capability codes. The intent was to place these capabilities after the sequence.

[Begin Correction]

<Section 7.1.2>

…

This MBE has the format:

{ Start-MBE / N / <h239ExtendedVideoCapability> / B_1 / . . . / B_{N-1} }

Bytes B_1 through B_{N-1} within the MBE shall begin with the roleLabel parameter, as defined in Table 6 and coded as a **GenericParameter** as described in Annex A, followed by a single byte of 0, which marks the end of the sequence of one or more **GenericParameter**s. (The use of more than one **GenericParameter** in this structure is for further study.)

If all bits in the roleLabel parameter are set to 0, this indicates that the capability applies to the main video channel.

Receivers shall parse the MBE as a sequence of one or more **GenericParameter**s according to Annex A, followed by a single byte of 0 marking the end of the **GenericParameter** sequence.

Immediately following the roleLabel 0 byte marking the end of the **GenericParameter** sequence, the remaining bytes of the MBE shall contain a concatenated list of 1 or more video capabilities in

the syntax given in Table A.1/H.221, as specified with all escape codes, extensions, or MBE sequences. The list of capabilities shall not include H.221 Cap-mark.

…

[End Correction]

7.3   Add missing word "in"

Fix typographical error.

[Begin Correction]

<Section 8.2>

Table 7 below lists the messages defined <u>in</u> this Recommendation, except for those in Annex B.

…

[End Correction]

7.4   Clarify procedures for mode switching on AMC channel

The original text omitted a statement that mode changes on the AMC channel use the same procedures as the traditional video channel (per 8.2/H.242), although this was agreed and understood in Q.1.

The AMC procedures do not work if the receiver and the sender do not synchronize the mode change.

[Begin Correction]

<Section B.5>

AMC signalling applies only to H.320 devices that have expressed the capability to support AMC by signalling **AMC-cap**.

<u>Mode changes that are signaled by the messages AMC-open and AMC-close, and mode changes affecting the content of the AMC channel, shall conform to the mode switch procedures in 8.2/H.242. C&I messages for mode changes affecting the content of the AMC channel shall be sent using the AMC-C&I facility in section B.5.3 below.</u>

[End Correction]

7.5   Clarify procedures when receiving AMC-C&I

The original text is clear that C&I for any channel, including the main video channel, can appear within the AMC-C&I message, but omitted the (perhaps obvious) corresponding statement about how to process such C&I. This corrects the omission.

<Section B.5.3>

…

This message may be 1 or more bytes in length, as specified with all escape codes, extensions, or MBE sequences in Table A.1/H.221.

All C&I messages for the main video channel received within the AMC-C&I shall be treated as if they had been received on the BAS channel.

7.6   Correct reference to H.230 Implementors' Guide

The published H.239 contains a reference to the H.230 Implementors' Guide which is no longer valid, as the referenced text is being incorporated into H.230 (2004). This corrects the reference.

<Section 7.1.2>

In H.320 systems, the H.239 capabilities shall be signalled in two different BAS messages, <h239ControlCapability> (see 3.10/H.230) ~~proposed new clause 3.10 in H.230 Implementors' Guide (05/2003))~~ and <h239ExtendedVideoCapability> (see Table 2/H.230).

…

Annex A: Defect Report Form for Recommendation H.239

DATE:	
CONTACT INFORMATION	
NAME:	
COMPANY:	
ADDRESS:	
TEL:	
FAX:	
EMAIL:	
AFFECTED RECOMMENDATIONS:	
DESCRIPTION OF PROBLEM:	
SUGGESTIONS FOR RESOLUTION:	

NOTE - Attach additional pages if more space is required than is provided above.