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ABSTRACT: This document is a compilation of reported defects identified with the 1993-1996 editions of the ITU-T H.323 (H.225.0 and H.245) series Recommendations. It is intended to be read in conjunction with the Recommendations to serve as an additional authoritative source of information for implementers. The changes, clarifications and corrections defined herein are expected to be included in future versions of affected H.323 series Recommendations.

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1	XX October 1996	Initial version — completed at the ITU-T Study Group 15 meeting, XXXX October 1996

Table of Contents

1. Introduction

This document is a compilation of reported defects identified with the 1993-1996 editions of the ITU-T H.323 series Recommendations. It is intended to be read in conjunction with the Recommendations to serve as an additional authoritative source of information for implementor's. The changes, clarifications and corrections defined herein are expected to be included in future versions of affected H.323 series Recommendations.

The first version of the guide was produced following the February 1997 ITU-T Study Group 15 meeting. Wide distribution of this document is expected and encouraged.

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 15 Question 3 Rapporteur's group. It can be revised at any recognized Q3/15 Rapporteur's 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 the H.323 Recommendations series, please provide a written description directly to the editors of the affected Recommendations with a copy to the Q3/15 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 H.323 series Recommendations. Formal membership in the ITU is not required to participate in this process.

5. References

This document refers to the following H.323 series Recommendations:

- ITU-T Recommendation H.323 (1996), *Visual Telephone Systems and Equipment for Local Area Networks which provide a Non-Guaranteed Quality of Service*
- ITU-T Recommendation H.225.0 (1996), *Media Stream Packetization and Synchronization on Non-Guaranteed Quality of Service LANs*
- ITU-T Recommendation H.245 (1996), *Control Protocol for Multimedia Communication*

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 Technical and Editorial Corrections to ITU-T Recommendation H.323

7.1.1 RTP stream and Logical Channel Association

Description: An omission has been discovered in the H.323 specification concerning the correlation of multimedia streams and their sources within a multipoint conference.

This information will be contained in the revision 2 of H.323 Recommendation to be published by the ITU-T. However, this information appears incorrectly in the final H.323 document that was submitted for approval in 1996.

As this omission affects media stream correlation and presentation to endpoint users, failure to correct these errors would result in an incompatible implementation. For this reason, these corrections are highlighted in this document to ensure that implementers are aware that these corrections have been made.

Method to associate a logical channel with the RTP stream:

1. The sender sends the **OpenLogicalChannel** message to the MC. The MC shall add the **TerminalLabel** of the sender to the **destination** field in **H2250LogicalChannelParameters** before forwarding the message to the receiver. In the muli-unicast model, the sender shall enter the **TerminalLabel** of the receiver in the **destination** field and the MC shall replace the **destination** field with the **TerminalLabel** of the sender before forwarding the **OpenLogicalChannel** message to the receiver.

2. The receiver may associate the logical channel number with the RTP stream source by comparing the **TerminalLabel** obtained from the **OpenLogicalChannel** message with the lowest byte in the **SSRC** (H.323, Section 8.4.3.1, #A4c).

Restrictions:

This method allows the receiver to associate only one logical channel of the sender with the RTP stream within a RTP session. If the sender wants to send two streams (video 1 and video 2) in the same session then the receiver will not be able to map the two logical channels with their two corresponding streams. In practice this is not a real restriction because the sender will normally send one stream per session but this method does disallow multiple streams per session.

Ideas to consider for H.323 version 2:

1. When MC cascading is allowed, changes should be made to Section 8.4.3.1, #A4c of H.323 to have the endpoints put the **TerminalLabel** in the low 16 bits of **SSRC** instead of the **TerminalNumber** in the low 8 bits of **SSRC**.

2. If the restriction of one stream per source in a session is too restrictive, another option would be to add an optional **SSRC** field in **H2250LogicalChannelParameters** of the **OpenLogicalChannel** message.

7.2 Technical and Editorial Corrections to ITU-T Recommendation H.225.0

7.2.1 Coding the Facility IE

Description: An error exists in the documentation for encoding the Facility IE.

These encoding instructions will be printed in their corrected form in the H.225.0 revision 2 Recommendation to be published by the ITU-T. However, this

information appears incorrectly in the final H225.0 document that was submitted for approval in 1996.

As these errors appear in the encoding instructions, failure to correct these errors would result in an incompatible implementations. For this reason, these corrections are highlighted in this document to ensure that implementers are aware that these corrections have been made.

Also included in this section is some clarifying instructions as to the use of the Facility PDU in the endpoint initiated call forwarding scenario.

[Begin Correction]

7.2.1.1 0.0.0.1. Facility

Encoded following Figure 8-2/Q.932 and Table 8-5/Q.932.

The Facility IE PDU shall be formed according to ROSE (~~uses X.208 [Specification of ASN.1] and X.209 [Specification of basic encoding rules for ASN.1])~~ coded in ASN.1 in the same manner as other elements defined in H.225.0 [the basic aligned variant of he packed encoding rules as specified in X.691])as defined in Q.932 and Q.952.

For the call forwarding case, the ROSE invoke component shall be completed as follows:

```
invokeIdentifier = sequence number
operationValue = callRerouting
argument =
{
        reroutingReason = cd                    // cd = call deflection
        calledAddress = forwarded-to E164       // get alias from Facility-UUIE
        reroutingCounter = x
}
```

The **Facility-UUIE** will appear in the user-user information element as described for the Facility message~~be encapsulated within the ROSE PDU as defined in Q.932~~. If the forwarded-to endpoint cannot be specified with an E.164 address, the forwarding terminal shall supply either the **alternativeAddress** or **alternativeAliasAddress.**

In cases unique to H.323 (i.e., the FacilityReason codes found under the **Facility-UUIE** description found in H.225.0), the *reroutingReason* will be **cd** and the *reason* of the **Facility-UUIE** will contain the actual reason for the deflection. This means that the receiver of the Facility message must always check the **Facility-UUIE** reason.

To instruct an endpoint to call a different endpoint because the calling endpoint wishes to join a conference and the called endpoint does not have the MC, the Facility IE would be completed in nearly the same manner as for forwarding. The **conferenceID** shall indicate the conference to join and the reason in the **Facility-UUIE** shall be **routeCallToMC**.

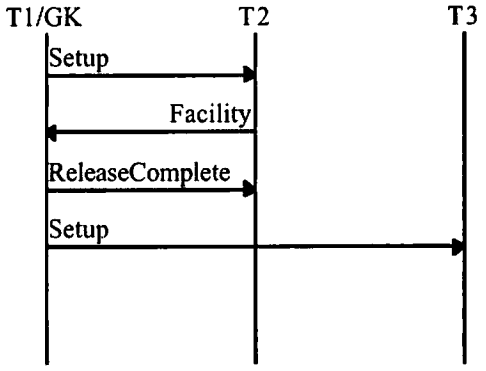
To instruct the calling endpoint to signal the called endpoint through the called endpoint's gatekeeper, the Facility IE would be completed in nearly the same manner as for forwarding. The **conferenceID** in the Facility-UUIE shall indicate

the conference to join and the reason in the **Facility-UUIE** shall be **routeCallToMC~~Gatekeeper~~.**

Possible extensions for H.225.0 are for further study.

[End Correction]

Consider the scenario where a terminal (T2) receives a Setup message, then instructs the originator of the Setup (T1 or GK) to forward the call to another terminal (T3). The message sequence appears as:



T2 responds to the Setup message with a Facility message. The Facility message contains a Facility IE coded according to the ROSE protocol as defined in Q.932. ROSE currently defines 4 components: invoke, return result, return error, and reject. The invoke can be viewed as a request, while return result, return error, and reject can be viewed as responses to the request. In this scenario, the Facility message carries a Facility IE with an invoke component, while the ReleaseComplete message carries a Facility IE with a return result component. Q.932 defines generic procedures, with the specifics coming from Q.95x (Q.952 in the case of call forwarding).

According to Q.952, the ASN.1 definition is:

```
CallReroutingType     OPERATION
ARGUMENT SEQUENCE {
    reroutingReason                          DiversionReason,
    calledAddress                            Address,
    reroutingCounter                         DiversionCounter              OPTIONAL,
    Q931InfoElement                          Q931InformationElement
        OPTIONAL,
    lastReroutingNr                [ 1]      PresentedNumberUnscreened     OPTIONAL,
    subscriptionOption                       [ 2]     SubscriptionOption   DEFAULT
    Notification,
    callingPartySubaddress         [ 3]      PartySubaddress               OPTIONAL,
    presentationAllowedDivertedToUser        [ 4]     PresentationAllowedIndicator
        OPTIONAL,
    routingInformation                       [ 5]     RoutingInformation
        OPTIONAL}
```

The Facility IE in the Facility message is coded per H.225.0 as:

```
component = invokeComp

{
        invokeIdentifier = sequence number
        (optional linkedIdentifier not used)
        operationValue = callRerouting
        argument =
        {
                reroutingReason = cd
                calledAddress = forwarded-to E.164  // get alias from Facility-UUIE
                reroutingCounter = x
        }
}
```

The Q931InfoElement in CallReroutingType is meant to contain information to be used by the receiver of the message in a subsequent message. For example, this might contain an IE that the receiver should use directly in its next message. In this simple forwarding example, this capability is not needed. The Facility-UUIE should always be coded in the normal user-user IE.

The ReleaseComplete message would contain a Facility IE coded as:

```
component = retResultComp
{
        invokeid = invokeIdentifier from invokeComp
        operationValue = callRerouting
}
```

7.2.2 Setup message

Description: An error (missing value) in the defined fields of the **SETUP** message has been discovered.

The corrected **SETUP** structure will be entered in the corrected form in the H.225.0 revision 2 Recommendation to be published by the ITU-T. However, this information appears incorrectly in the final H225.0 document that was submitted for approval in 1996.

The receipt of a **SETUP** message will cause a corresponding **ARQ** message to be send to the receiver's Gatekeeper. The will exist situations in which the calling endpoint does not have any **AliasAddresses** assigned to it. In these cases, the only identifier for the caller is the **CallSignallingAddress**. Assuming this value is present, it should be taken from the **SETUP** message and placed in the **srcCallSignalAddress** so that a Gatekeeper can utilize it in any policy implementation for an **ARQ/ACF** response.

[Begin Correction]

In the User-user field the following information shall be provided in the ASN.1 User-to-User IE:

Setup-UUIE ::=SEQUENCE

{

protocolIdentifier ProtocolIdentifier,

h245Address TransportAddress OPTIONAL,

sourceAddress SEQUENCE OF AliasAddress OPTIONAL,

sourceInfo EndpointType,

destinationAddress SEQUENCE OF AliasAddress OPTIONAL,

destCallSignalAddress TransportAddress OPTIONAL, -- Note(1)

destExtraCallInfo SEQUENCE OF AliasAddress OPTIONAL, -- Note(1)

destExtraCRV SEQUENCE OF CallReferenceValue OPTIONAL,-- Note(1)

activeMC BOOLEAN,

conferenceID ConferenceIdentifier,

conferenceGoal CHOICE

```
    {
        create          NULL,
        join            NULL,
        invite          NULL,
        ...
    },
    callServices            QseriesOptions  OPTIONAL,
    callType        CallType,
    ...
    SourceCallSignalAddress  TransportAddress OPTIONAL,
}
```

Note 1: If the **destExtraCallInfo** is present, a CRV for each call to be made may be supplied in **destExtraCRV**. These CRVs will be used to identify any response to each call launched. These procedures are for further study. If the destExtraCRV field is not present, a gateway shall aggregate all call information into ~~into~~ a single response, with the effect that if one call fails on the SCN side, the entire call is treated as a failure.

protocolIdentifier - set by the calling endpoint to the version of H.323 supported
h245Address - this is a specific transport address on which the calling endpoint or gatekeeper handling the call would like to establish H.245 signaling. This should only be provided by the sender if it is capable of handling H.245 procedures before receiving a CONNECT on the Call Signaling channel.
sourceAddress - contains the H323_IDs for the source; the E.164 number of the source is in the Q.931 part of SETUP. The primary address shall be first.
sourceInfo - Contains a EndpointType to allow the called party to determine whether the call involves a gateway or not.
destinationAddress - this is the address the endpoint wishes to be connected to.. The primary address shall be first. When calling an endpoint using only an E.164 address, this address shall be placed in the Q.931 IE.
destExtraCallInfo - needed to make possible additional channel calls, i.e. for a 2*64 Kbps call on the WAN side. Shall only contain E.164 addresses. and shall not contain the number of the initial channel.
destExtraCRV - CRVs for the additional SCN calls specified by **destExtraCallInfo.** Their use is for further study.
activeMC - indicates that the calling endpoint is under the influence of an active MC
conferenceID - unique conference identifier
conferenceGoal - indicates a desire to join an existing conference, start a new conference, or to invite a party to join an existing conference
callServices - provides information on support of optional Q-series protocols to gatekeeper and called terminal.
callType - Using this value, called party's gatekeeper can attempt to determine 'real' bandwidth usage. The default value is **pointToPoint** for all calls; it should be recognized that the call type may change dynamically during the call. and that the final call type may not be known when the SETUP is sent.
SourceCallSignalAddress - contains the transport address for the source; this value shall be used in the ARQ message by the receiver of the SETUP.

[End Correction]

7.2.3 (7.3.12 Setup Acknowledge)

[Begin Correction]

This message may not be sent by an H.323 entity. However, it may be forwarded from the network via a gateway. Processing on receipt is optional.

[End Correction]

7.3 Technical and Editorial Corrections to ITU-T Recommendation H.245

7.3.1 Correction of Errors UnicastAddress/Multicast Definitions

Description: Typographical omissions have been identified in the specifications for H.323 transport addresses as defined in H.245.

These omissions will be added in their corrected form in the H.245 Recommendation to be published by the ITU-T. However, this information appears incorrectly in the H.245 (NCM6) document that was determined in May of 1996.

As these omissions appear in the H.225.0 specification, failure to correct these errors could result in an incompatible implementations. Transport addresses can be indicated in the H.225.0 signaling which have no counterpart in H.245 needed commands. For this reason, these corrections are highlighted in this document to ensure that implementers are aware that these corrections have been made.

[Begin Correction]

```
UnicastAddress   ::=CHOICE
{
    iPAddress    SEQUENCE
    {
        network  OCTET STRING (SIZE(4)),
        tsapIdentifier  INTEGER(0..65535),
        ...
    },
    iPXAddress   SEQUENCE
    {
        node     OCTET STRING (SIZE(6)),
        netnum   OCTET STRING (SIZE(4)),
        tsapIdentifier  OCTET STRING (SIZE(2)),
        ...
    },
    iP6Address   SEQUENCE
    {
        network  OCTET STRING (SIZE(16)),
        tsapIdentifier  INTEGER(0..65535),
        ...
    },
    netBios      OCTET STRING (SIZE(16)),
    iPSourceRouteAddress SEQUENCE
    {
```

```
        routing  CHOICE
        {
          strict NULL,
          loose  NULL
        },
        network  OCTET STRING (SIZE(4)),
        tsapIdentifier  INTEGER(0..65535),
        route    SEQUENCE OF OCTET STRING (SIZE(4)),
        ...
    },
    ...
    nsap                OCTET STRING (SIZE(1..20)),
    nonStandardAddress  NonStandardParameter
}

MulticastAddress ::=CHOICE
{
    iPAddress    SEQUENCE
    {
        network  OCTET STRING (SIZE(4)),
        tsapIdentifier  INTEGER(0..65535),
        ...
    },
    iP6Address   SEQUENCE
    {
        network  OCTET STRING (SIZE(16)),
        tsapIdentifier  INTEGER(0..65535),
        ...
    },
    ...
    nsap                OCTET STRING (SIZE(1..20)),
    nonStandardAddress  NonStandardParameter

}
```

[End Correction]

8. Implementation Clarifications

8.1 Timer Values for RAS messages

Description: An error (missing value) in the defined fields of the **SETUP** message has been discovered.

RAS Message	*Time-out value (sec)*	*Retry count*
GRQ		
GCF		
GRJ		
RRQ		
RCF		
RRJ		
URQ		
UCF		
URJ		
ARQ		

ACF		
ARJ		
BRQ		
BCF		
BRJ		
IRQ		
IRR		
DRQ		
DCF		
DRJ		
LRQ		

8.2 Q.931 Call Issues

8.2.1 Q.931 Call Reference Value:

There has been some confusion about the encoding of the Call reference value from documentation in the Q.931 standard. Shown below is the pertinent section from the Q.931 standard as referenced in the H.225.0 document. The 'octet 2' as indicated by the highlighted field is actually the first octet of the CRV number itself.

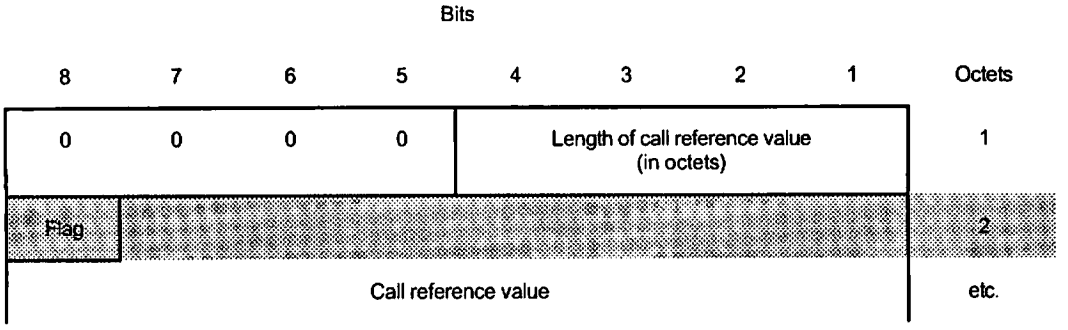
7.2.1.2 Call reference (Q.931)

As defined in subclause 4.3/Q.931

A call reference value length of two octets shall be supported by any H.323 end point.

The call reference value is chosen at the side originating the call and has to be locally unique. For subsequent communication, the calling and the called side shall use this call reference value in all the messages belonging to this particular call.

The value is encoded following Figure 4-5/Q.931 for a two-octet call reference value. The most significant octet of the reference value is always encoded in octet number 2.



8.2.2 Q.931 Signaling channel:

Implementers of H.323 endpoints have the option of controlling the Q.931 control channel under the following circumstances outlined in H.225.0

From H.225.0 Section 6.1

1. For terminal to terminal call signaling (Figure 9/H.323), either terminal may choose to close the reliable call signaling channel, or to leave it open.
2. For the gatekeeper mediated call signaling case (Figure 8/H.323), the terminals shall keep the reliable port active throughout the call. However, the gatekeeper may chose to close this signaling channel, but should keep the channel open for calls that involve gateways. This will allow the end-to-end transmission of Q.931 information elements such as display information.

The recommend mode of implementation is that endpoints should not close the Q.931 control channel for the duration of a call. Although it is not a strict requirement, this simplification will allow optional signaling to occur between the endpoints. This consistent mode of operation by all endpoints (keeping the Q.931 channel open) implies that all endpoints will issue the Q.931 ReleaseComplete when closing down the connection; after the H.245 EndSession.

8.2.3 Q.931 Message transmission:

The usage of Q.931 mandates the operation of a reliable transport channel - in the IP environment, TCP. In general there are no issues with overlapping multiple (unrelated) Q.931 signaling elements. For IP implementations of H.323 however, the practicalities of decoding the Q.931 messages from the TCP stream require the usage of an individual TPKT header for each message. In other words Q.931 messages may be 'pipelined' into the TCP channel as long as each message boundary is clearly indicated with an associated TPKT header.

For the receiving entities, this implies that the section of the byte stream that is associated with a particular message should be derived from the TPKT header.

8.3 Media Codecs:

8.3.1 H.261 Packetization:

The SBIT is the number of most significant bits that shall be ignored in the first data octet, EBIT is the number of least significant bits that shall be ignored in the last data octet.

8.3.2 H.263 Usage:

H.323 section 6.2.4 states:

> "The video codec is optional. All H.323 terminals providing video communications shall be capable of encoding and decoding video according to H.261 QCIF...."

Due to the fact the minimum reasonable bandwidth of H.261 is 60kbps, it is unreasonable to mandate its usage for low bandwidth (dial-up) links. In this case H.263 should be the minimum interoperability standard.

> "The video codec is optional. All H.323 terminals providing video communications shall be capable of encoding and decoding video according to H.261 QCIF. In addition, if the communication is to occur over a low bandwidth channel (defined as 64kbps or less) the terminal shall also be capable of encoding and decoding video according to H.263 QCIF."

8.3.3 G.711:

Clarification to implementers for H.323 Section 6.2.1 on audio coding.

G.711 - Sign bit (msb) of each octet is the first bit onto the media line, and the least significant bit is the last bit to be transmitted. A complete octet of 8 bits/sample of G.711 is to be put on the line. If encoder (or GW source on the SCN side) supplies 6 or 7 bits of audio data , then zero padding must be applied to the samples as they are passed onto the H.323 side.

8.3.4 G.723 Usage:

H.323 section 6.2.5 states:

> "All H.323 terminals shall have an audio codec. All H.323 terminals shall be capable of encoding and decoding speech according to Recommendation G.711. ...."

Due to the fact the bandwidth of G.711 is 64kbps, it is unreasonable to mandate its usage for low bandwidth (dial-up) links. In this case G.723 should be the minimum interoperability standard. This makes H.323 consistent with the H.324 decision for low speed links.

> "All H.323 terminals shall have an audio codec. All H.323 terminals shall be capable of encoding and decoding speech according to Recommendation G.711. In addition, if the communication is to occur over a low bandwidth channel (defined as 64kbps or less) the terminal shall also be capable of encoding and decoding audio according to G.723."

8.4 H.245 Signaling:

H.225.0 Section 6.1 states:

> "When messages are sent on the reliable H.245 control channel, more than one message may be sent in a single packet as long as whole messages are sent; there shall be no fragmentation of H.245 messages across packets."

The usage of H.245 mandates the operation of a reliable transport channel - in the IP environment, TCP. In general there are no issues with overlapping multiple H.245 signaling elements. For IP implementations of H.323 however, the practicalities of decoding the messages boundaries from the TCP stream require the usage of TPKT headers. This is the 'packet' that is referred to in the above section; not the IP layer packet. In other words, multiple H.245 messages may be combined into one TPKT by accounting for their combined length in the header value. Each individual message boundary can be deduced as the TPKT is incrementally decoded by message sections.

For the receiving entities, this implies that the section of the TPKT associated with an individual H.245 messages should be derived from the ASN.1 decode.

8.5 *Connection Establishment:*

8.5.1 SETUP Messages

There is no explicit synchronization or locking, during call establishment between two endpoints. This implies that an endpoint 'A' can send a SETUP to endpoint 'B' at the same instant that 'B' is sending a SETUP to 'B'. Assuming that A and B only wanted to establish one call between them, implementations should provide some method to resolve this 'overlap' of calls.

SETUP overlaps will be handled in the application. In the event that an endpoint receives a SETUP message from a terminal to which it had previously sent its own SETUP, the endpoint may take any action suitable to the implementers. The recommended behavior is that the application go 'off-hook' (become busy) during the time that an outstanding SETUP message has not received any response. In the event that the terminal can support more than one concurrent connection, this action is still recommended in cases where the received SETUP is from the same endpoint to which the pending SETUP has been sent.

8.5.2 Response to SETUP Messages

Section 8 in H.323 shows a number of diagrams outlining message signaling for various call scenarios. (figures 13-23) . The ALERTING message is mandatory; in terms of being able to be sent. However, if the endpoint receiving the SETUP message can respond with a CONNECT, CALLPROCEEDING or RELEASECOMPLETE within 4 seconds, it is not required to send an ALERTING.

The sender of a SETUP message can expect to get either an ALERTING, CALLPROCEEDING, CONNECT or RELEASECOMPLETE within 4 seconds after successful transmission. The meaning of the Alerting message is that the called party (the user) has been alerted of an incoming call. Alerting should never be generated by any system except the ultimate called terminal, and then only when it has actually alerted the user. (Of course, in a case of interworking with POTS, for example, the gateway would generate Alerting when it receives a ringing indication -- the POTS equivalent of Alerting.)

A gateway should send CALLPROCEEDING when it receives the SETUP (or after it receives ACF) if it expects more than 4 seconds to elapse before it receives CALLPROCEEDING, ALERTING, CONNECT, or RELEASECOMPLETE from the remote system. (Actually, it's easiest to just always send it.)

8.5.3 STATUS message values

Some call states (as indicated by a STATUS message) can't be reached by other mandatory states. No endpoint should be required to support *sending* these call states - but if an endpoint is able to support an optional call state, it may signal it. In other words receivers of the STATUS message should be tolerant of state values that itself can not get into.

8.5.4 Addressing values in messages

SrcInfo (AliasAddress) in the ARQ is a required sequence, however there are conditions under which this value may not be known. Endpoints are not required to have an alias defined - in this case the SrcInfo sequence is present in the encoding of the ARQ message but it has a 0 length.

A calling endpoint must identify itself in the SETUP message. In order for a calling endpoint to identify itself it may supply an alias (either an E.164 address or an h323-ID). If the source address is in the form of E.164 it should be placed in the calling party number of the SETUP message. (as per instructions in H.225.0 section 7.3.11) If the endpoint only has an h323-ID (or prefers to use this as its source address) it should place the h323-ID in the optional Setup-UUIE, sourceAddress field.

(This alias address may be 'manufactured' from the IP address in 'doted' notation).

8.5.5 Gateway Bandwidth Indications

In the case of incoming calls to an H.320-H.323 Gateway (from SCN to LAN) the receiving Gateway cannot guarantee that the call bandwidth requested (in the initial ARQ) will be the final amount. If multiple B-channels are added during the call, the Gateway shall issue BRQs for any added bandwidth on the LAN portion of the connection. It is recommended that Gateways have a default values (e.g. 128kb – 2B and 384kb-6b) for the initial ARQ.

H.323 Recommendation Series Defect Report Form

DATE:

CONTACT INFORMATION

NAME:
COMPANY:
ADDRESS:

TEL:
FAX:
E-MAIL:

AFFECTED RECOMMENDATIONS:

DESCRIPTION OF PROBLEM:

SUGGESTIONS FOR RESOLUTION:

Note – Attach additional pages if more space is required than is provided above