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1. Introduction

This document contains a number of proposals for changes that were discussed by the editors, but were felt to be of sufficient scope and importance to require some additional justification before inclusion in the text of the drafts.

2. Changes to the Registration Process

Currently the terminal supplies the transport address along with any H323_IDs or E.164 addresses that it may desire to use. The terminal may supply a number of H323_IDs or E.164 addresses as long as they all are unique within the domain and map to a single transport address. While this type of procedure applies well to a series of aliases that may be made up by an individual (i.e. "Dale", "dls@mtgbcs.att.com", etc.) it does not apply well to E.164 addresses. First, there is probably one and only one unique E.164 address that is assigned to a given terminal. Even if the user is told the correct number, they may fail to enter it properly initially, or it may be mis-entered or corrupted during a registration, leading to administrative expense to correct such problems.

Some customers may find it desirable to centrally administer unique E.164 addresses, and have them automatically and correctly distributed to terminals without human intervention. Such a process would prevent errors from manual entry and corrupted distribtion, and assure that duplicate address problems do not arise.

This could be easily added to the RCF (Registration Confirmation) message with the requirement that the gatekeeper assigned E.164 address over-rides any address or addresses previously in use by the terminal. Since it is desirable to assign the E.164 address to a unique person, or possibly to a device used by many people, it seems necessary to include an indentification field or fields in the RRQ message that could be uniquely mapped by the gatekeeper to an E.164 address. Such a procedure would overcome problems

associated with terminals have non-unique transport addresses, or addresses that change over time.

Further, to support interoperability between terminals and gatekeepers made by different manufacturers, these procedures should be mandatory.

3. Registered to Unregistered Terminal Calls

In some previous discussion it has been suggested that although the gatekeeper managed call model can be used when a registered terminal calls an unregistered terminal (Figures 13 & 14, H.323, Jan 11 draft), that when an unregistered terminal calls a registered terminal (Figures 15 & 16) that only the direct call model can be used. If true, this indroduces a troubling asymmetry in our procedures, with the practical effect that in real systems call features might vary greatly depending on the direction of the call, which seems highly undesirable from a customer viewpoint.

Hence, it seems very important to make the call signaling method of Figure 16 work properly, and in a fashion using the same general procedures as the other cases. In the current draft of H.323/Figure 16, endpoint 2 is acting as a relay between endpoint 1 and its gatekeeper for certain messages, which seems awkward.

Another approach to this problem is to make use of the GQRQ from H.225.0 (AVC-869v2) to request the address of the gatekeeper if one exists. Thus we would see the following:

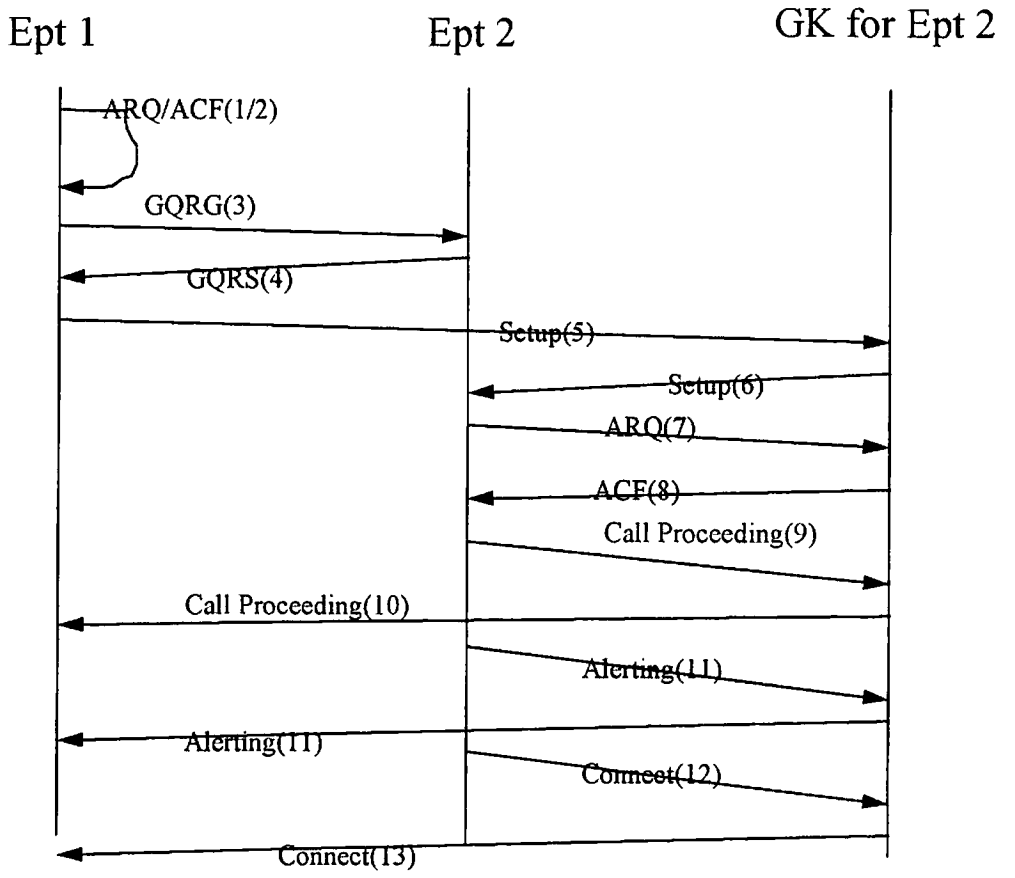

Figure 16/H.323 Called Endpoint Bound to Gatekeeper - Gatekeeper Routed Call Signalling

This procedure makes this case like the others, but with the addition of a single message sequence that must be supported by the terminal. It has the effect of ensuring that the gatekeeper will choose the call model in all cases, and that features will be provided in the same way from the same source for both inbound and outbound calls in all cases. Note that the direct case of Figure 15 must also be changed to include the GQRG/GQRS sequence.

Note that no gatekeeper to gatekeeper signaling has been defined; all messages relate to the terminal/gatekeeper relationship.

4. Ad Hoc Multipoint Conference

A definition of a Ad Hoc Multipoint Conference was included in H.323, Section 3. A better definition is ***"An Ad Hoc Multipoint Conference is a multipoint conference that was established dynamically rather than by pre-arranged dial-in or dial-out to/from an MCU. This can be done using the direct call model if one or more of the terminals on the initial call has an integral MC, or using the gatekeeper mediated call model if the gatekeeper includes or has access to MC functionality"***