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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Infrastructure of audiovisual services – Supplementary
services for multimedia

Location number within H.323 systems

ITU-T Recommendation H.460.20



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ITU-T Recommendation H.460.20

Location number within H.323 systems

Summary

This Recommendation defines a parameter "LocationSourceAddress" to convey location numbers as a field that carries a sequence of an alias address that matches the Location Number from/to non-H.323 networks. Coming from non-H.323 networks, this field can be inserted by Gateways. Coming from H.323 networks, this field can be inserted by originating Gatekeepers.

Source

ITU-T Recommendation H.460.20 was approved on 13 September 2005 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

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Introduction

Nowadays more and more telephone numbers do not provide any information on geographic localization of the calling party. Although there is a need to have an accurate geographic position, there is also a need to convey already existing information about localization coming from the PSTN.

In the PSTN, a parameter is defined to transport a location number coming from a Mobile Network. This parameter (Location Number in ISUP) is also used inside PSTN to give more accurate information on the calling party, when the calling party number cannot be used to provide any geographic information. For example this information is used for IN services like premium services, (free) 800-numbers, emergency services, etc.

To better interwork with ISUP, this Recommendation proposes a field called LocationSourceAddress which may be added and filled by gatekeepers and gateways.

NOTE – In this Recommendation, the geographic information provided is only a number conveyed. This number may be a zip code, an E.164 number, a zone number, or whatever the need may be. This parameter should not be used to convey accurate geographical information (such as earth coordinates).

ITU-T Recommendation H.460.20

Location number within H.323 systems

1 Scope

In the case of Voice over IP trunking (H.323 network is between two PSTN networks), since the distant PSTN network may need the location number parameter, H.323 should convey the location number present in ISUP. Otherwise this information is lost at the interworking edge.

In the case of an IP to PSTN call in a GK routed model, the originating GK (where the terminal is registered to) should be able to add a location number when the calling party number does not provide any information on the geographic location of the calling party. This information is needed by the PSTN for emergency services for billing and for routing the call.

In the case of a PSTN to IP call, in a GK routed model, H.323 should have a field to convey the location number provided by ISUP networks. As a matter of fact, some H.323 application servers need more precise information on the calling party for emergency services for billing and for routing the call.

This Recommendation proposes a parameter "LocationSourceAddress" to convey the location number.

NOTE – Location number in the Service Channel Network (SCN) is specified in ITU-T Rec. Q.763.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- ITU-T Recommendation H.225.0 (2003), *Call signalling protocols and media stream packetization for packet-based multimedia communication systems.*
- ITU-T Recommendation H.245 (2005), *Control protocol for multimedia communication.*
- ITU-T Recommendation H.323 (2003), *Packet-based multimedia communication systems.*
- ITU-T Recommendation H.460.1 (2002), *Guidelines for the use of the Generic Extensible Framework.*
- ITU-T Recommendation Q.763 (1999), *Signalling System No. 7 – ISDN user part formats and codes.*

3 Abbreviations

This Recommendation uses the following abbreviations:

GEF	Generic Extensible Framework
GK	Gatekeeper
SCN	Service Channel Network

4 Feature description

4.1 Negotiation of the feature

Usage of the LocationSourceAddress feature is negotiated between Gateways and Gatekeepers and/or between Gatekeepers at call set-up time. For this purpose, Gateways or Gatekeepers that support this feature shall include the feature descriptor defined in 4.3 (see Table 1 below) when they issue a SETUP message. The SETUP shall contain a request for LocationSourceAddress feature support in the **desiredFeatures** or **supportedFeatures** element. The **neededFeatures** element should not be used to request this feature as it should be optional.

In addition, the SETUP message shall include a **genericData** element specifying **LocationSourceAddress** (parameter 1).

The receiving party should not acknowledge the acceptance of the LocationSourceAddress feature as there is no associated procedure to apply at the calling party if this feature is not supported by the called party.

4.2 Generic data usage

The Generic Extensible Framework (GEF) shall be used to convey the LocationSourceAddress as described in tabular form below.

4.3 Negotiation of LocationSourceAddress feature

The LocationSourceAddress feature will be negotiated as a Generic Extensible Framework as described in ITU-T Rec. H.323 (2003). The **FeatureDescriptor** for LocationSourceAddress Feature will be a **GenericData** element with a standard **GenericIdentifier** of value '20':

Table 1/H.460.20 – LocationSourceAddress feature

Feature Name:	LocationSourceAddress Feature
Feature Description:	This feature permits the use of LocationSourceAddress elements.
Feature Identifier Type:	Standard
Feature Identifier Value:	20

The following subfeature parameters are defined for the LocationSourceAddress feature. The parameters are used within a **genericData** list in ITU-T Rec. H.225.0 call signalling messages in order to indicate or invoke the corresponding feature/request.

Table 2/H.460.20 – LocationSourceAddress parameter

Parameter Name:	LocationSourceAddress
Parameter Description:	This field is an ASN.1-PER encoded ExtendedAliasAddress.
Parameter Identifier Type:	Standard
Parameter Identifier Value:	1
Parameter Type:	Raw
Parameter cardinality:	zero or once

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