Telecommunication Standardisation Sector
Study Group 15
Experts Group for Video Coding and Systems in
ATM and Other Network Environments

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SOURCE : Stuart Dunstan, Siemens Ltd
TITLE : Comments on references to H.245 in H.310 and H.323
PURPOSE : Proposal

## 1. Introduction

Attention is drawn to proposed text for H.310 [1], and text in H.323 [2], of the following form,

> H.245 messages fall into four categories: Request, Response, Command, and Indication. Request messages require a specific action by the receiver, including an immediate response. Response messages respond to a corresponding request. Command messages require a specific action, but do not require a response. Indication messages are informative only, and do not require any action or response. ...

In introducing H.245 it may be unwise to emphasise this classification of messages for the following reasons,

i) system recommendations should emphasise the protocol entity nature of H.245. H.245 consists of a number of independent protocol entities e.g. master slave signalling entity, logical channel signalling entity, etc. Each protocol entity consists of syntax (messages and fields), semantics, and well defined procedures. Global message classification is in itself not an important aspect.

ii) the statement appears to give mandatory requirement to message procedures based on this classification. This may conflict with procedures defined in section 8. Section 8 defines the interaction with the user, what actions shall be performed at each terminal, what messages may be sent, and when messages may be sent. Further specification is not required.

This last issue also exists in H.245, though it is proposed to take no action there.

Figure 1 shown overleaf provides an overview of H.245.

## 2. Comments on H.323

Section 5.2.7 of H.323 currently discusses messages in H.245, and says nothing about semantics and procedures. It states what messages defined in H.245 are <u>not</u> used in H.323.

It may be preferable if H.323 referred to protocol entities consisting of syntax, semantics, and procedures, and stated explicitly which H.245 protocol entities are used in H.323.

Note that in H.245 the term "PDU" has been replaced by the term "message".

## 3. Proposed text

The following is possible replacement text for H.310 and H.323 if the above points are deemed to be significant. The protocols entities listed apply to H.310. For H.323, appropriate protocol entities should be added or removed.

----start quote----

H.245 specifies a number of independent protocol entities which support terminal-to-terminal signalling. A protocol entity is specified by its syntax (messages), semantics, and a set of procedures which specify the exchange of messages and the interaction with the user. H.310 terminals shall support the syntax, semantics, and procedures of the following protocol entities;

- master slave determination
- capability exchange
- logical channel signalling
- bi-directional logical channel signalling
- close logical channel signalling
- mode request
- round trip delay determination
- maintenance loop signalling
- specific commands and indications *(should be specified)*

----end quote----

## 4. Additional issue in H.310

The text in section 5.6.3 of [1] should be modified to reflect the definition of a logical channel as defined in H.245, i.e.

> **Logical Channel:** A logical channel is a uni-directional path or bi-directional path for the transmission of information.

Hence a logical channel is by definition uni-directional or bi-directional. The transmission paths of a bi-directional logical channel may have different characteristics.

## References


[1] Mr Hibi, "Draft text of H.310 communication protocol", email of 29 Dec 1995.

[2] Draft Rec. H.323. "Visual Telephone Systems and equipment for local area networks which provide a non-guarantedd quality of service", November 6, 1995 (H323-8.ww6).

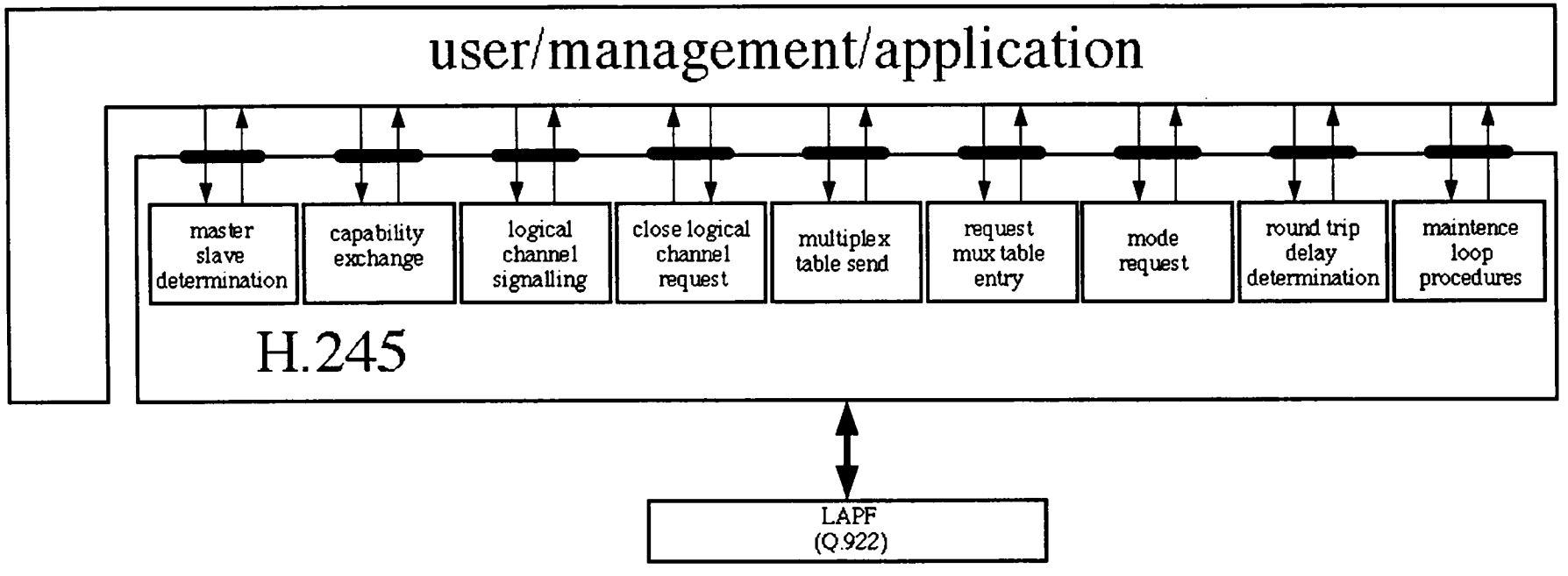
user/management/application
master slave determination
capability exchange
logical channel signalling
close logical channel request
multiplex table send
request mux table entry
mode request
round trip delay determination
maintence loop procedures
H.245
LAPF
(Q.922)

Figure 1. Representation of H.245.