ITU Telecommunication Standardization Sector
Study Group 15
Q.2&3/15 Rapporteur Meeting
Eibsee, 24-27 September 1996

Document AVC-1003
8 June 1996

Source: SG11 and SG15
Title: Liaison statements regarding Q.2931 terminal protocol identification
Purpose: Report

This document contains the following liaison statements between SG11 and SG15:

Annex 1 From SG11 Miyazaki meeting (February 1996) to SG15
Annex 2 From SG15 Geneva meeting (May-June 1996) to SG11

END

Annex 1

ITU - Telecommunications Standardization Sector
Study Group 11 **Original: English**
Torino, October

Document addressed to WP 2/11 (DSS2)

QUESTION: 15/11

SOURCE:* Editor

TITLE: Proposed Changes to Q.2931

ABSTRACT: This document contains proposed changes to the text sections of Recommendation Q.2931. This document reflects changes at the January meeting in Miyazaki.

The following are areas for clarification for which no text is included:

- Actions are unclear upon receipt of a message with the global or dummy call reference and which contains IEs with errors with instruction indicator "clear call".

The convention for the proposed text changes is:

New text is underlined.
Deleted text has strike through.
Existing text is as shown.

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Clause 4.5.5/Q.2931

Ed: Add following codepoint and text to Table 4-6 (Sheet 3 of 3), Partially Filled Cell Method:
0000 0000 partially filled cells method is not used, i.e., cells are filled completely (Note)
Note: The indication of this codepoint is equivalent to the absence of the subfield for partially filled cells method.

Ed: Modify note at the end of Table 4-6 relating to default value for partially filled cells by replacing current text "default = 47 octets" by:
default = partially filled cells method is not used, i.e., cells are filled completely.

Clause 4.5.5/Q.2931 (AAL IE)

Add two new codepoints to the SSCS Type subfield (octet 8.1 for AAL type 5):

8 7 6 5 4 3 2 1	Bits
0 0 0 0 1 0 0 0	ITU-T Rec. I.365.2 (SSCF to provide CONS and Q.2110 (SSCOP)) (Note 1)
0 0 0 0 1 0 0 1	ITU-T Rec. I.365.3 (SSCF to provide COTS and Q.2110 (SSCOP)) (Note 1)

Note 1: This codepoint is only applicable for AAL type 5.

In addition, clarify the meaning for the following existing codepoints for the SSCS Type subfield:

8 7 6 5 4 3 2 1	Bits
0 0 0 0 0 0 0 1	ITU-T Rec. Q.2110 (SSCOP assured operation) with unspecified SSCF
0 0 0 0 0 0 1 0	ITU-T Rec. Q.2110 (SSCOP non-assured operation) with unspecified SSCF
0 0 0 0 0 1 0 0	ITU-T Rec. I.365.1 (SSCS to provide frame relay services)

Clause 4.5.9/Q.2931 (B-LLI)

Add the following two codepoints to the User information layer 3 protocol field (bits 5-1 Octet 7):

5 4 3 2 1	Bits
0 1 1 0 0	ITU-T Recommendation H.310
0 1 1 0 1	ITU-T Recommendation H.321

Add the following octets to B-LLI contents:

Additional B-LLI Contents

8	7	6	5	4	3	2	1	
0/1	Reserved			Terminal Type				7a*
ext								(Note 6)
1	0	Forward Multiplexing			Backward Multiplexing			7b*
ext	Spare	Capability			Capability			(Note 6)

Note 6: This octet may be present only if octet 7 indicates ITU-T Rec. H.310.

Terminal Type (bits 4-1 Octet 7a)

4 3 2 1	Bits
0 0 0 1	Receive only
0 0 1 0	Send only
0 0 1 1	Receive and send

Forward Multiplexing Capability (bits 6-4 Octet 7b)

6 5 4	Bits
0 0 0	No multiplexing
0 0 1	Transport stream (TS)
0 1 0	Transport stream with forward error correction
0 1 1	Program stream (PS)
1 0 0	Program stream with forward error correction
1 0 1	ITU-T Rec. H.221

Backward Multiplexing Capability (bits 3-1 Octet 7b)

3 2 1	Bits
0 0 0	No multiplexing
0 0 1	Transport stream (TS)
0 1 0	Transport stream with forward error correction
0 1 1	Program stream (PS)
1 0 0	Program stream with forward error correction
1 0 1	ITU-T Rec. H.221

Note 1 - The allowable combination of codepoints for the Multiplexing capability and Terminal type fields may be restricted. These restrictions are provided within the terminal protocol specifications.
Note 2 - It is required for further study to include AAL capability supported (AAL 1, AAL 5, AAL 1 & 5) in B-LLI IE.

Clause 4.5.9/Q.2931

Octet groups 5 (layer 1 id.), 6 (layer 2 id.), and 7 (layer 3 id.) of the Broadband low layer information element are not position independent, but, if present at all, shall be sent in the order as specified in Figure 4-16/Q.2931.

Clause 4.6/Q.2931 (Figures 4-31, 4-32, 4-33, and 4-34)

Further contents as in Figure 4-xx/Q.931 and Table 4-xx/Q.931. (Note)

Note: The coding rules of Q.931 shall apply.

Clause 5.1.3

Ed: replace "ATM user cell rate" with "ATM traffic descriptor".

Clause 5.2.3/Q.2931 (change last two paragraphs)

The network and user shall support the non-associated signalling procedures and may as an option support the associated signalling procedures. ~~A subscription option is necessary if the network supports both non-associated and associated signalling.~~ The associated signalling procedures are used only by bilateral agreement between the user and the network.

When the user ~~network~~ receives a Connection identifier information element...with a value not supported by the user ~~network~~, the call shall be rejected with cause #36, "VPCI/VCI assignment failure".

Clause 5.6.8.1/Q.2931

Action shall be taken on the message and those information elements which are recognized and have valid content. Unrecognized information elements shall be discarded and ignored.

Clause 5.6.8.2/Q.2931

action shall be taken on the message and those information elements which are recognized and have valid content. Information elements with content error shall be discarded and ignored.

Clause 6.3 Interworking N-ISDN -> B-ISDN (add new subclause as follows)

6.3.6 Mapping of Clearing Messages

The DISCONNECT message of Q.931 is mapped to the RELEASE message of Q.2931.

Clause 6.4 Interworking B-ISDN -> N-ISDN (add new subclause as follows)

6.4.5 Mapping of Clearing Messages

The RELEASE message of Q.2931 is mapped to the DISCONNECT message of Q.931.

Clause 6.4.5/Q.2931

93 ~~78~~ AAL parameters cannot be supported) ==> ~~value 79 Service or option not implemented, unspecified;~~ 95 Invalid message, unspecified

Clause 6.6.2/Q.2931

Ed: Delete reference to timer T312 from the list of timers in this clause because T312 only applies to DSS 1, not DSS 2.

Annex B/Q.2931 (second last paragraph)

Therefore,...that the terminal checks the B-LLI,...

Annex E/Q.2931 (Tables E-1, E-2, E-3)

AAL parameters: ~~AAL for voice~~ see § E.4

Annex F.2/Q.2931

d) for User defined AAL:
- User defined AAL Information (4 octets).

Annex 2

ITU - Telecommunication Standardization Sector
STUDY GROUP 15

Temporary Document (WP1/15)

Geneva, 27 May - 7 June 1996

Questions: 2/15, 3/15

SOURCE: RAPPORTEUR FOR Q.2/15 (SAKAE OKUBO)
TITLE: DRAFT LIAISON STATEMENT TO SG11

This draft liaison statement is in response to TD 22 (WP1/15) from SG11 regarding terminal protocol identification.

QUESTIONS: Q.2, 3/15, Q.15/11
SOURCE: ITU-T SG15 (Geneva, 27 May - 7 June 1996)
TITLE: Q.2931 B-LLI FOR H.310 TERMINAL PROTOCOL IDENTIFICATION

LIAISON STATEMENT

TO: Study Group 11
APPROVAL: Approved by Study Group 15
FOR: Action
DEADLINE: April 1997

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SG15 appreciates the SG11 consideration of our requirements for Q.2931 regarding the terminal protocol identification. We are pleased to see that they will be reflected in the future revision of Q.2931. However, we are concerned about the reservation of the field for "AAL capability supported", bits 5-7 of Octet 7a. Since this is essential for the H.310 terminal protocol identification as sated below, SG15 requests that SG11 define this field giving a codepoint for each of AAL1, AAL5 and AAL1&5.

We are coping with the wide flexibility of B-ISDN; a typical question is with what bit rate a call should be started. In case of N-ISDN, opening a symmetrical 64 kbit/s B channel is given, but in B-ISDN we may wish to have a communication of 5 Mbit/s symmetrical, 10 Mbit/s symmetrical, 7 Mbit/s and 64 kbit/s asymmetrical, etc. etc.

Hence our approach is to start with a common symmetrical 64 kbit/s connection with AAL5 solely for deciding an appropriate audiovisual communication mode. This procedure is common to all of H.310 terminal types (described later). Then, each terminal indicates its capabilities to the remote terminal using the capability exchange messages and procedures specified in ITU-T Recommendation H.245 and a set of parameters for the audiovisual communication are decided, such as bitrate, AAL, audio coding law, video coding law. No human interaction takes place through this initial call. According to the mode of operation agreed through the H.245 capability exchange procedures, the second VC for audiovisual and other data is established with proper parameters such as bitrates for respective directions, AAL. Finally, a desired audiovisual communication starts. One or more VCs may be set up according to the negotiation between the two terminals involved.

Profiling of H.310 terminal types is based on the following two functionalities supported:

- audiovisual transport: receive only (ROT), send only (SOT), receive and send (RAST)
- AAL: AAL1, AAL5, both AAL1 and AAL5

Hence we now have the following 9 types in Recommendation H.310:

- ROT-1, ROT-5, ROT-1&5
- SOT-1, SOT-5, SOT-1&5
- RAST-1, RAST-5, RAST-1&5

Out of these terminal types, some combinations can not interwork due to incompatibility of audiovisual transport capability or AAL capability: e.g. ROT-1 and ROT-1, ROT-1 and SOT-5. Hence we need a separate codepoint for each of them.

Please note that inclusion of terminal type (ROT/SOT/RAST) as well as AAL (AAL1, AAL5, AAL1&5) as part of the compatibility check fields (now B-LLI) is intended to allow this terminal type identification for the initial call. For example, an initial call from AAL1&5 terminal to AAL1 terminal should be accepted (actual audiovisual communication will follow with AAL1), while the one from AAL1 terminal to AAL5 terminal should be rejected because there is no chance of communication, hence should not be charged.

- END -