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ITU-T

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STANDARDIZATION SECTOR
OF ITU

G.9961

Amendment 2

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SERIES G: TRANSMISSION SYSTEMS AND MEDIA,
DIGITAL SYSTEMS AND NETWORKS

Access networks – In premises networks

Unified high-speed wireline-based home networking
transceivers – Data link layer specification

Amendment 2

CAUTION !

PREPUBLISHED RECOMMENDATION

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Amendment 2 to Recommendation ITU-T G.9961 (2015)

Unified high-speed wireline-based home networking transceivers – Data link layer specification: Amendment 2

Summary

Amendment 2 to Recommendation ITU-T G.9961 (2015) includes support for compression of BAT and BMAT messages, and support for indicating PSD capabilities of a node.

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Amendment 2 to Recommendation ITU-T G.9961 (2015)

Unified high-speed wireline-based home networking transceivers – Data link layer specification: Amendment 2

1. Revise the text of §8.6.1.1.4.1 “Registration request message (ADM_NodeRegistrRequest.req)” as follows:

8.6.1.1.4.1 Registration request message (ADM_NodeRegistrRequest.req)

The ADM_NodeRegistrRequest.req message is a unicast management message sent by a registering node to the domain master (directly or via a proxy), and is intended to be used for registration requests only. The format of the MMPL of the ADM_NodeRegistrRequest.req message shall be as shown in Table 8-16.

Table 8-16 – Format of the MMPL of the ADM_NodeRegistrRequest.req message

Field	Octet	Bits	Description
Attempt	0	[1:0]	00 ₂ for initial attempt, 01 ₂ , 10 ₂ , 11 ₂ for the second, third and fourth attempts
ProxyReg		[2]	Proxy registration flag; shall be set to one for registration through proxy (see clause 8.6.1.2) and zero otherwise.
Reserved		[7:3]	Reserved by ITU-T (Note 1)
ProxyDevID	1	[7:0]	Device ID of the Registration proxy (Note 2).
Parameters	2	[0]	Set to one if node is capable of operating as a domain master, zero otherwise
		[1]	Set to one if relaying is supported, zero otherwise
		[4:2]	Indicates the bandplan that the node shall use after registration represented as described in clause 7.1.2.3.2.2 of [ITU-T G.9960] (BNDPL/GRP_ID field).
		[5]	Set to one if the device is registering using registration code, zero otherwise.
		[7:6]	Reserved by ITU-T (Note 1)
T_AIFG	3	[7:0]	The value of T _{AIFG} supported by the node, represented as $n \times 1.28 \mu\text{s}$; the value of n is an unsigned integer in the range between 4 and 96. Valid values for each medium are specified in Table 8-14.
NumNodeInformationTLVs	4	[7:0]	Number of NodeInformationTLVs (N) included in this message.

Table 8-16 – Format of the MMPL of the ADM_NodeRegistrRequest.req message

Field	Octet	Bits	Description
Parameters	5	[0]	Set to one if node is capable of calculating routing tables, zero otherwise.
		[7:1]	Reserved by ITU-T (Note 1)
NodeInformationTLVs[0]	Variable	Variable	Information related to the features implemented and capabilities of the registering node. It shall be coded as described in Table 8-16.1
...	...	...	...
NodeInformationTLVs[N-1]	Variable	Variable	Information related to the features implemented and capabilities of the registering node. It shall be coded as described in Table 8-16.1
NOTE 1 – Bits that are reserved by ITU-T shall be set to zero by the transmitter and ignored by the receiver. NOTE 2 – This field shall be set to zero by the transmitter and ignored by the receiver when the ProxyReg field is set to zero.			

Table 8-16.1 – Format of NodeInformationTLVs[i] and DmInformationTLVs[i]

Field	Octet	Bits	Description
InformationType	Variable	[7:0]	Type of information field 0 – ITU-T information (see Table 8-16.2). 1 – Reserved for HGF information All other values of this field are reserved by ITU-T.
InformationLength	Variable	[7:0]	Length in bytes of information value field.
InformationValue	Variable	Var	Value of information field.

Table 8-16.2 – Format of the InformationValue field when the InformationType field is set to ITU-T information in Table 8-16.1

Field	Octet	Bits	Description
ITUFieldsContents	0	[7:0]	Bits [7:0] represent the information related to the presence of the different components of the ITU-T information field. Bit 0: This bit shall be set to ZERO. Bit 1: If set to one, Capabilities field is present. If set to zero, Capabilities field is not present. Other bits are reserved by ITU-T and shall be set to 0 (Note)
Capabilities	Variable	See Table 8-16.4	If present, this field contains the information on specific capabilities that the node implements. The format of this field is described in Table 8-16.4
NOTE – Bits that are reserved by ITU-T shall be set to zero by the transmitter and ignored by the receiver.			