1 ## 5.2 UMTPDU *Subtype* encoding

2 The value encoding of the *Subtype* field shall be as defined in Table 5-1.

3 **Table 5-1—*Subtype* field encoding**
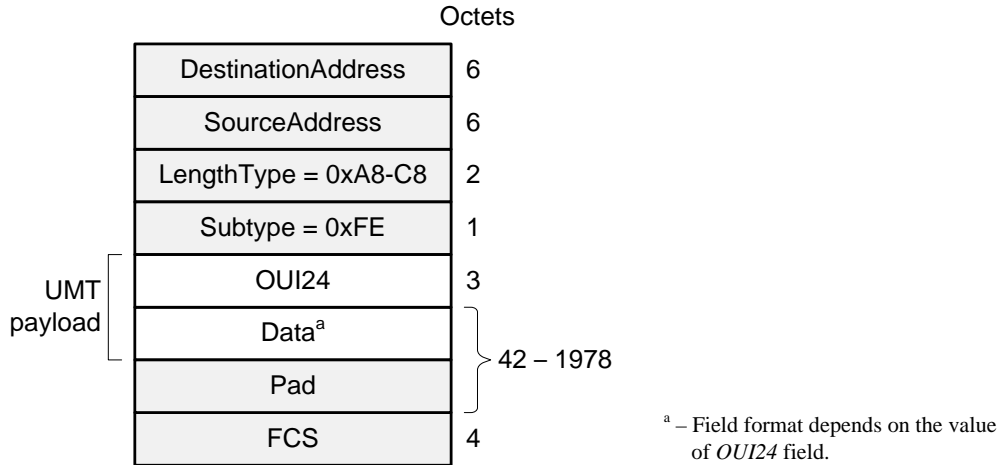
Value	Designation	Description
0x00	*UMT_config*	*UMT_config* subtype identifies *UMT_Request* and *UMT_Response* UMTPDUs used for configuring the UMT Classification and Translation Engine (see 6.1).
0x01, 0x02	n/a	Reserved for UMT Discovery protocol; ignored on reception.
0x03	*OAM_Subtype*	*OAM_Subtype* represents the OAMPDU payload carried within the UMTPDU (see 5.2.2).
0x04	*OMCI_Subtype*	*OMCI_Subtype* represents the OMCI payload carried within the UMTPDU (see 5.2.3).
0x05	*L2_subtype*	*L2_Subtype* represents a generic Ethernet frame carried within the UMTPDU (e.g., MAC-in-MAC) (see 5.2.4).
0x06	*L3_Subtype*	*L3_Subtype* represents a generic L3 packet (plus TPID) carried within the UMTPDU (see 5.2.5).
0x07 to 0xFD	n/a	Reserved; ignored on reception.
0xFE	*OUI24_Subtype*	*OUI24_Subtype* represents an organization-specific payload carried within the UMTPDU. The organization is identified by a unique OUI/CID value (see 5.2.6).
~~0xFE,~~ 0xFF	*OUI36_Subtype*	*OUI36_Subtype* represents an organization-specific payload carried within the UMTPDU ~~(see 5.2.6)~~. The organization is identified by a unique OUI-36 value (see 5.2.6).

4 **~~Editorial Note (to be removed prior to publication): Glen took an action item to look into new~~**
5 **~~organization specific ID structure and specify 0xFE for old (3 octet long) and 0xFF for new (longer)~~**
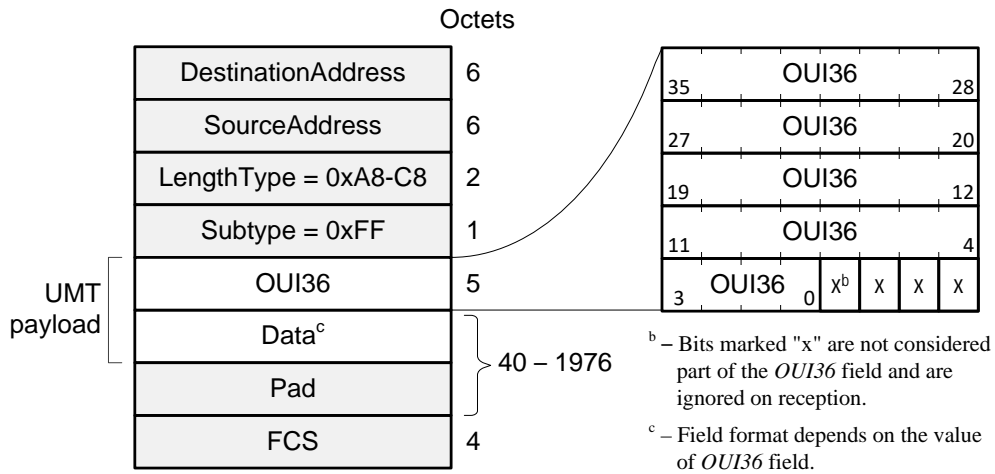6 **~~ones.~~**

7 ### 5.2.6 Organization-specific extension subtype

8 The Organization-specific UMTPDU is an instantiation of a generic UMTPDU as defined in 5.1. It is
9 identified ~~with~~ by the *Subtype* field value of ~~0xFE~~ *OUI24_Subtype* or ~~0xFF~~ *OUI36_Subtype* and it is used
10 for organization specific extensions.

11 The format and frame structure of the ~~Organization~~ Organization-Specific UMTPDU with *OUI24_Subtype*
12 ~~frame structure~~ shall be as depicted in Figure 5-5(a). ~~and theThe field *OUI* immediately following the~~
13 ~~*Subtype* field shall contain the Organizationally Unique Identifier (OUI) or Company ID (CID).~~ format and
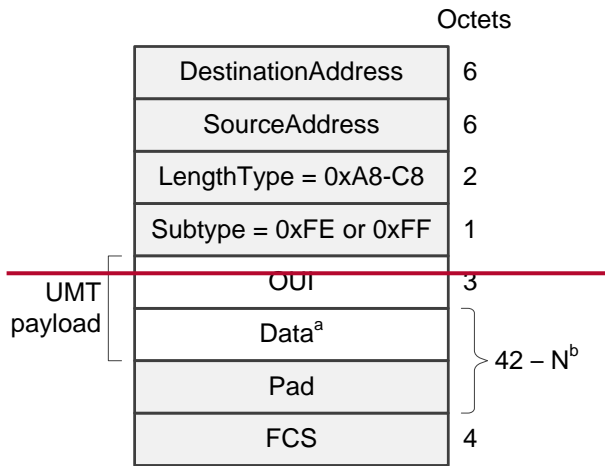14 frame structure of the UMTPDU with *OUI36_Subtype* shall be as depicted in Figure 5-5(b).

15

Octets

DestinationAddress	6
SourceAddress	6
LengthType = 0xA8-C8	2
Subtype = 0xFE	1
OUI24	3
Data[a]	
Pad	42 – 1978
FCS	4

UMT payload (brackets OUI24, Data, Pad)

[a] – Field format depends on the value of *OUI24* field.

a) UMTPDU format with *OUI24_Subtype* (0xFE)

Octets

DestinationAddress	6
SourceAddress	6
LengthType = 0xA8-C8	2
Subtype = 0xFF	1
OUI36	5
Data[c]	
Pad	40 – 1976
FCS	4

UMT payload (brackets OUI36, Data, Pad)

35	OUI36				28
27	OUI36				20
19	OUI36				12
11	OUI36				4
3	OUI36	0	x[b]	x	x	x

[b] – Bits marked "x" are not considered part of the *OUI36* field and are ignored on reception.

[c] – Field format depends on the value of *OUI36* field.

b) UMTPDU format with *OUI36_Subtype* (0xFF)

Octets

DestinationAddress	6
SourceAddress	6
LengthType = 0xA8-C8	2
Subtype = 0xFE or 0xFF	1
OUI	3
Data[a]	
Pad	42 – N[b]
FCS	4

UMT payload (brackets OUI, Data, Pad)

a – Field format depends on the value of *OUI* field.
b – Maximum field length depends on frame type (see Figure 5-1).

Figure 5-1—Format of UMTPDU with organization-specific extension subtype

The structure of the *UMT payload* in the UMTPDU with organization-specific extension subtype is defined as follows:

—*OUI24*:

This field carries the Organizationally Unique Identifier (OUI) or Company ID (CID) value assigned to an organization by the IEEE Registration Authority (IEEE RA)[a].

—*OUI36*:

This field carries the Organizationally Unique 36-bit Identifier (OUI-36) value assigned to an organization by the IEEE RA.

—*Data*:

This field carries the OUI/CID-specific data payload. The internal format of the *Data* field is dependent on *OUI24* or *OUI36* field value and is beyond the scope of this standard. The combined size of the *Data* and *Pad* fields ranges between 42 and *N*, where *N* is defined in Figure 5-1.

---

[a] Refer to Guidelines for Use of Extended Unique Identifier (EUI), Organizationally Unique Identifier (OUI), and Company ID (CID) at https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/tutorials/eui.pdf.