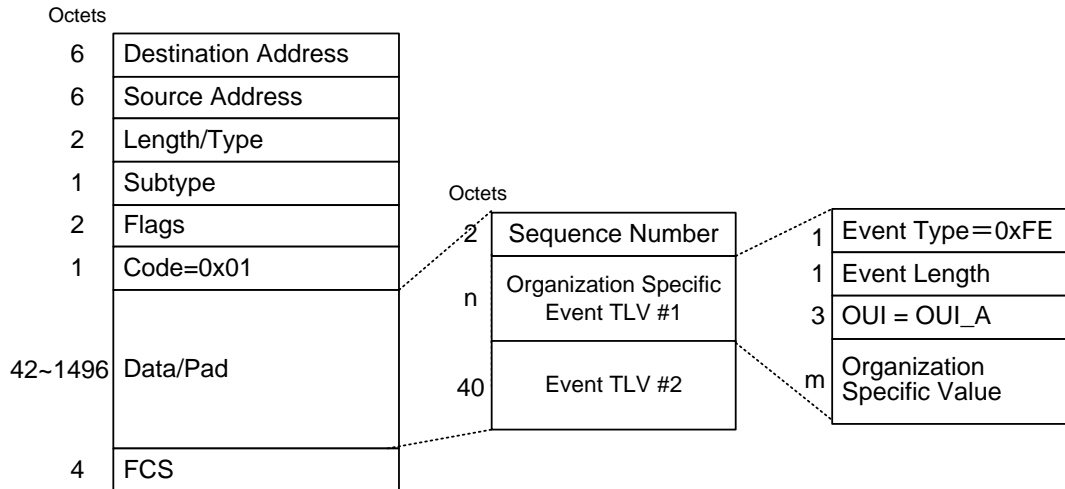


### 13.4.1.3.2 Event Notification TLV

The basic structure of the *Organization Specific Event* TLV shall be as specified in IEEE Std 802.3, 57.5.3.5. Specific fields in the *Organization Specific Event* TLV shall be as shown in Figure 13-8 and specified below:



**Figure 13-8—Relationship between *Organization Specific Event* TLV and the *Event Notification OAMPDU***

- a) Event Type = 0xFE, according to the encoding of this field as defined in IEEE Std 802.3, Table 57-12.
- b) Event Length. This one-octet field indicates the length (in octets) of this TLV-tuple.
- c) OUI for Package A, equal to OUI\_A.
- d) Organization Specific Value carries the specific set of event-associated information. Further, the structure of the Organization Specific Value shall be as specified in Table 13-84 and described below.

**Table 13-84—Internal structure of the Organization Specific Value field**

Octet(s)	Field	Notes
1	EventCode	This field identifies the type of alarm that was identified by the source OAM client. See Table 13-85 for definition of individual values for the EventCode field. These alarm codes are grouped into link faults, critical events, and Dying Gasp alarm types, with code values numbered accordingly. Only the values listed in the table are supported. Other values are reserved and ignored on reception.
1	EventRaised	This field indicates whether the given event was raised. The following values are supported: 0x00: The given event was cleared. 0x01: The given event was raised. Other values are reserved and ignored on reception.
2	ObjectType	This field identifies the object element generating the alarm in question.

Octet(s)	Field	Notes
<u>21, 2, or</u> 4	ObjectInstance	This field identifies the object element instance generating the alarm in question.

- Object**Type** field identifies the object that generated the given event, as defined in 14.4.1.1.1. Other values of the Object**Type** are reserved and ignored on reception.
- Object**Instance** field identifies the specific instance of the object that generated the given event, as defined in 14.4.1.1.2.

**Table 13-85—Code points for the EventCode field**

Event Code	Value	Description
Link Fault Alarms		
LoS	11	Loss of received optical power by the transceiver (ONU EPON port). Link down on Ethernet PHY (ONU UNI port).
Key Exchange Failure	12	ONU did not observe a switch to a new key after key exchange.
Critical Event Alarms		
Port Disabled	21	Ethernet port is disabled by management action.
Dying Gasp Alarms		
Power Failure	41	Loss of power at the ONU (Dying Gasp).
Other Alarms		
Statistics Alarm	81	Statistic has crossed defined alarm thresholds.
ONU Busy	82	ONU is busy and unable to acknowledge or process further OAM until alarm clears.
MAC Table Overflow	83	ONU MAC Table has seen more addresses than it can hold.