##### *13.4.1.3.2 Event Notification* TLV

1. 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:
2. 

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

* 1. Event Type = 0xFE, according to the encoding of this field as defined in IEEE Std 802.3, Table 57–12.
  2. Event Length. This one-octet field indicates the length (in octets) of this TLV-tuple.
  3. OUI for Package A, equal to OUI\_A.
  4. 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

| 1. **Octet(s)** | 1. **Field** | 1. **Notes** |
| --- | --- | --- |
| 1. 1 | 1. EventCode | 1. 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. 1 | 1. EventRaised | 1. This field indicates whether the given event was raised. The following values are supported: 2. 0x00: The given event was cleared. 3. 0x01: The given event was raised. 4. Other values are reserved and ignored on reception. |
| 2 | ObjectType | 1. This field identifies the object element generating the alarm in question. |
| 1, 2, or 4 | ObjectInstance | 1. This field identifies the object element instance generating the alarm in question. |

* ObjectType field identifies the object that generated the given event, as defined in 14.4.1.1.1. Other values of the ObjectType are reserved and ignored on reception.
* ObjectInstance 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. |