### 1.1.1.1    Message flow during eOAM discovery process

Figure 13-2 ~~presents the overview of data~~illustrates the message flow during the eOAM discovery process for compliant devices~~, and delay introduced by the Physical Layer (fiber propagation delay, any propagation delay in sublayers, etc.) is not shown~~. The eOAM discovery process operates by exchanging the *Extended Information* TLV between the OLT and the ONU. The OLT and the ONU may send additional *Organization Specific Information* TLVs if they support other versions of management software identified by other OUI values. The ~~following four steps describe~~ the eOAM discovery process comprises two steps described below:

**Step 1~~:~~ — Discovery of OLT and ONU capabilities:**

> The OLT starts the eOAM discovery process immediately after the completion of the OAM discovery process, by sending the *Information* OAMPDU (`eOAM_Discovery`) with the *Extended Information* TLV, as defined in 13.4.4.1. This message #1 contains the list of all supported versions of the management software associated with the OUI value of the given *Extended Information* TLV. The OLT may also send additional *Organization Specific Information* TLVs if it supports other versions of management software identified by other OUI values. The order in which individual *Information* TLVs are transmitted within the *Information* OAMPDU is defined in 13.3.2.2.

> ~~Step 2:~~ The ONU responds to the received `eOAM_Discovery` message #1 by sending the *Extended Information* TLV containing the list of supported versions of the management software associated with the same OUI in the `eOAM_Discovery` message #2~~, using the *Extended Information* TLV~~.

**Step 3~~2:~~ — Configuration of OLT and ONU eOAM versions:**

> Once the OLT receives the `eOAM_Discovery` message #2 from the ONU with the list of supported software versions, the OLT decides which version of the management software is to be used. The OLT then notifies the ONU about the selected version using the `eOAM_DiscoveryAck` message #3, carrying the single eOAMversion value.

> ~~Step 4:~~ The ONU confirms the selected extended OAM version by sending the `eOAM_DiscoveryAck` message #4 with the same software version.

This concludes the eOAM discovery process, at which time both the ONU and the OLT know what software version to use for further communication across the management channel.
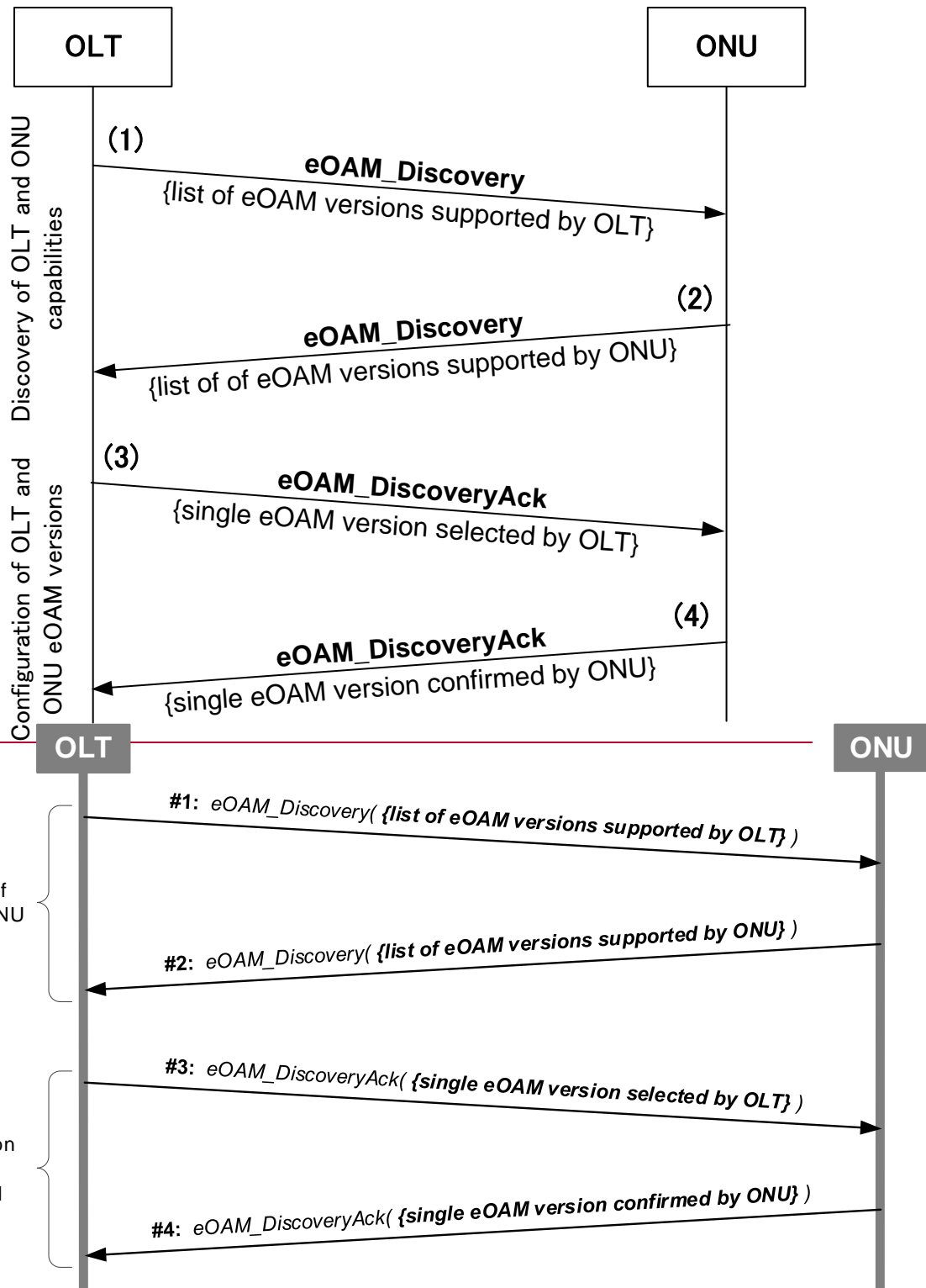
**Figure 13-2—Illustration of the eOAM discovery process**

The following subclauses specify the state diagrams for the eOAM discovery process for the ONU and OLT, including the message flow for both devices, timeout conditions for the OLT, and failure indications.