CLAIMS

What is claimed is:

1. A system upgrade method, comprising:

detecting an upgrade triggering event, wherein the upgrade triggering event is used to instruct an optical network terminal ONT and an optical line terminal OLT to perform a concurrent upgrade; wherein the upgrade triggering event comprises at least one of the following: no downstream optical signal from the OLT is detected within a predetermined time period; a concurrent upgrade message that instructs the ONT to perform resetting and is sent by the OLT before the OLT is upgraded and reset is received; or the preloaded ONT upgrade program is detected;

resetting the ONT to activate a preloaded ONT upgrade program; and

restoring a service with the OLT.

2. The method according to claim 1, before the detecting an upgrade triggering event, further comprising: receiving an indication message that is used to indicate the upgrade triggering event to the ONT and sent by the OLT.

3. The method according to claim 1, before the resetting the ONT to activate a preloaded ONT upgrade program, further comprising: receiving and loading the ONT upgrade program sent by the OLT.

4. The method according to claim 1 or 3, wherein the ONT upgrade program comprises: a command line that is used to indicate the upgrade triggering event to the ONT.

5. The method according to any one of claims 1 to 4, wherein the predetermined time period is greater than 100 ms.

6. A system upgrade method, wherein the method is performed by an optical line terminal OLT, and comprise:

sending an indication message to an optical network terminal ONT, wherein the indication message is used to instruct the ONT to perform a concurrent upgrade with the OLT; wherein the indication message is used to indicate attribute information that the ONT performs ONT resetting when the ONT detects no downstream optical signal from the OLT within a predetermined time period, or to instruct the ONT to perform resetting;

resetting the OLT to activate a preloaded OLT upgrade program; and

restoring a service with the ONT.

7. The method according to claim 6, before the resetting the OLT to activate a preloaded OLT upgrade program, further comprising: sending an ONT upgrade program to the ONT, so that the ONT loads the ONT upgrade program.

8. The method according to claim 7, wherein the ONT upgrade program comprises: a command line that is used to indicate that the ONT performs ONT resetting when the ONT detects no downstream optical signal from the OLT within a predetermined time period.

9. An optical network terminal, comprising:

a detection unit, configured to detect an upgrade triggering event, wherein the upgrade triggering event is used to instruct the optical network terminal ONT and an optical line terminal OLT to perform a concurrent upgrade; wherein the upgrade triggering event detected by the detection unit comprises at least one of the following:

no downstream optical signal from the OLT is detected within a predetermined time period; a concurrent upgrade message that instructs the ONT to perform resetting and is sent by the OLT before the OLT is upgraded and reset is received; or the preloaded ONT upgrade program is detected;

a resetting unit, configured to reset the ONT to activate a preloaded ONT upgrade program; and

a service restoration unit, configured to restore a service with the OLT.

10. The optical network terminal according to claim 9, wherein the ONT further comprises a receiving unit, wherein the receiving unit is configured to receive an indication message that is used to indicate the upgrade triggering event to the ONT and sent by the OLT.

11. The optical network terminal according to claim 9, wherein the ONT further comprises a receiving unit, wherein the receiving unit is configured to receive and load the ONT upgrade program sent by the OLT.

12. The optical network terminal according to claim 9 or 11, wherein the ONT upgrade program comprises: a command line that is used to indicate the upgrade triggering event to the ONT.

13. An optical line terminal, comprising:

a sending unit, configured to send an indication message to an optical network terminal ONT, wherein the indication message is used to instruct the ONT to perform a concurrent upgrade along with the optical line terminal OLT; wherein the indication

message sent by the sending unit is used to indicate attribute information that the ONT performs ONT resetting when the ONT detects no downstream optical signal from the OLT within a predetermined time period, or to instruct the ONT to perform resetting;

a resetting unit, configured to reset the OLT to activate a preloaded OLT upgrade program; and

a service restoration unit, configured to restore a service with the ONT.

14. The optical line terminal according to claim 13, wherein the sending unit is further configured to send an ONT upgrade program to the ONT, so that the ONT loads the ONT upgrade program.

15. The optical line terminal according to claim 14, wherein the ONT upgrade program comprises: a command line that is used to indicate that the ONT performs ONT resetting when the ONT detects no downstream optical signal from the OLT within a predetermined time period.