IEEE P802.15
Wireless Specialty Networks

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| IEEE 802.15.13 Comment Resolution Text for CID 291703 |
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Abstract

# This document contains the resolution text for CID 291703

**Comment**

How does the relay or relayed device detect that relay/relayed device is no longer reachable? There is no direct ACKs between the devices? What methods they can use?

**Resolution**

The association and dissociation of both relay and relayed devices are being conducted only by the Coordinator. Coordinator is aware of the devices associated with its OWPAN and also knows the ones that are disassociated (described in 6.4.7).

Only Coordinator can activate or deactivate a relay link with *Relay Device Configuration Request and Response*(to relay device)or*Relayed Device Configuration Requests and Response*(to relayed device) elements. These elements inform the devices whether a relay link will be activated/deactivated together with relevant relay/relayed device addresses. ( described in 7.6.26 and 7.6.28)

If one of the relay/relayed device is no longer reachable, Coordinator will know it (6.4.7) and inform the other one by *Relay Device Configuration Request*(to relay device)or*Relayed Device Configuration Requests*(to relayed device) elements*.*

The relayed device might be still associated with the OWPAN, however, it might not be in the coverage area of the relay device. In this case, the current signaling mechanism can still handle it through *Reachable Address*element which is sent by relay device periodically to the Coordinator. Then, again it is the Coordinator's job to deactivate the relay link (by sending *Relay Device Configuration Request* element, as described above). It is described in 6.10.1 as

“Upon receiving a Reachable Address element, the coordinator shall decide whether to use relaying for communication with the devices in the Reachable Address element. The coordinator may activate the relaying for a certain device as described in 6.10.2. The coordinator may deactivate the relaying for a certain device at any time as described in 6.10.3. The coordinator should deactivate the relaying for a certain device when it was previously reachable by the relay device and determined permanently not reachable anymore.”