Broadcast message is then distributed to devices on peer subnets...

The BBMD has a table of all of its peer BBMDs and their broadcast distribution masks. By inverting each peer BBMD's broadcast distribution mask and logically OR'ing it with the peer BBMD's address either a directed broadcast address or the address of the peer BBMD itself emerges. (A "directed broadcast" address for a given subnet is formed by taking a BBMD's subnet and substituting all one's for the host portion.) Using this address, the sending BBMD then takes the broadcast message it received, creates a **Forwarded-NPDU** message and sends it to each of the destination addresses derived from its table.

The forwarded broadcast message needs to have the original source address preserved. When the message is re-broadcast on the other peer LANs it is important that it not appear to have been routed unless, of course, it has been. The message may already have SNET, SLEN, and SADR fields in its NPCI because it may have originated on another BACnet network as a remote or global broadcast. The message we have created to accomplish this forwarding task is called the **Forwarded-NPDU** message.