CLAIMS

1. A method, applied to a first device, comprising:

changing a first communication link between a first affiliated station of the first device and a first affiliated access point (AP) of a second device to a second communication link between the first affiliated station of the first device and a second affiliated AP of the second device, while maintaining a third communication link between a second affiliated station of the first device and a third affiliated AP of the second device.

2. The method of claim 1 further comprising:

sending a communication link configuration request management frame to the second device to request changing the first communication link to the second communication link.

3. The method of claim 2, wherein the communication link configuration request management frame comprises the following fields: category, communication link configuration action, dialog token, current communication link information, and new communication link information.

4. The method of any one of claims 1 to 3, wherein the second device is an AP multi-link device (MLD) and the first device is a non-AP MLD for a network using an IEEE 802.11 protocol configured for multi-link operation.

5. The method of claim 4, wherein the IEEE 802.11 protocol is IEEE 802.11be.

6. The method of any one of claims 1 to 5, wherein at least one of the one or more affiliated APs of the second device are for operating in a dedicated service mode.

7. The method of claim 6, wherein the dedicated service mode comprises one of six gigahertz (6 GHz), Emergency Preparedness Communications Service (EPSC), and Enhanced Broadcast Service (EBCS).

8. The method of any one of claims 1 to 7, wherein at least one of the one or more affiliated APs of the second device are for operating in at least one service mode.

9. The method of claim 8, wherein the at least one service mode comprises one or more of Millimeter Wave (mmWave), Directional Multi-Gigabit (DMG), China Directional Multi-Gigabit (CDMG), and Enhanced Directional Multi-Gigabit (EDMG).

10. One or more non-transitory computer-readable storage media comprising computer-executable instructions for managing communication links for MLDs, wherein the instructions, when executed, cause a processing structure to perform the method according to any one of claims 1 to 9

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11. A multi-link device (MLD) device, comprising modules for performing the method according to any one of claims 1 to 9.

12. The multi-link device of claim 11, wherein the multi-link device is an non-access point (non-AP) MLD.

13. A computer program product comprising instructions, wherein when the instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 9.