CLAIMS

1. A channel operation method, being performed by a second device, comprising:

sending a Dynamic subchannel/subband Operation (DSO) mode management frame to a first device,

wherein the DSO mode management frame is used for indicating that a DSO mode between the first device and the second device is an enabled mode or a disabled mode, the enabled mode is a mode that allows a target device to perform frame exchange according to a first parameter set in a DSO manner, the first parameter set is indicated by the DSO mode management frame, and the first parameter set comprises at least one of a channel bandwidth or maximum supported spatial streams.

2. The method of claim 1, wherein

the disabled mode is a mode that does not allow the target device to perform the frame exchange in the DSO manner; or

the disabled mode is a mode that does not allow the target device to perform the frame exchange according to the first parameter set in the DSO manner.

3. The method of claim 1 or 2, wherein the target device is one or both of the first device and the second device.

4. The method of any one of claims 1 to 3, further comprising:

setting DSO mode information between the first device and the second device according to the DSO mode management frame, wherein the DSO mode information comprises at least one of:

the DSO mode between the first device and the second device;

an operating parameter for DSO control; or

a parameter set for performing the frame exchange.

5. The method of claim 4, wherein the DSO mode management frame is a DSO mode notification frame, and setting the DSO mode information between the first device and the second device according to the DSO mode management frame comprises:

when the DSO mode notification frame returned by the first device is received within a timeout duration after the DSO mode notification frame being sent, setting the DSO mode

information between the first device and the second device according to the DSO mode notification frame; or

in a case that the DSO mode notification frame returned by the first device is not received within the timeout duration after the DSO mode notification frame being sent, after the timeout duration is reached, setting the DSO mode information between the first device and the second device according to the DSO mode notification frame.

6. The method of claim 4, wherein the DSO mode management frame is a DSO mode request frame, and setting the DSO mode information between the first device and the second device according to the DSO mode management frame comprises:

receiving a first DSO mode response frame returned by the first device, wherein the first DSO mode response frame is used for indicating whether the DSO mode information indicated by the DSO mode request frame is accepted; and

in a case that the first DSO mode response frame is used for indicating that the DSO mode information indicated by the DSO mode request frame is accepted, setting the DSO mode information between the first device and the second device according to the DSO mode request frame.

7. The method of claim 6, wherein the first DSO mode response frame comprises a first status code, and the first status code is used for indicating whether the DSO mode information indicated by the DSO mode request frame is accepted.

8. The method of claim 6 or 7, further comprising:

receiving a second DSO mode response frame that is not triggered by requesting, sent by the first device, wherein the second DSO mode response frame is used for indicating recommended DSO mode information.

9. The method of any one of claims 1 to 8, wherein the DSO mode management frame comprises at least one of a DSO mode control field, a DSO parameter update field, or an operation mode parameter update field,

wherein the DSO mode control field is used for controlling the DSO mode between the first device and the second device;

the DSO parameter update field is used for updating an operating parameter for DSO control between the first device and the second device; and

the operation mode parameter update field is used for updating a parameter set for performing the frame exchange between the first device and the second device.

10. The method of claim 9, wherein the DSO parameter update field comprises at least one of a dynamic subchannel/subband operation padding delay subfield or a dynamic subchannel/subband operation transition delay subfield,

wherein the dynamic subchannel/subband operation padding delay subfield is used for indicating a minimum medium access control (MAC) padding duration of a channel switching notification frame, and the channel switching notification frame is used for triggering the target device to switch to a target subchannel/subband in the DSO manner for performing the frame exchange; and

the dynamic subchannel/subband operation transition delay subfield is used for indicating a transition delay for switching from the target subchannel/subband to a regular subchannel/subband.

11. The method of claim 9 or 10, wherein in a case that the DSO mode management frame is a DSO mode notification frame, the DSO parameter update field comprises a transition timeout subfield; and

the transition timeout subfield is used for indicating a timeout duration for the first device to return the DSO mode notification frame to the second device after receiving the DSO mode notification frame.

12. The method of any one of claims 1 to 11, wherein in a case that the first device is a non-access point (non-AP) device and the second device is an AP device, the method further comprises:

sending a channel switch indication frame to the first device in a case that the DSO mode between the first device and the second device is in the enabled mode;

performing the frame exchange with the first device on a target subchannel indicated by the DSO mode management frame according to the first parameter set.

13. The method of any one of claims 1 to 11, wherein in a case that the first device is an AP device and the second device is a non-AP device, the method further comprises:

receiving a channel switch indication frame sent by the first device in a case that the DSO mode between the first device and the second device is in the enabled mode; and

switching to a target subchannel indicated by the DSO mode management frame, and performing the frame exchange with the first device according to the first parameter set.

14. The method of claim 1, wherein the method further comprises:

sending a subband-switch control frame to the first device, or

receiving the subband-switch control frame sent from the first device,

wherein the subband-switch control frame is a modified Multi-User Request To Send (MU-RTS) frame or a Buffer Status Report Poll (BSRP) frame.

15. A communication device, implemented as a second device, comprising a processor, a memory and a transceiver,

wherein the memory is configured to store a computer program, and the processor is configured to invoke and run the computer program stored in the memory to control the communication device to perform the method of any one of claims 1 to 14.