

CLAIMS

What is claimed is:

1. A ~~channel bandwidth configuration~~communication method, ~~applied to a terminal device,~~
wherein the method comprises:

5 receiving ~~bandwidth configuration information of a basic service set (BSS), wherein the~~
~~bandwidth configuration information of the BSS is carried in an extremely high throughput (EHT)~~
operation element, wherein the extremely high throughput EHT operation element comprises a
channel bandwidth field, a first channel center frequency field, and a second channel center
frequency field, wherein the channel bandwidth field indicates a channel bandwidth information of
10 a basic service set (BSS), the first channel center frequency field and the second channel center
frequency field indicate channel location information of the BSS, ~~and the bandwidth information~~
~~is any channel bandwidth in a plurality of channel bandwidths that can be supported by the terminal~~
~~device; and~~

15 obtaining bandwidth configuration information of the BSS ~~the channel bandwidth information~~
~~and the channel location information based on the EHT operation element~~ bandwidth configuration
~~information of the BSS, wherein the bandwidth configuration information of the BSS comprises~~
the channel bandwidth and the channel location information.

2. A ~~communication~~channel bandwidth configuration method, ~~applied to a network device,~~
wherein the method comprises:

20 generating ~~bandwidth configuration information of a basic service set (BSS), wherein the~~
~~bandwidth configuration information of the BSS is carried in an extremely high throughput (EHT)~~
operation element, wherein the EHT ~~extremely high throughput~~ operation element comprises a
channel bandwidth field, a first channel center frequency field, and a second channel center
frequency field, wherein the channel bandwidth field indicates a channel bandwidth information
25 of a basic service set (BSS), the first channel center frequency field and the second channel
center frequency field indicate channel location information of the BSS, ~~and the bandwidth~~
~~information is any channel bandwidth in a plurality of channel bandwidths supported by a terminal~~
~~device; and~~

30 sending the EHT operation element ~~bandwidth configuration information of the BSS.~~

3. The method according to claim 1 or 2, wherein the ~~extremely high throughput~~EHT
operation element further comprises a puncture bitmap ~~puncture information~~ field indicating a
punctured channel in the BSS.

4. The method according to claim 3, wherein the puncture bitmap ~~puncture information~~ field
comprises at least one bit; the bit one-to-one corresponds to a channel element in a channel

bandwidth of the BSS; and when the bit is a first-preset bit value, it-the preset bit value indicates that the corresponding channel element is a punctured channel, ~~and-wherein~~ a channel bandwidth of the channel element is 20 MHz.

5 ~~5. The method according to claim 3, wherein the puncture information field comprises puncture mode indication information used to indicate that the punctured channel is in any one of preset punctured channel modes.~~

~~6. The method according to claim 1, wherein the bandwidth configuration information further comprises primary channel information in the BSS; and the method further comprises:~~

10 ~~receiving a high throughput operation element, wherein the high throughput operation element comprises a primary channel field, and the primary channel information is carried in the primary channel field.~~

~~7. The method according to claim 1, wherein the bandwidth configuration information further comprises primary channel information in the BSS; and the method further comprises:~~

15 ~~receiving a high efficiency operation element, wherein the high efficiency operation element comprises a primary channel field, and the primary channel information is carried in the primary channel field.~~

85. The method according to any one of claims 1 to 74, wherein ~~the channel bandwidth field indicates a first preset value, a second preset value, or a third preset value~~, the first channel center frequency field comprises first channel center frequency information indicating a center frequency of the channel bandwidth of the BSS, the second channel center frequency field comprises second channel center frequency information, and the second channel center frequency information is zero, wherein,

when the channel bandwidth field indicates a first preset value and the first preset value is 0, the first preset value indicates that the channel bandwidth of the BSS is 20 MHz;

25 when the channel bandwidth field indicates a second preset value and the second preset value is 1, the second preset value indicates that the channel bandwidth of the BSS is 40 MHz; and

when the channel bandwidth field indicates a third preset value and the third preset value is 2, the third preset value indicates that the channel bandwidth of the BSS is 80 MHz.

30 96. The method according to any one of claims 1 to 75, wherein when the channel bandwidth field indicates a fourth preset value and the fourth preset value is 3, the first preset value indicates that the channel bandwidth of the BSS is 160 MHz, the first channel center frequency field comprises third channel center frequency information indicating a center frequency of a primary 80 MHz channel in the 160MHz channel bandwidth first segment of the BSS, and the second channel center frequency field comprises fourth channel center frequency information indicating a center frequency of a-the 160 MHz channel bandwidthsecond segment of the BSS, wherein

~~the fourth preset value indicates that the channel bandwidth of the BSS is 160 MHz or 80 + 80 MHz; and~~

~~if a difference between the third channel center frequency information and the fourth channel center frequency information is equal to 8 a first preset difference, the channel bandwidth of the BSS is 160 MHz; or~~

~~if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a second preset difference, the channel bandwidth of the BSS is 80 + 80 MHz.~~

407. The method according to any one of claims 1 to 76, wherein when the channel bandwidth field indicates a fifth preset value and the fifth preset value is 4, the fifth preset value indicates that the channel bandwidth of the BSS is 320 MHz, the first channel center frequency field comprises fifth channel center frequency information indicating a center frequency of a primary 160 MHz channel in the 320MHz channel bandwidth a first segment of the BSS, and the second channel center frequency field comprises sixth channel center frequency information indicating a center frequency of the 320 MHz channel bandwidth a second segment of the BSS, wherein

~~the fifth preset value indicates that the channel bandwidth of the BSS is 320 MHz or 160 + 160 MHz; and~~

~~if a difference between the fifth channel center frequency information and the sixth channel center frequency information is equal to 16 a third preset difference, the channel bandwidth of the BSS is 320 MHz; or~~

~~if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a fourth preset difference, the channel bandwidth of the BSS is 160 + 160 MHz.~~

8. The communication method according to claim 1, wherein the receiving EHT operation element, comprises:

receiving the EHT operation element in a 5 GHz frequency band.

9. The communication method according to claim 8, wherein the receiving EHT operation element in the 5 GHz frequency band comprises:

receiving a management frame in the 5 GHz frequency band, wherein the management frame carries a high throughput (HT) operation element and the EHT operation element.

10. The communication method according to claim 1, wherein the receiving EHT operation element, comprises:

receiving the EHT operation element in a 6 GHz frequency band.

11. The communication method according to claim 10, wherein the receiving EHT operation element in the 6 GHz frequency band comprises:

receiving a management frame, wherein the management frame carries a high efficiency (HE) operation element and the EHT operation element.

–12. The method according to claim 2, wherein the sending the EHT operation element, comprises:

sending the EHT operation element in a 5 GHz frequency band.

13. The method according to claim 12, wherein the sending the EHT operation element in the 5 GHz frequency band comprises:

sending a management frame in the 5 GHz frequency band, wherein the management frame carries a high throughput (HT) operation element and the EHT operation element.

14. The method according to claim 2, wherein the sending the EHT operation element comprises:

sending the EHT operation element in a 6 GHz frequency band.

15. The method according to claim 14, wherein the sending the EHT operation element in the 6 GHz frequency band comprises:

sending a management frame, wherein the management frame carries a high efficiency (HE) operation element and the EHT operation element.

16. A terminal device, comprising:

a processor; and

a memory, configured to store computer instructions, which when executed by the processor, cause the terminal device to perform the method in any one of claims 1 and 3 to 11.

17. A network device, comprising:

a processor; and

a memory, configured to store computer instructions, which when executed by the processor, cause the network device to perform the method in any one of claims 2 to 7 and 12 to 15.

18. A chip, comprising:

a processor; and

a memory, configured to store computer instructions, which when executed by the processor, cause a terminal device comprising the chip to perform the method in any one of claims 1 and 3 to 11.

19. A chip, comprising:

a processor; and

a memory, configured to store computer instructions, which when executed by the processor, cause a network device comprising the chip to perform the method in any one of claims 2 to 7 and 12 to 15.

20. A computer-readable storage medium, wherein the computer-readable storage medium

stores computer instructions, which when executed by a processor, cause a terminal device comprising the processpr to perform the method in any one of claims 1 and 3 to 11.

21. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions, which when executed by a processor, cause a network device comprising the processpr to perform the method in any one of claims 2 to 7 and 12 to 15.

~~11. A terminal device, comprising a transceiver and at least one processor, wherein the transceiver is configured to receive bandwidth configuration information of a basic service set (BSS), wherein the bandwidth configuration information of the BSS is carried in an extremely high throughput operation element, the extremely high throughput operation element comprises a channel bandwidth field, a first channel center frequency field, and a second channel center frequency field, the channel bandwidth field indicates channel bandwidth information of the BSS, the first channel center frequency field and the second channel center frequency field indicate channel location information of the BSS, and the bandwidth information is any channel bandwidth in a plurality of channel bandwidths supported by the terminal device; and~~

~~the processor is configured to obtain the channel bandwidth information and the channel location information based on the bandwidth configuration information of the BSS.~~

~~12. A network device, comprising a processor and a transceiver, wherein the processor is configured to generate bandwidth configuration information of a basic service set (BSS), wherein the bandwidth configuration information of the BSS is carried in an extremely high throughput operation element, the extremely high throughput operation element comprises a channel bandwidth field, a first channel center frequency field, and a second channel center frequency field, the channel bandwidth field indicates channel bandwidth information of the BSS, the first channel center frequency field and the second channel center frequency field indicate channel location information of the BSS, and the bandwidth information is any channel bandwidth in a plurality of channel bandwidths supported by a terminal device; and~~

~~the transceiver is configured to send the bandwidth configuration information of the BSS.~~

~~13. The device according to claim 11 or 12, wherein the extremely high throughput operation element further comprises a puncture information field indicating a punctured channel in the BSS.~~

~~14. The device according to claim 13, wherein the puncture information field comprises at least one bit; the bit one to one corresponds to a channel element in a channel bandwidth of the BSS; and when the bit is a first preset bit value, it indicates that the corresponding channel element is a punctured channel, and a channel bandwidth of the channel element is 20 MHz.~~

~~15. The device according to claim 13, wherein the puncture information field comprises puncture mode indication information indicating that the punctured channel is in any one of preset punctured channel modes.~~

16. The device according to claim 11, wherein the transceiver is further configured to receive a high throughput operation element, wherein the high throughput operation element comprises a primary channel field, and primary channel information is carried in the primary channel field.

17. The device according to claim 11, wherein the transceiver is further configured to receive a high efficiency operation element, wherein the high efficiency operation element comprises a primary channel field, and primary channel information is carried in the primary channel field.

18. The device according to any one of claims 11 to 17, wherein the channel bandwidth field indicates a first preset value, a second preset value, or a third preset value, the first channel center frequency field comprises first channel center frequency information indicating a center frequency of the channel bandwidth of the BSS, the second channel center frequency field comprises second channel center frequency information, and the second channel center frequency information is zero, wherein

the first preset value indicates that the channel bandwidth of the BSS is 20 MHz, the second preset value indicates that the channel bandwidth of the BSS is 40 MHz, and the third preset value indicates that the channel bandwidth of the BSS is 80 MHz.

19. The device according to any one of claims 11 to 18, wherein the channel bandwidth field indicates a fourth preset value, the first channel center frequency field comprises third channel center frequency information indicating a center frequency of a first segment of the BSS, and the second channel center frequency field comprises fourth channel center frequency information indicating a center frequency of a second segment of the BSS, wherein

the fourth preset value indicates that the channel bandwidth of the BSS is 160 MHz or $80 + 80$ MHz; and

if a difference between the third channel center frequency information and the fourth channel center frequency information is equal to a first preset difference, the channel bandwidth of the BSS is 160 MHz; or

if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a second preset difference, the channel bandwidth of the BSS is $80 + 80$ MHz.

20. The device according to any one of claims 11 to 18, wherein the channel bandwidth field indicates a fifth preset value, the first channel center frequency field comprises fifth channel center frequency information indicating a center frequency of a first segment of the BSS, and the second channel center frequency field comprises sixth channel center frequency information indicating a center frequency of a second segment of the BSS, wherein

the fifth preset value indicates that the channel bandwidth of the BSS is 320 MHz or $160 + 160$ MHz; and

if a difference between the fifth channel center frequency information and the sixth channel center frequency information is equal to a third preset difference, the channel bandwidth of the BSS is 320 MHz; or

if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a fourth preset difference, the channel bandwidth of the BSS is 160 + 160 MHz.

21. A chip, comprising at least one processor and an interface, wherein

the interface is configured to input bandwidth configuration information of a basic service set (BSS) to the processor, wherein the bandwidth configuration information of the BSS is carried in an extremely high throughput operation element, the extremely high throughput operation element comprises a channel bandwidth field, a first channel center frequency field, and a second channel center frequency field, the channel bandwidth field indicates channel bandwidth information of the BSS, the first channel center frequency field and the second channel center frequency field indicate channel location information of the BSS, and the bandwidth information is any channel bandwidth in a plurality of channel bandwidths—supported by a terminal device; and

the processor is configured to obtain the channel bandwidth information and the channel location information based on the bandwidth configuration information of the BSS.

22. A chip, comprising at least one processor and an interface, wherein

the processor is configured to generate bandwidth configuration information of a basic service set (BSS), wherein the bandwidth configuration information of the BSS is carried in an extremely high throughput operation element, the extremely high throughput operation element comprises a channel bandwidth field, a first channel center frequency field, and a second channel center frequency field, the channel bandwidth field indicates channel bandwidth information of the BSS, the first channel center frequency field and the second channel center frequency field indicate channel location information of the BSS, and the bandwidth information is any channel bandwidth in a plurality of channel bandwidths supported by a terminal device; and

the interface is configured to output the bandwidth configuration information of the BSS.

23. The chip according to claim 21 or 22, wherein the extremely high throughput operation element further comprises a puncture information field indicating a punctured channel in the BSS.

24. The chip according to claim 23, wherein the puncture information field comprises at least one bit; the bit one-to-one corresponds to a channel element in a channel bandwidth of the BSS; and when the bit is a first preset bit value, it indicates that the corresponding channel element is a punctured channel, and a channel bandwidth of the channel element is 20 MHz.

25. The chip according to claim 23, wherein the puncture information field comprises puncture mode indication information indicating that the punctured channel is in any one of preset

punctured channel modes.

26. The chip according to claim 22, wherein

the interface is further configured to input a high throughput operation element to the processor, wherein the high throughput operation element comprises a primary channel field, and primary channel information is carried in the primary channel field.

27. The chip according to claim 22, wherein

the interface is further configured to input a high efficiency operation element to the processor, wherein the high efficiency operation element comprises a primary channel field, and primary channel information is carried in the primary channel field.

28. The chip according to any one of claims 22 to 27, wherein the channel bandwidth field indicates a first preset value, a second preset value, or a third preset value, the first channel center frequency field comprises first channel center frequency information indicating a center frequency of the channel bandwidth of the BSS, the second channel center frequency field comprises second channel center frequency information, and the second channel center frequency information is zero, wherein

the first preset value indicates that the channel bandwidth of the BSS is 20 MHz, the second preset value indicates that the channel bandwidth of the BSS is 40 MHz, and the third preset value indicates that the channel bandwidth of the BSS is 80 MHz.

29. The chip according to any one of claims 22 to 27, wherein the channel bandwidth field indicates a fourth preset value, the first channel center frequency field comprises third channel center frequency information indicating a center frequency of a first segment of the BSS, and the second channel center frequency field comprises fourth channel center frequency information indicating a center frequency of a second segment of the BSS, wherein

the fourth preset value indicates that the channel bandwidth of the BSS is 160 MHz or $80 + 80$ MHz; and

if a difference between the third channel center frequency information and the fourth channel center frequency information is equal to a first preset difference, the channel bandwidth of the BSS is 160 MHz; or

if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a second preset difference, the channel bandwidth of the BSS is $80 + 80$ MHz.

30. The chip according to any one of claims 22 to 27, wherein the channel bandwidth field indicates a fifth preset value, the first channel center frequency field comprises fifth channel center frequency information indicating a center frequency of a first segment of the BSS, and the second channel center frequency field comprises sixth channel center frequency information indicating a

center frequency of a second segment of the BSS, wherein

~~the fifth preset value indicates that the channel bandwidth of the BSS is 320 MHz or 160 + 160 MHz; and~~

~~if a difference between the fifth channel center frequency information and the sixth channel center frequency information is equal to a third preset difference, the channel bandwidth of the BSS is 320 MHz; or~~

~~if a difference between the third channel center frequency information and the fourth channel center frequency information is greater than a fourth preset difference, the channel bandwidth of the BSS is 160 + 160 MHz.~~

31. ~~A computer-readable storage medium, wherein the computer-readable storage medium stores program instructions, and when the program instructions are executed by a computer, the method according to any one of claims 1 to 10 is implemented.~~

32. ~~A computer program product, wherein the computer program product stores program instructions, and when the program instructions are executed by a computer, the method according to any one of claims 1 to 10 is implemented.~~

33. ~~A program, wherein when the program instructions are executed by a computer, the method according to any one of claims 1 to 10 is implemented.~~