CLAIMS

What is claimed is:

1. A bandwidth mode indication method, wherein the method comprises:

generating a ~~first~~ frame, wherein the ~~first~~ frame is a non-high throughput (non-HT) frame or a non-high throughput duplicated (non-HT duplicated) frame, the ~~first~~ frame comprises a service field, the service field occupies 16 bits (B0-B15), first seven bits (B0-B6) of the service field carry a scrambling sequence, a B7 bit of the service field ~~comprises a first field, the first field~~ indicates whether a bandwidth mode indication field carried in the ~~first~~ frame indicates a target bandwidth mode, and the target bandwidth mode comprises ~~one or more of bandwidth modes other than 20 MHz, 40 MHz, 80 MHz, and 80+80 MHz or 160 MHz~~320MHz or 160+160MHz; and

sending the ~~first~~ frame.

2. The method according to claim 1, wherein that the B7 bit of the service field ~~first field~~ indicates whether ~~a~~the bandwidth mode indication field carried in the ~~first~~ frame indicates ~~a~~the target bandwidth mode comprises:

when the B7 bit of the service field~~first field~~ is set to a first preset value, the bandwidth mode indication field carried in the frame indicates a bandwidth mode in a first bandwidth mode set, wherein the first bandwidth mode set comprises 20 MHz, 40 MHz, 80 MHz, 80+80 MHz, or 160 MHz~~the bandwidth mode indication field does not indicate the target bandwidth mode~~; or

when the B7 bit of the service field~~first field~~ is set to a second preset value, the bandwidth mode indication field indicates the target bandwidth mode.

3. The method according to claim 1, wherein the ~~first~~ frame further comprises a unicast/multicast bit; and

when the unicast/multicast bit is set to 1 and the B7 bit of the service field~~first field~~ is set to a first preset value, ~~it indicates that the first frame carries the bandwidth mode indication field and~~ the bandwidth mode indication field indicates a bandwidth mode in a first bandwidth mode set, wherein the first bandwidth mode set comprises 20 MHz, 40 MHz, 80 MHz, ~~and~~ 80+80 MHz or 160 MHz; or

when the unicast/multicast bit is set to 1 and the B7 bit of the service field~~first field~~ is set to a second preset value, ~~it indicates that the first frame carries the bandwidth mode indication field and~~ the bandwidth mode indication field indicates a bandwidth mode in a second bandwidth mode

set, wherein the second bandwidth mode set comprises the target bandwidth mode.

4. The method according to claim 2 or 3, wherein the first preset value is 0 and the second preset value is 1.

45. The method according to any one of claims 1 ~~or~~ to ~~2~~4, wherein the bandwidth mode indication field comprises a B5 bit and a B6 bit ~~in the first seven bits of a scrambling sequence~~of the service field.

~~5. The method according to any of claims 1 to 4, wherein the first field comprises at least one of the last nine bits of the service field.~~

~~6. The method according to claim 5, wherein the first field is a B7 bit in the service field.~~

6. The method according to any one of claims 1 to 5, wherein the bandwidth mode indication field is CH_BANDWIDTH_IN_NON_HT field.

7. The method according to any one of claims 1 to 6, wherein the target bandwidth mode comprises a preamble puncturing bandwidth mode and/or a non-preamble puncturing bandwidth mode.

8. A bandwidth mode indication method, wherein the method comprises:

receiving a ~~first~~ frame, wherein the ~~first~~ frame is a non-high throughput (non-HT) frame or a non-high throughput duplicated (non-HT duplicated) frame, the ~~first~~ frame comprises a service field, the service field occupies 16 bits (B0-B15), first seven bits (B0-B6) of the service field carry a scrambling sequence, a B7 bit of the service field ~~comprises a first field, the first field~~ indicates whether a bandwidth mode indication field carried in the ~~first~~ frame indicates a target bandwidth mode, and the target bandwidth mode comprises 320MHz or 160+160MHz~~one or more of bandwidth modes other than 20 MHz, 40 MHz, 80 MHz, and 80+80 MHz or 160 MHz~~; and

parsing the ~~first~~ frame.

9. The method according to claim 8, wherein that the B7 bit of the service field~~first field~~ indicates whether ~~a~~the bandwidth mode indication field carried in the ~~first~~ frame indicates ~~a~~the target bandwidth mode comprises:

when the B7 bit of the service field~~first field~~ is set to a first preset value, the bandwidth mode indication field carried in the frame indicates a bandwidth mode in a first bandwidth mode set, wherein the first bandwidth mode set comprises 20 MHz, 40 MHz, 80 MHz, 80+80 MHz, or 160 MHz~~does not indicate the target bandwidth mode~~; or

when the B7 bit of the service field~~first field~~ is set to a second preset value, the bandwidth

mode indication field indicates the target bandwidth mode.

10. The method according to claim 8, wherein the ~~first~~ frame further comprises a unicast/multicast bit; and

when the unicast/multicast bit is set to 1 and the B7 bit of the service field~~first field~~ is set to a first preset value, ~~it indicates that the first frame carries the bandwidth mode indication field and~~ the bandwidth mode indication field indicates a bandwidth mode in a first bandwidth mode set, wherein the first bandwidth mode set comprises 20 MHz, 40 MHz, 80 MHz, and 80+80 MHz or 160 MHz; or

when the unicast/multicast bit is set to 1 and the B7 bit of the service field~~first field~~ is set to a second preset value, ~~it indicates that the first frame carries the bandwidth mode indication field and~~ the bandwidth mode indication field indicates a bandwidth mode in a second bandwidth mode set, wherein the second bandwidth mode set comprises the target bandwidth mode.

11. The method according to claim 9 or 10, wherein the first preset value is 0 and the second preset value is 1.

~~11~~12. The method according to any one of claims 8 ~~or~~to ~~9~~11, wherein the bandwidth mode indication field comprises a B5 bit and a B6 bit ~~in the first seven bits of a scrambling sequence~~of the service field.

13. The method according to any one of claims 8 to 12, wherein the bandwidth mode indication field is CH_BANDWIDTH_IN_NON_HT field.

~~12. The method according to any of claims 8 to 11, wherein the first field comprises at least one of the last nine bits of the service field.~~

~~13. The method according to claim 12, wherein the first field is a B7 bit in the service field.~~

14. The method according to any one of claims 8 to 13, wherein the target bandwidth mode comprises a preamble puncturing bandwidth mode and/or a non-preamble puncturing bandwidth mode.

15. A communication apparatus, wherein the communication apparatus comprises a unit configured to perform the steps in the method according to any one of claims 1 to 14.

16. A computer-readable storage medium, wherein the computer-readable storage medium stores computer instructions; and when the computer instructions are run on a computer, the computer is enabled to perform the method according to any one of claims 1 to 14.

17. A chip, wherein the chip comprises a processing unit and a transceiver pin, the processing

unit is configured to perform a processing operation in the method according to any one of claims 1 to 14, and the transceiver pin is configured to perform a communication operation in the method according to any one of claims 1 to 14.

18. A computer program product, wherein when the computer program product runs on a computer, the computer is enabled to perform the method according to any one of claims 1 to 14.

19. A communication apparatus, comprising:

a processor; and

a storage medium, configured to store computer instructions, which when executed by the processor, cause the communication apparatus to perform the method in any one of claims 1 to 14.