CLAIMS

What is claimed is:

1. A communication method, wherein the method comprises:

generating a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the indicated bandwidth is related to a value of M and a second basic service set operating channel bandwidth, the second basic service set operating channel bandwidth is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and

sending the first frame.

2. The method according to claim 1, wherein fundamental channels in the second basic service set operating channel bandwidth comprise the fundamental channels in the first basic service set operating channel bandwidth.

3. The method according to claim 1 or 2, wherein the P pieces of first information are sorted sequentially in ascending order of frequencies of the corresponding fundamental channels.

4. The method according to any one of claims 1 to 3, wherein the Q pieces of second information are sorted sequentially in ascending order of frequencies of the corresponding fundamental channels.

5. The method according to any one of claims 1 to 4, wherein M is equal to a first value, the indicated bandwidth is the second basic service set operating channel bandwidth, and the first value is a number of the fundamental channels comprised in the second basic service set operating channel bandwidth.

6. The method according to any one of claims 1 to 4, wherein M is less than a first value, the indicated bandwidth is primary Z megahertz in the second basic service set operating channel bandwidth, Z is equal to M multiplied by a fundamental channel bandwidth, and the first value is a number of the fundamental channels comprised in the second basic service set operating channel bandwidth.

7. The method according to any one of claims 1 to 4, wherein M is greater than a first value,

the indicated bandwidth is greater than the second basic service set operating channel bandwidth, first S pieces of information in M pieces of information in total of the P pieces of first information and the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to S fundamental channels comprised in the second basic service set operating channel bandwidth, S is a positive integer, the first value is a number of the fundamental channels comprised in the second basic service set operating channel bandwidth, and S is greater than P.

8. The method according to claim 7, wherein an $(S+1)^{th}$ piece of information to a $(P+Q)^{th}$ piece of information in the M pieces of information in total of the P pieces of first information and the Q pieces of second information are reserved.

9. The method according to any one of claims 1 to 8, wherein a bandwidth size of the fundamental channel is 20 megahertz MHz.

10. The method according to any one of claims 1 to 9, wherein the first element further comprises a maximum transmit power interpretation field, and a value of the maximum transmit power interpretation field is 1 or 3.

11. The method according to any one of claims 1 to 10, wherein the first element is a transmit power envelope element.

12. The method according to any one of claims 1 to 11, wherein the first basic service set operating channel bandwidth is a non-extremely high throughput EHT basic service set operating channel bandwidth, and the second basic service set operating channel bandwidth is an EHT basic service set operating channel bandwidth.

13. The method according to any one of claims 1 to 12, wherein the value of M is 2 to the power of m, and m is an integer greater than or equal to 0.

14. A communication method, wherein the method comprises:

receiving a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and the indicated bandwidth is related to a value of M and a second basic service set operating channel bandwidth, the second basic service set operating channel bandwidth is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and

determining, based on the first frame, maximum transmit PSDs corresponding to fundamental channels in the second basic service set operating channel bandwidth.

15. A communication method, wherein the method comprises:

receiving a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and the indicated bandwidth is related to a value of M and a second basic service set operating channel bandwidth, the second basic service set operating channel bandwidth is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and

determining, based on the first frame, maximum transmit PSDs corresponding to the fundamental channels in the first basic service set operating channel bandwidth.

16. The method according to claim 14 or 15, wherein the fundamental channels in the second basic service set operating channel bandwidth comprise the fundamental channels in the first basic service set operating channel bandwidth.

17. The method according to any one of claims 14 to 16, wherein the P pieces of first information are sorted sequentially in ascending order of frequencies of the corresponding fundamental channels.

18. A communication apparatus, wherein the apparatus comprises a transceiver unit and a processing unit;

the processing unit is configured to generate a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the indicated bandwidth is related to a value of M and a second basic service set operating channel bandwidth, the second basic service set operating channel bandwidth

is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and

the transceiver unit is configured to send the first frame.

19. A communication apparatus, wherein the apparatus comprises a transceiver unit and a processing unit;

the transceiver unit is configured to receive a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and the indicated bandwidth is related to a value of M and a second basic service set operating channel bandwidth, the second basic service set operating channel bandwidth is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and

the processing unit is configured to determine, based on the first frame, maximum transmit PSDs corresponding to fundamental channels in the second basic service set operating channel bandwidth.

20. A communication apparatus, wherein the apparatus comprises a transceiver unit and a processing unit;

the transceiver unit is configured to receive a first frame, wherein the first frame comprises a first element, the first element comprises P pieces of first information and Q pieces of second information, the P pieces of first information indicate respectively maximum transmit power spectral densities PSDs corresponding to P fundamental channels, the P fundamental channels are some or all of fundamental channels in a first basic service set operating channel bandwidth, the Q pieces of second information indicate respectively maximum transmit PSDs corresponding to fundamental channels in an indicated bandwidth excluding the P fundamental channels, and P and Q are positive integers; the first element further comprises third information and fourth information, the third information indicates a value of P, and the fourth information indicates a value of Q; and the indicated bandwidth is related to a value of M and a second basic service set

operating channel bandwidth, the second basic service set operating channel bandwidth is different from the first basic service set operating channel bandwidth, M is equal to a sum of P and Q, and M is a positive integer; and

the processing unit is configured to determine, based on the first frame, maximum transmit PSDs corresponding to the fundamental channels in the first basic service set operating channel bandwidth.