CLAIMS

1. A communication apparatus, wherein the communication apparatus is applied in a station, and the communication apparatus comprises:

a transceiver, configured to receive a trigger frame sent by a first access point AP, wherein the trigger frame is used to trigger the station to send a trigger based physical protocol data unit PPDU, the station belongs to one of a plurality of basic service sets, and the trigger frame comprises a transmit power of sending the trigger frame, an estimated received power of the trigger frame, identification information of the plurality of basic service sets and identification information of the station; and

a processor, configured to determine that the trigger based physical protocol data unit PPDU needs to be sent.

2. A communication apparatus, wherein the communication apparatus is applied in a first access point AP, and the communication apparatus comprises:

a processor, configured to generate a trigger frame, wherein the trigger frame is used to trigger each of stations STAs in a plurality of basic service sets BSSs to send a trigger based physical protocol data unit PPDU, and the trigger frame comprises a transmit power of sending the trigger frame, an estimated received power of the trigger frame, identification information of the plurality of basic service sets and identification information of the stations; and

a transceiver, configured to send the trigger frame to the stations.

3. The communication apparatus according to claim 1 or 2, wherein the identification information of the plurality of basic service sets comprises at least one of the following: basic service set colors respectively corresponding to the plurality of basic service sets, access point identifiers respectively corresponding to the plurality of basic service sets, basic service set identifiers respectively corresponding to the plurality of basic service sets, and medium access control MAC addresses of access points respectively corresponding to the plurality of basic service sets; and

the identification information of the station comprises an association identifier AID of the station.

4. The communication apparatus according to any one of claims 1 to 3, wherein the trigger frame comprises a first field and at least one first user info field corresponding to the first field,

wherein

the first field comprises identification information of at least one of the plurality of basic service sets;

one first user info field comprises identification information of one triggered station of the at least one basic service set; and

the at least one first user info field is located after the first field in the trigger frame.

5. The communication apparatus according to claim 4, wherein the first field is carried in a second user info field in the trigger frame;

the first field is carried in a common info field in the trigger frame; or

the first field is carried in a coordinated field in the trigger frame.

6. The communication apparatus according to claim 5, wherein if the first field is carried in the second user info field in the trigger frame, the at least one basic service set does not comprise a first basic service set corresponding to the first access point, and the first field is located after a first user info field corresponding to the first basic service set in the trigger frame.

7. The communication apparatus according to any one of claims 4 to 6, wherein the trigger frame comprises a plurality of first fields and at least one first user info field respectively corresponding to each of the plurality of first fields.

8. The communication apparatus according to claim 5, wherein if the first field is carried in the common info field in the trigger frame, the common info field comprises a trigger type subfield and a trigger dependent common information subfield, wherein

the trigger type subfield indicates a trigger type of the trigger frame; and

the trigger dependent common information subfield comprises the first field.

9. The communication apparatus according to claim 5, wherein if the first field is the coordinated field in the trigger frame, the trigger frame further comprises the common info field, wherein

the common info field indicates a trigger type of the trigger frame, and

the coordinated field is located after the common info field in the trigger frame.

10. The communication apparatus according to any one of claims 4 to 9, wherein the first field comprises at least one basic service set identifier subfield, and

one basic service set identifier subfield indicates identification information of one of the at least one basic service set.

11. The communication apparatus according to claim 10, wherein one of the at least one basic service set identifier subfield is a first value, and the first value indicates that the first field does not comprise a basic service set identifier subfield after the basic service set identifier subfield whose value is the first value.

12. The communication apparatus according to claim 11, wherein the first value is all 0 or all 1.

13. The communication apparatus according to any one of claims 4 to 12, wherein the first field comprises at least one number of user info subfield, and

one number of user info subfield indicates a quantity of first user info fields corresponding to one of the at least one basic service set.

14. The communication apparatus according to claim 13, wherein one of the at least one number of user info subfield is a second value, and the second value indicates that the first field does not comprise a number of user info subfield after the number of user info subfield whose value is the second value.

15. The communication apparatus according to claim 14, wherein the second value is all 0 or all 1.

16. The communication apparatus according to any one of claims 5 to 15, wherein if the first field is carried in the second user info field in the trigger frame, the first field comprises an association identifier subfield, wherein

the association identifier subfield indicates a type of the first field, and

a value of the association identifier subfield is a specific AID.

17. The communication apparatus according to any one of claims 4 to 16, wherein the first field comprises a number of basic service set subfield, and

the number of basic service set subfield indicates a quantity of the at least one basic service set.

18. An uplink coordinated communication method, comprising:

receiving, by a station STA, a trigger frame sent by a first access point AP, wherein the trigger frame is used to trigger the station to send a trigger based physical protocol data unit PPDU, the station belongs to one of a plurality of basic service sets, and the trigger frame comprises a transmit power of sending the trigger frame, an estimated received power of the trigger frame, identification information of the plurality of basic service sets and identification information of the station; and

determining, by the station, the trigger based physical protocol data unit PPDU.

19. An uplink coordinated communication method, comprising:

generating, by a first access point AP, a trigger frame, wherein the trigger frame is used to trigger each of stations STAs in a plurality of basic service sets BSSs to send a trigger based physical protocol data unit PPDU, and the trigger frame comprises a transmit power of sending the trigger frame, an estimated received power of the trigger frame, identification information of the plurality of basic service sets and identification information of the stations; and

sending, by the first access point, the trigger frame to the stations.

20. The method according to claim 18 or 19, wherein the identification information of the plurality of basic service sets comprises at least one of the following: basic service set colors respectively corresponding to the plurality of basic service sets, access point identifiers respectively corresponding to the plurality of basic service sets, basic service set identifiers respectively corresponding to the plurality of basic service sets, and medium access control MAC addresses of access points respectively corresponding to the plurality of basic service sets; and

the identification information of the station comprises an association identifier AID of the station.

21. The method according to claims 18 or 19, wherein the trigger frame comprises a first field and at least one first user info field corresponding to the first field, wherein

the first field comprises identification information of at least one of the plurality of basic service sets;

one first user info field comprises identification information of one triggered station of the at least one basic service set; and

the at least one first user info field is located after the first field in the trigger frame.

22. The method according to claim 21, wherein the first field is carried in a second user info field in the trigger frame;

the first field is carried in a common info field in the trigger frame; or

the first field is carried in a coordinated field in the trigger frame.

23. The method according to claim 22, wherein if the first field is carried in the second user info field in the trigger frame, the at least one basic service set does not comprise a first basic service set corresponding to the first access point, and the first field is located after a first user info field corresponding to the first basic service set in the trigger frame.

24. The method according to any one of claims 21 to 23, wherein the trigger frame comprises a plurality of first fields and at least one first user info field respectively corresponding to each of the plurality of first fields.

25. The method according to claim 22, wherein if the first field is carried in the common info field in the trigger frame, the common info field comprises a trigger type subfield and a trigger dependent common information subfield, wherein

the trigger type subfield indicates a trigger type of the trigger frame; and

the trigger dependent common information subfield comprises the first field.

26. The method according to claim 22, wherein if the first field is carried in the coordinated field in the trigger frame, the trigger frame further comprises the common info field, wherein

the common info field indicates a trigger type of the trigger frame, and

the coordinated field is located after the common info field in the trigger frame.

27. The method according to any one of claims 21 to 26, wherein the first field comprises at least one basic service set identifier subfield, and

one basic service set identifier subfield indicates identification information of one of the at least one basic service set.

28. The method according to claim 27, wherein one of the at least one basic service set identifier subfield is a first value, and the first value indicates that the first field does not comprise a basic service set identifier subfield after the basic service set identifier subfield whose value is the first value.

29. The method according to claim 28, wherein the first value is all 0 or all 1.

30. The method according to any one of claims 21 to 29, wherein the first field comprises at least one number of user info subfield, and

one number of user info subfield indicates a quantity of first user info fields corresponding to one of the at least one basic service set.

31. The method according to claim 30, wherein one of the at least one number of user info subfield is a second value, and the second value indicates that the first field does not comprise a number of user info subfield after the number of user info subfield whose value is the second value.

32. The method according to claim 31, wherein the second value is all 0 or all 1.

33. The method according to any one of claims 22 to 32, wherein if the first field is carried in the second user info field in the trigger frame, the first field comprises an association identifier

subfield, wherein

the association identifier subfield indicates a type of the first field, and

a value of the association identifier subfield is a specific AID.

34. The method according to any one of claims 21 to 33, wherein the first field comprises a number of basic service set subfield, and

the number of basic service set subfield indicates a quantity of the at least one basic service set.

35. A communication apparatus, wherein the communication apparatus is configured to perform the method according to any one of claims 18 to 34.

36. A chip, comprising a processing circuit and a transceiver pin, wherein the chip is configured to perform the method according to any one of claims 18 to 34.

37. A computer-readable storage medium, configured to store a computer program, wherein the computer program comprises instructions used to perform the method according to any one of claims 18 to 34.

38. 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 18 to 34.

39. A communication system, wherein the communication system comprises the communication apparatus to perform the according to any one of claim 1 and claims 3 to 17, and the communication apparatus according to any one of claims 2 to 17.