CLAIMS

What is claimed is:

1. An information control method, applied to a base station, wherein the base station comprises a central unit CU and a distributed unit DU, and the method comprises:

transmitting first signaling from the CU to the DU, wherein the first signaling comprises information about multicast broadcast service MBS traffic, and the information about MBS traffic is used to indicate that the DU transmits MBS traffic in a first mode;

generating configuration information related to the MBS traffic in the DU; and

transmitting the configuration information from the DU to the CU;

wherein the first signaling further comprises at least one of the following:

frequency information expected by the CU;

cell type information and/or frequency type information expected by the CU;

priority information about MBS traffic;

information about comparison between priority of MBS traffic and priority of unicast traffic;

information about whether the MBS traffic is able to be overridden by other MBS traffic and/or unicast traffic; and

information about whether the MBS traffic is able to override other MBS traffic and/or unicast traffic.

2. The method according to claim 1, wherein the first mode comprises any one of the following: a point-to-multipoint PTM mode and a point-to-point PTP mode.

3. The method according to claim 1, wherein the first signaling further comprises at least one of the following:

cell information expected by the CU.

4. The method according to claim 3, wherein the information about comparison between priority of MBS traffic and priority of unicast traffic comprises at least one of the following:

the priority of MBS traffic being higher than, lower than, or equal to the priority of unicast traffic;

reporting information of a terminal about priority of MBS traffic and priority of unicast traffic;

a priority threshold for MBS traffic;

a priority threshold for unicast traffic; and

a priority threshold for MBS traffic and a priority threshold for unicast traffic.

5. The method according to claim 2, wherein the first mode is the PTM mode, and the generating configuration information related to the MBS traffic in the DU comprises:

determining, by the DU, a target cell and/or a target frequency;

reserving, by the DU at the target cell and/or the target frequency, a resource required for the MBS traffic; and

generating, by the DU based on the reserved resource, the configuration information related to the MBS traffic.

6. The method according to claim 5, wherein the first signaling comprises the cell information expected by the CU, and the target cell is a cell, among cells corresponding to the cell information, that successfully performs acceptance; and/or

the first signaling comprises the frequency information expected by the CU, and the target frequency is a frequency, among frequencies corresponding to the frequency information, that successfully performs acceptance.

7. The method according to claim 6, wherein the cells corresponding to the cell information comprise a cell that fails to perform acceptance, and/or the frequencies corresponding to the frequency information comprise a frequency that fails to perform acceptance, and the method further comprises:

transmitting acceptance failure information from the DU to the CU, wherein

the acceptance failure information comprises information about the cell that fails to perform acceptance, and/or information about the frequency that fails to perform acceptance.

8. The method according to claim 5, wherein the target cell is a cell that successfully performs acceptance and that is selected by the DU from cells related to the DU; and/or

the target frequency is a frequency that successfully performs acceptance and that is selected by the DU from frequencies related to the DU.

9. The method according to claim 8, wherein the first signaling comprises the cell type information expected by the CU, and the target cell is a cell that successfully performs acceptance and that is selected by the DU based on the cell type information from cells related to the DU; and/or

the first signaling comprises the frequency type information expected by the CU, and the target frequency is a frequency that successfully performs acceptance and that is selected by the DU based on the frequency type information from frequencies related to the DU.

10. The method according to claim 1, wherein after the transmitting the configuration information from the DU to the CU, the method further comprises:

transmitting target configuration information to a terminal from the CU by using any one of the following:

broadcast radio resource control RRC signaling, multicast RRC signaling, dedicated RRC signaling, and a system information block SIB, wherein

the target configuration information comprises the configuration information related to the MBS traffic, or the target configuration information comprises updated configuration information related to the MBS traffic.

11. The method according to claim 1, wherein before the transmitting first signaling from the CU to the DU, the method further comprises:

performing, by the CU, a first operation, wherein

the first operation comprises any one of the following:

determining to transmit the MBS traffic in the first mode; and

determining to switch a transmission mode of the MBS traffic to the first mode.

12. The method according to claim 11, wherein the performing a first operation comprises:

performing, by the CU, the first operation based on at least one of the following:

MBS traffic interest information collected by the CU;

a suggestion request of the DU;

MBS traffic measurement information reported by the DU; and

auxiliary information or request information transmitted by a core network node.

13. The method according to claim 12, wherein a collection manner for the MBS traffic interest information comprises at least one of the following:

the CU triggers the terminal to report the MBS traffic interest information; and

the terminal actively reports the MBS traffic interest information.

14. The method according to claim 12, wherein a trigger condition for the suggestion request of the DU comprises at least one of the following:

usage of a target resource meets a first preset condition;

transmission efficiency of a target resource meets a second preset condition; and

a feedback status of the terminal meets a third preset condition.

15. The method according to claim 1 or 12, further comprising:

transmitting second signaling from the CU to the DU, wherein the second signaling is used to configure MBS traffic measurement information.

16. The method according to claim 15, wherein the MBS traffic measurement information comprises at least one of the following:

total resource occupancy of MBS traffic in the PTM mode and/or the PTP mode;

resource occupancy of each MBS traffic in the PTM mode and/or the PTP mode;

resource occupancy of MBS traffic in a preset MBS traffic list in the PTM mode and/or the PTP mode;

total resource occupancy of MBS traffic in the PTP mode for each or a given terminal;

resource occupancy of each MBS traffic in the PTP mode for each or a given terminal;

resource occupancy of MBS traffic in a preset MBS traffic list in the PTP mode for each or a given terminal;

feedback information for MBS traffic in the PTM mode;

for MBS traffic in the PTP mode, terminal information that is specified or meets a fourth preset condition and that is configured to be reported;

total number of active terminals for MBS traffic in the PTM mode;

number of active terminals for each MBS traffic in the PTM mode;

number of active terminals for given MBS traffic in the PTM mode;

number of active terminals for MBS traffic in a preset MBS traffic list in the PTM mode;

hardware load of the PTM mode and/or the PTP mode; and

remaining capacity of the PTM mode and/or the PTP mode.

17. The method according to claim 2, wherein the first mode is the PTM mode, the CU corresponds to a plurality of DUs, and the method further comprises any one of the following:

establishing one user plane tunnel between the CU and each DU; and

establishing one user plane multicast tunnel between the CU and the plurality of DUs.

18. The method according to claim 2, wherein the first mode is the PTP mode, the CU corresponds to a plurality of DUs, the CU maintains a unified first user plane entity for terminals and the plurality of DUs each maintain a second user plane entity for each terminal, the method further comprises any one of the following:

establishing one user plane tunnel between the CU and each of the DUs; and

establishing one user plane multicast tunnel between the CU and the plurality of DUs.

19. The method according to claim 2, wherein the first mode is the PTP mode, the CU and the DU maintain a unified first user plane entity and a unified second user plane entity for each terminal, and the method further comprises any one of the following:

establishing a separate user plane tunnel between the CU and the DU for each terminal; and

establishing a distinguishable user plane multicast tunnel between the CU and the DU for each terminal.

20. A base station, comprising a processor, a memory, and a program or instructions stored in the memory and capable of running on the processor, wherein when the program or instructions are executed by the processor, the steps of the information control method according to any one of claims 1 to 19 are implemented.