## CLAIMS

What is claimed is:

1. A method for transmitting a multicast and broadcast service interest indication message, applied to a communication apparatus, wherein the method comprises:

receiving a system information block (SIB) of a secondary cell (SCell), wherein the SIB comprises information used for obtaining a multicast and broadcast service control channel (MCCH) configuration of a multicast and broadcast service (MBS); and

receiving, by using an MCCH configured by using the MCCH configuration, an MBS service provided by the SCell; and

determining, based on the MBS service provided by the SCell, an identifier of an MBS service of interest to the communication apparatus; and

sending a multicast and broadcast service interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the communication apparatus.

2. The method according to claim 1, wherein the sending an MII message comprises:

if SIBs of all cells in a cell set are not received after the MII message is sent last time, sending the MII message, wherein

the cell set comprises one or more cells that provide a radio resource for the communication apparatus.

3. The method according to claim 1, wherein the sending an MII message comprises:

if the identifier of the MBS service of interest to the communication apparatus is different from an identifier that is of an MBS service and that is carried in an MII message sent last time, sending the MII message.

4. The method according to any one of claims 1 to 3, wherein

the SCell is a SCell in a master cell group (MCG) and/or a secondary cell group (SCG) that provides a radio resource for the communication apparatus.

5. The method according to claim 2, wherein

the cell set comprises one or more cells that provide a radio resource for the communication apparatus after the communication apparatus sends an MII message last time.

6. The method according to any one of claims 1 to 5, wherein

the SIB of the SCell is received through dedicated signaling.

7. The method according to any one of claims 1 to 5, wherein

the MII message further carries at least one of MBS frequency information and MBS priority information.

8. A method for transmitting a multicast and broadcast service interest indication message,

applied to a communication apparatus, wherein the method comprises:

receiving first indication information, wherein the first indication information indicates the communication apparatus to report an identifier of a multicast and broadcast service (MBS) service; and

sending a multicast and broadcast service interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the communication apparatus.

9. The method according to claim 8, wherein

the first indication information is carried in a system message;

the first indication information is received through dedicated signaling; or

the first indication information is carried in a message in a random access procedure.

10. A method for transmitting a multicast and broadcast service interest indication message, applied to a communication apparatus, wherein the method comprises:

sending first indication information, wherein the first indication information indicates a terminal device to report an identifier of a multicast and broadcast service (MBS) service; and

receiving a multicast and broadcast service interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the terminal device.

11. The method according to claim 10, wherein

the first indication information is carried in a system message;

the first indication information is received through dedicated signaling; or

the first indication information is carried in a message in a random access procedure.

12. A communication apparatus, wherein the apparatus comprises:

a communication unit and a processing unit, configured to receive a system information block (SIB) of a secondary cell (SCell), wherein the SIB comprises information used for obtaining a multicast and broadcast service control channel (MCCH) configuration of a multicast and broadcast service (MBS), wherein

the communication unit is further configured to receive, by using an MCCH configured by using the MCCH configuration, an MBS service provided by the SCell; and

the processing unit is configured to determine, based on the MBS service provided by the SCell, an identifier of an MBS service of interest to the communication apparatus; and

the communication unit is further configured to send a multicast and broadcast service interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the communication apparatus.

13. The apparatus according to claim 12, wherein the communication unit sending an MII message is specifically:

if SIBs of all cells in a cell set are not received after the MII message is sent last time, sending

the MII message, wherein

the cell set comprises one or more cells that provide a radio resource for the communication apparatus.

14. The apparatus according to claim 12, wherein the communication unit sending an MII message is specifically:

if the identifier of the MBS service of interest to the communication apparatus is different from an identifier that is of an MBS service and that is carried in an MII message sent last time, sending the MII message.

15. The apparatus according to any one of claims 12 to 14, wherein

the SCell is a SCell in a master cell group (MCG) and/or a secondary cell group (SCG) that provides a radio resource for the communication apparatus.

16. The apparatus according to claim 13, wherein

the cell set comprises one or more cells that provide a radio resource for the communication apparatus after the communication apparatus sends an MII message last time.

17. The apparatus according to any one of claims 12 to 16, wherein

the SIB of the SCell is received through dedicated signaling.

18. The apparatus according to any one of claims 12 to 16, wherein

the MII information further carries MBS frequency information and MBS priority information.

19. A communication apparatus, wherein the apparatus comprises:

a communication unit, configured to receive first indication information, wherein the first indication information indicates the communication apparatus to report an identifier of a multicast and broadcast service (MBS) service, wherein

the communication unit is further configured to send a multicast and broadcast service interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the communication apparatus.

20. The apparatus according to claim 19, wherein

the first indication information is carried in a system message;

the first indication information is received through dedicated signaling; or

the first indication information is carried in a message in a random access procedure.

21. A communication apparatus, wherein the apparatus comprises:

a communication unit, configured to send first indication information, wherein the first indication information indicates a terminal device to report an identifier of a multicast and broadcast service (MBS) service, wherein

the communication unit is further configured to receive a multicast and broadcast service

interest indication (MII) message, wherein the MII message carries an identifier of an MBS service of interest to the terminal device.

22. The apparatus according to claim 21, wherein

the first indication information is carried in a system message;

the first indication information is received through dedicated signaling; or

the first indication information is carried in a message in a random access procedure.

23. A communication apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to receive a signal from a communication apparatus other than the communication apparatus and transmit the signal to the processor, or send a signal from the processor to a communication apparatus other than the communication apparatus; and the processor is configured to implement the method according to any one of claims 1 to 7 or the method according to claim 8 or 9 by using a logic circuit or executing a code instruction.

24. A communication apparatus, comprising a processor and an interface circuit, wherein the interface circuit is configured to receive a signal from a communication apparatus other than the communication apparatus and transmit the signal to the processor, or send a signal from the processor to a communication apparatus other than the communication apparatus; the processor is configured to implement the method according to claim 10 or 11 by using a logic circuit or executing a code instruction.

25. A computer-readable storage medium, wherein the storage medium stores a computer program or instructions, and when the computer program or the instructions are executed by a communication apparatus, the method according to any one of claims 1 to 7 is implemented, or the method according to claim 8 or 9 is implemented.

26. A computer-readable storage medium, wherein the storage medium stores a computer program or instructions, and when the computer program or the instructions are executed by a communication apparatus, the method according to claim 10 or 11 is implemented.

27. A computer program product, wherein the computer program product, when running on a computer, enables the computer to perform the method according to any one of claims 1 to 7, or perform the method according to claim 8 or 9.

28. A computer program product, wherein the computer program product, when running on a computer, enables the computer to perform the method according to claim 10 or 11.