CLAIMS

1. A modulation and coding scheme indication method, applied to a first device, wherein the method comprises:

determining an unequal modulation and coding scheme MCS configuration; and

sending indication information to a second device, wherein the indication information indicates the unequal MCS configuration supported by the first device under a specified condition, and the specified condition comprises at least one of the following:

a bandwidth corresponding to the unequal MCS configuration;

a size of a resource unit RU corresponding to the unequal MCS configuration; or

a size of a multiple resource unit MRU corresponding to the unequal MCS configuration.

2. A modulation and coding scheme indication method, applied to a second device, wherein the method comprises:

receiving indication information from a first device, wherein the indication information indicates an unequal modulation and coding scheme (MCS) configuration supported by the first device under a specified condition, and the specified condition comprises at least one of the following:

a bandwidth corresponding to the unequal MCS configuration;

a size of a resource unit (RU) corresponding to the unequal MCS configuration; or

a size of a multiple resource unit (MRU) corresponding to the unequal MCS configuration; and

determining the unequal MCS configuration based on the indication information.

3. The method according to claim 1, wherein

the determining the unequal MCS configuration comprises:

determining the unequal MCS configuration based on a number of spatial streams NSS used by the first device.

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

the unequal MCS configuration comprises:

an unequal MCS configuration used by the first device for sending; and/or

an unequal MCS configuration used by the first device for receiving.

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

the unequal MCS configuration comprises:

different MCSs corresponding to the first device in different spatial streams; or

different MCSs corresponding to the first device on different tones.

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

that the indication information indicates the unequal MCS configuration supported by the first device under the specified condition comprises:

the indication information indicates a first MCS, and the first MCS is an MCS with highest complexity supported by the first device.

7. The method according to claim 6, wherein the first MCS is an MCS used in a first spatial stream; and

the indication information further indicates a second MCS, and the second MCS is an MCS used in a second spatial stream.

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

that the indication information indicates the unequal MCS configuration supported by the first device under the specified condition comprises:

the indication information comprises a number of spatial streams (NSS) and an unequal MCS configuration corresponding to the NSS.

9. The method according to any one of claims 1, 3to 8, wherein after sending the indication information to the second device, the method further comprises:

sending or receiving data in different spatial streams by using the unequal MCS configuration; or

sending or receiving data on different tones by using the unequal MCS configuration.

10. A modulation and coding scheme indication method, applied to a first device, wherein the method comprises:

determining an unequal modulation and coding scheme (MCS) configuration; and

sending indication information to a second device, wherein the indication information indicates an MCS index, and the MCS index is an index of the unequal MCS configuration.

11. A modulation and coding scheme indication method, applied to a second device, wherein the method comprises:

receiving indication information from a first device, wherein the indication information indicates a modulation and coding scheme (MCS) index, and the MCS index is an index of an unequal MCS configuration; and

determining the unequal MCS configuration based on the MCS index.

12. The method according to claim 10, wherein

the determining the unequal MCS configuration comprises:

determining the unequal MCS configuration based on a number of spatial streams NSS used by the first device.

13. The method according to any one of claims 10 to 12, wherein

the unequal MCS configuration comprises:

an unequal MCS configuration used by the first device for sending; and/or

an unequal MCS configuration used by the first device for receiving.

14. The method according to any one of claims 10 to 12, wherein

the unequal MCS configuration comprises:

different MCSs corresponding to the first device on different tones.

15. The method according to any one of claims 10 to 14, wherein

the MCS index is associated with a resource configuration, the resource configuration comprises a resource unit (RU) or a multiple resource unit (MRU) allocated to the first device, and the RU and the MRU comprise a plurality of tones; and

the MCS index indicates different MCSs corresponding to different tones in the resource configuration.

16. The method according to any one of claims 10 to 14, wherein

the MCS index indicates a resource configuration and different MCSs corresponding to different tones in the resource configuration; and

the resource configuration comprises a resource unit RU or a multiple resource unit (MRU) allocated to the first device, and the RU and the MRU comprise a plurality of tones.

17. The method according to any one of claims 10 to 12, wherein

the unequal MCS configuration comprises:

different MCSs corresponding to the first device in different spatial streams.

18. The method according to any one of claims 10 to 13 and 17, wherein

the MCS index is associated with a number of spatial streams (NSS), and the MCS index indicates different MCSs corresponding to different spatial streams in the NSS.

19. The method according to any one of claims 10 to 13 and 17, wherein

the MCS index indicates an NSS and different MCSs corresponding to different spatial streams in the NSS.

20. The method according to any one of claims 10 to 19, wherein

that the indication information indicates the MCS index comprises:

the indication information comprises a bitmap, and the bitmap indicates the MCS index; and

the indication information comprises an MCS index value, and the MCS index value indicates the MCS index; or

the indication information indicates a start position and/or an end position of the MCS index.

21. The method according to any one of claims 10, 12 to 20, wherein after sending the indication information to the second device, the method further comprises:

sending or receiving data in different spatial streams by using the unequal MCS configuration; or

sending or receiving data on different tones by using the unequal MCS configuration.

22. A communication apparatus, comprising a processor and a memory, wherein the processor is coupled to the memory, the memory stores program instructions, and when the program instructions stored in the memory are executed by the processor, the communication apparatus is enabled to perform the method according to any one of claims 1 to 9, or the communication apparatus is enabled to perform the method according to any one of claims 10 to 21.

23. A chip, comprising a processor and a memory coupled to the processor, wherein the memory stores a computer program, the chip is located in a communication apparatus, and when the processor executes the computer program, the communication apparatus is enabled to perform the method according to any one of claims 1 to 9, or the communication apparatus is enabled to perform the method according to any one of claims 10 to 21.

24. A computer-readable storage medium, storing a computer program or instructions, wherein when the computer program or the instructions are executed on a communication apparatus, the communication apparatus is enabled to perform the method according to any one of claims 1 to 9, or the communication apparatus is enabled to perform the method according to any one of claims 10 to 21.