

WE CLAIM

1. An information feedback method which is applicable to a first communication node, comprising:

receiving a downlink data transmission instruction sent by a second communication node; and

triggering, according to the downlink data transmission instruction, the first communication node to feed back demodulation capability information and channel state information (CSI) to the second communication node; the CSI comprising: a signal-to-noise ratio (SNR) and an SNR change rate of a received signal;

wherein,

the demodulation capability information refers to the SNR corresponding to a block error rate (BLER) reaching a preset value, each time the first communication node checks data scheduled by using a Modulation and Coding Scheme (MCS).

2. The method of claim 1, wherein feeding back demodulation capability information to the second communication node comprises:

feeding back the demodulation capability information of the first communication node to the second communication node through radio resource control (RRC) signaling or medium access control (MAC) signaling.

3. The method of claim 1, wherein feeding back CSI to the second communication node comprises:

feeding back the CSI to the second communication node through a physical uplink control channel (PUCCH) or a physical uplink shared channel (PUSCH).

4. The method of claim 1, wherein the CSI is fed back in at least one of: a periodical manner; or a non-periodical manner.

5. The method of claim 4, corresponding to the periodical manner in which the CSI is fed back, the method further comprising:

receiving a configuration parameter sent by the second communication node through RRC signaling; and

feeding back the CSI to the second communication node according to the configuration parameter.

6. The method of claim 4, in response to the CSI being fed back in a non-periodical

manner, the method further comprising:

receiving downlink control information (DCI) signaling sent by the second communication node; and

feeding back the CSI to the second communication node according to a parameter indicated by the DCI signaling.

7. The method of any one of claims 1 to 6, wherein the SNR change rate comprises: a 1st order SNR change rate.

8. The method of claim 7, wherein the SNR change rate further comprises: 2nd to n-th order SNR change rates, wherein n is a positive integer greater than or equal to 2.

9. The method of claim 7, wherein a maximum order of the SNR change rate is configured by the second communication node to the first communication node through the RRC signaling, the MAC signaling, or the DCI signaling; or the maximum order of the SNR change rate is 1 by default.

10. An information feedback method which is applicable to a second communication node, comprising:

receiving demodulation capability information and channel state information (CSI) fed back by a first communication node; and

determining a modulation and coding scheme (MCS) for each time of scheduling according to the demodulation capability information and the CSI, the CSI comprising a signal-to-noise ratio (SNR) and an SNR change rate of a received signal;

wherein,

the demodulation capability information refers to the SNR corresponding to a block error rate (BLER) reaching a preset value, each time a first communication node checks data scheduled by using the MCS.

11. The method of claim 10, in response to the first communication node feeding back the CSI in a periodical manner, the method further comprising:

sending a configuration parameter to the first communication node through radio resource control (RRC) signaling, the configuration parameter being used to indicate a manner in which the first communication node feeds back the CSI.

12. The method of claim 10, in response to the first communication node feeding back the CSI in a non-periodical manner, the method further comprising:

sending downlink control information (DCI) signaling to the first communication node, the DCI signaling being used to indicate a manner in which the first communication node feeds back the CSI.

13. An information feedback apparatus which is applicable to a first communication node, comprising:

a first receiver unit configured to receive a downlink data transmission instruction sent by a second communication node; and

a first feedback unit configured to trigger, according to the downlink data transmission instruction, the first communication node to feed back demodulation capability information and channel state information (CSI) to the second communication node, the CSI comprising a signal-to-noise ratio (SNR) and an SNR change rate of a received signal;

wherein,

the demodulation capability information refers to the SNR corresponding to a block error rate (BLER) reaching a preset value, each time the first communication node checks data scheduled by using a Modulation and Coding Scheme (MCS).

14. An information feedback apparatus which is applicable to a second communication node, comprising:

a receiver unit configured to receive demodulation capability information and channel state information (CSI) fed back by a first communication node; and

a determination module configured to determine a modulation and coding scheme (MCS) for each time of scheduling according to the demodulation capability information and the CSI, the CSI comprising a signal-to-noise ratio (SNR) and an SNR change rate of a received signal;

wherein,

the demodulation capability information refers to the SNR corresponding to a block error rate (BLER) reaching a preset value, each time a first communication node checks data scheduled by using the MCS.

15. A communication node, comprising: a communication module, a memory, and at least one processor, wherein:

the communication module is configured to perform communication interaction between the communication node and communication nodes other than the communication node;

the memory is configured to store at least one program; and

the at least one program, when executed by the at least one processor, causes the at least one processor to implement the information feedback method of any one of claims 1 to 9 or claims 10 to 12.

16. A storage medium storing a computer program which, when executed by a processor, causes the processor to implement the information feedback method of any one of claims 1 to 9 or claims 10 to 12.