CLAIMS

What is claimed is:

1. A channel information processing method, applied to a network-side device, and comprising:

receiving first information and second information from a terminal, wherein the first information comprises a first parameter without uplink/downlink channel reciprocity, the first parameter is determined based on downlink channel estimation, the second information is used to indicate a deviation between a second parameter and a third parameter that have uplink/downlink channel reciprocity, the second parameter is determined based on uplink channel estimation, and the third parameter is determined based on downlink channel estimation; and

determining channel information of a downlink channel based on the first information, the second information, and the second parameter;

wherein before the receiving first information and second information from a terminal, the method further comprises:

performing channel estimation on an uplink channel and determining the second parameter from a channel estimation result; and

transmitting the second parameter to the terminal.

2. The method according to claim 1, wherein the method further comprises:

receiving third information from the terminal, wherein the third information comprises a fourth parameter corresponding to a first path, and the first path is different from a path corresponding to the second parameter.

3. The method according to claim 2, wherein the determining channel information of a downlink channel comprises:

determining the channel information of the downlink channel based on the first information, the second information, the third information, and the second parameter.

4. The method according to claim 1, wherein the second parameter and the third parameter each comprise a delay of a target path and/or a spatial angle of the target path.

5. The method according to claim 4, wherein the target path is at least one of the following: a path indicated by the network-side device, a path for which the deviation between the second parameter and the third parameter is greater than a threshold, and a path discovered by the terminal.

6. The method according to claim 4, wherein in a case that the second parameter and the third parameter each comprise a delay of a target path and a spatial angle of the target path, the second information is used to indicate a deviation between a delay in the second parameter and a delay in the third parameter.

7. The method according to claim 1, wherein the performing channel estimation on an uplink channel and determining the second parameter from a channel estimation result comprises:

performing estimation on uplink channel information to obtain a first uplink channel estimation result in frequency domain;

performing Fourier transform on the first uplink channel estimation result to obtain a second uplink channel estimation result in time domain; and

determining a delay of a target path and/or a spatial angle of the target path from the second uplink channel estimation result.

8. The method according to claim 1, wherein the determining channel information of a downlink channel based on the first information, the second information, and the second parameter comprises:

inputting the first information to a target neural network to obtain fourth information; and

determining the channel information of the downlink channel by using the fourth information, the second information, and the second parameter.

9. The method according to claim 8, wherein the target neural network is obtained by training an initial neural network through a preset training set, and the preset training set comprises first information obtained at a plurality of historical moments.

10. The method according to claim 9, wherein the first parameter in the first information is a gain of a target path.

11. A channel information processing method, applied to a terminal, and comprising:

transmitting first information and second information to a network-side device, wherein the first information comprises a first parameter without uplink/downlink channel reciprocity, the first parameter is determined based on downlink channel estimation, the second information is used to indicate a deviation between a second parameter and a third parameter that have uplink/downlink channel reciprocity, the second parameter is determined based on uplink channel estimation, and the third parameter is determined based on downlink channel estimation;

wherein before the transmitting first information and second information to a network-side device, the method further comprises:

receiving the second parameter from the network-side device;

wherein the second parameter is determined from a channel estimation result on an uplink channel by the network-side device.

12. The method according to claim 11, wherein before the transmitting first information and second information to a network-side device, the method comprises:

performing channel estimation on a downlink channel, and determining the first parameter and the third parameter from a channel estimation result.

13. The method according to claim 11, wherein the method comprises:

transmitting third information to the network-side device, wherein the third information comprises a fourth parameter corresponding to a first path, and the first path is different from a path corresponding to the second parameter.

14. The method according to claim 11, wherein the second parameter and the third parameter each comprise a delay of a target path and/or a spatial angle of the target path.

15. The method according to claim 14, wherein in a case that the second parameter and the third parameter each comprise a delay of a target path and a spatial angle of the target path, the second information is used to indicate a deviation between a delay in the second parameter and a delay in the third parameter.

16. The method according to claim 12, wherein the performing channel estimation on a downlink channel, and determining the first parameter from a channel estimation result comprises:

performing channel estimation on the downlink channel to obtain a first downlink channel estimation result in frequency domain;

performing two-dimensional Fourier transform on the first downlink channel estimation result to obtain a second downlink channel estimation result in time domain; and

determining a delay of a target path and/or a spatial angle of the target path from the second downlink channel estimation result.

17. A terminal, 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 channel information processing method according to any one of claims 11 to 16 are implemented.

18. A network-side device, 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 channel information processing method according to any one of claims 1 to 10 are implemented.