the uplink transmission. As shown in FIG. 8, the method may include but not limited to the following steps.

[00141] At step S801, a control command transmitted by a network side device is received.

[00142] In the embodiment of the present disclosure, the control command is a control command for uplink transmission.

[00143] In the embodiment of the present disclosure, step S801 can be implemented in any manner in various embodiments of the present disclosure, which are not be limited by the embodiments of the present disclosure, and will not be repeated again.

[00144] At step S802, whether scheduled data supports a HARQ feedback function is determined based on the control command.

[00145] In the embodiments of the present disclosure, step S802 can be implemented in any manner in multiple embodiments of the present disclosure, which are not be limited by the embodiments of the present disclosure, and will not be repeated again.

[00146] At step S803, after transmitting uplink data, the terminal device waits for a scheduling command or a HARQ feedback further transmitted by the network side device, determines whether to retransmit the uplink data based on the scheduling command or the HARQ feedback further transmitted by the network side device, where the control command is a control command for uplink transmission, and the scheduled data supports the HARQ feedback function; or, after the transmitting uplink data, the terminal device clears data cache in a HARQ process corresponding to the uplink data, where the control command is a control command for uplink transmission, and the scheduled data does not support the HARQ feedback function.

[00147] As an example, data scheduled by the control command for uplink transmission supports the HARQ feedback function. In this example, after transmitting the data scheduled by the control command for uplink transmission, the terminal device waits for a scheduling command further transmitted by the network side device. It is assumed that the scheduling command further transmitted by the network side device indicates that the terminal device needs to retransmit the data scheduled by the uplink scheduling command, the terminal device needs to retransmit the data to the network side device; or, it is assumed that the scheduling command further transmitted by the network side device indicates that the terminal device does not need to retransmit the uplink data, the terminal device does not need to retransmit the data to the network side device.

[00148] As another example, data scheduled by the control command for uplink transmission

the HARQ feedback function is supported, so that the terminal device can determine whether the data scheduled by the control command supports the HARQ feedback function through the scrambling sequence. As shown in FIG. 11, the method may include but not limited to the following steps.

[00181] At step S1101, a scheduling command transmitted by a network side device is received, where the scheduling command includes a scrambling sequence.

[00182] At step S1102, a correspondence between the scrambling sequence and whether the HARQ feedback function is supported is determined.

[00183] For example, two orthogonal scrambling sequences (such as a first scrambling sequence and a second scrambling sequence) may be predefined, the existence of the above first scrambling sequence indicates that scheduled data supports the HARQ feedback function, and the existence of the above second scrambling sequence indicates that scheduled data does not support the HARQ feedback function.

[00184] At step S1103, the scheduling command is parsed to obtain a target scrambling sequence in the command.

[00185] At step S1104, whether the data scheduled by the control command supports the HARQ feedback function is determined based on the correspondence and the target scrambling sequence

[00186] As an example, the existence of the above first scrambling sequence indicates that scheduled data supports the HARQ feedback function, and the existence of the above second scrambling sequence indicates that scheduled data does not support the HARQ feedback function. If the scrambling sequence obtained by the terminal device includes the first scrambling sequence, the terminal device may determine that the scheduled data supports the HARQ feedback function; if the scrambling sequence obtained by the terminal device includes the second scrambling sequence, the terminal device may determine that the scheduled data does not support the HARQ feedback function.

[00187] By implementing the embodiments of the present disclosure, the terminal device can determine whether the scheduled data supports the HARQ feedback function or not based on the scrambling sequence in the received scheduling command, and then can determine whether to enable or disable HARQ, which avoids a problem of HARQ blocking due to excessive HARQ processes, and prevents the reduction in the effectiveness of data transmission caused by insufficient HARQ process of the terminal device, thereby improving the data transmission efficiency of the terminal device.

[00188] In the above embodiments provided by the present disclosure, the method provided by the embodiments of the present disclosure is introduced from the perspective of a terminal device. The

transmission or a control command for downlink transmission.

[00204] For example, the network side device may use a control command for uplink transmission as the control command to instruct the terminal device to determine whether scheduled uplink data supports the HARQ feedback function; or the network side device may also use a control command for downlink scheduling as the control command to instruct the terminal device to determine whether scheduled downlink data supports the HARQ feedback function.

[00205] In an implementation, the control command includes a predetermined information field; the predetermined information field is used to indicate whether the scheduled data supports the HARQ feedback function.

[00206] It should be noted that in the embodiment of the present disclosure, the predetermined information field may be a newly added information field; or the predetermined information field may also be an existing information field.

[00207] As an example, an information field named "HARQ disabling flag" may be introduced into the control command. The information field has 1-bit length information. Value "1" means that the scheduled data supports the HARQ feedback function; value "0" means that the scheduled data does not support the HARQ feedback function.

[00208] As another example, a value (for example, an RNTI value) in an existing information field may be used as an indication target value to indicate whether the scheduled data supports the HARQ feedback function or not. For example, if an indication value of a certain information field is a pre-agreed value, it is considered that scheduled data transmission supports the HARQ feedback function; if it is another value, it is considered that scheduled data transmission does not support the HARQ feedback function. Specific implementation of the above technical solutions will be given in other embodiments, and will not be described in detail here.

[00209] In an optional implementation, a length and/or a position of the predetermined information field are agreed upon by a protocol; or, a length and/or a position of the predetermined information field are preconfigured.

[00210] As an example, the length of the predetermined information field and the position of the predetermined information field may be agreed upon by the protocol.

[00211] As another example, the length of the predetermined information field and the position of the predetermined information field may be preconfigured.

[00212] As another example, the length of the predetermined information field may be agreed

the target RNTI value is used to implicitly indicate whether the scheduled data supports the HARQ feedback function.

[00221] By implementing the embodiments of the present disclosure, the network side device can instruct the terminal device whether the scheduled data supports the HARQ feedback function or not through the target RNTI value in the control command, so that the terminal device enables or disables HARQ, which prevents the terminal device from overrunning the HARQ process, and prevents the reduction in the effectiveness of data transmission caused by insufficient HARQ processes of the terminal device, thereby improving the data transmission efficiency of the terminal device.

[00222] In some implementation of the embodiments of the present disclosure, the control command transmitted by the network side device may also be a scheduling command. As an example, referring to FIG. 14. FIG. 14 is another schematic flowchart of a feedback processing method provided by an embodiment of the present disclosure. This method is performed by a network side device. As shown in FIG. 14, the method may include but not limited to the following steps.

[00223] At step S1401, a control command is scrambled on an RNTI with a target scrambling sequence, where the control command is a scheduling command.

[00224] For example, the network side device may pre-define two orthogonal scrambling sequences with the terminal device, where the existence of the above scrambling sequences indicates that scheduled data supports the HARQ feedback function, and the absence of the above orthogonal scrambling sequence indicates that scheduled data does not support the HARQ feedback function. If the network side device needs to instruct the terminal device that the scheduled data supports the HARQ feedback function, the scheduling command is scrambled on the RNTI with the above orthogonal scrambling sequences; or, if the network side device needs to instruct the terminal device that the scheduled data does not support the HARQ feedback function, the scheduling command is scrambled on the RNTI with other scrambling sequences different from the above orthogonal scrambling sequences.

[00225] At step S1402, the scheduling command scrambled with the target scrambling sequence is transmitted to the terminal device.

[00226] In the embodiment of the present disclosure, the scheduling command scrambled with the target scrambling sequence is used to implicitly indicate whether the scheduled data supports the HARQ feedback function.

[00227] By implementing the embodiments of the present disclosure, the network side device can

WHAT IS CLAIMED IS:

1. A method for processing hybrid automatic repeat request (HARQ) feedback, performed by a terminal device, comprising:

receiving a control command transmitted by a network side device; and

determining whether scheduled data supports a HARQ feedback function.

2. The method according to claim 1, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining, based on the control command, whether current data scheduling by a first physical layer control signaling supports the HARQ feedback function, wherein the control command is the first physical layer control signaling to indicate HARQ enabled or HARQ disabled.

3. The method according to claim 1, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining, based on the control command, whether data scheduling within a first time period supports the HARQ feedback function, wherein the control command is a second physical layer control signaling to indicate HARQ enabled or HARQ disabled, and the first time period.

4. The method according to claim 1, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining, based on the control command, whether data scheduling within a second time period supports the HARQ feedback function,

wherein the control command is a third physical layer control signaling to indicate HARQ enabled or HARQ disabled, and the second time period is a time period starting from reception of the third physical layer control signaling to indicate HARQ enabled, and ending until reception of the third physical layer control signaling to indicate HARQ disabled; or the second time period is a time period starting from reception of the third physical layer control signaling to indicate HARQ disabled, and ending until reception of the third physical layer control signaling to indicate HARQ enabled.

5. The method according to claim 1, further comprising:

after the terminal device transmits uplink data, waiting for a scheduling command or a

HARQ feedback further transmitted by the network side device, and determining whether to retransmit the uplink data based on the scheduling command or the HARQ feedback further transmitted by the network side device, wherein the control command is a control command for uplink transmission, and the scheduled data supports the HARQ feedback function; or,

after the terminal device transmits the uplink data, clearing data cache in a HARQ process corresponding to the uplink data, wherein the control command is the control command for uplink transmission, and the scheduled data does not support the HARQ feedback function.

6. The method according to claim 1, further comprising:

after the terminal device receives downlink data, feeding back HARQ feedback information of the downlink data at an indicated position, wherein the control command is a control command for downlink transmission, and the scheduled data supports the HARQ feedback function; or,

after the terminal device receives the downlink data, disabling HARQ feedback, and clearing data cache in a HARQ process corresponding to the downlink data, wherein the control command is the control command for downlink transmission, and the scheduled data does not support the HARQ feedback function.

7. The method according to any one of claims 1 to 6, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining whether the scheduled data supports the HARQ feedback function based on indication information in a predetermined information field in the control command.

8. The method according to claim 7, wherein at least one of a length or a position of the predetermined information field is defined by a protocol or preconfigured.

9. The method according to any one of claims 1 to 6, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining a correspondence between a value of a radio network temporary identifier (RNTI) and whether the HARQ feedback function is supported, wherein the control command is a scheduling command;

parsing the scheduling command to obtain a target RNTI value in the scheduling command; and

determining whether the scheduled data supports the HARQ feedback function based on the correspondence and the target RNTI value.

10. The method according to any one of claims 1 to 6, wherein the determining whether the scheduled data supports the HARQ feedback function comprises:

determining a correspondence between a scrambling sequence and whether the HARQ feedback function is supported, wherein the control command is a scheduling command;

parsing the scheduling command to obtain a target scrambling sequence in the scheduling command; and

determining whether the scheduled data supports the HARQ feedback function based on the correspondence and the target scrambling sequence.

11. A method for processing hybrid automatic repeat request (HARQ) feedback, performed by a network side device, comprising:

transmitting a control command to a terminal device,

wherein the control command instructs the terminal device to determine whether scheduled data supports a HARQ feedback function.

12. The method according to claim 11, wherein the control command is a first physical layer control signaling to indicate HARQ enabled and/or HARQ disabled; and the first physical layer control signaling is to indicate whether current data scheduling supports the HARQ feedback function.

13. The method according to claim 11, wherein the control command is a second physical layer control signaling to indicate HARQ enabled and/or HARQ disabled, and a first time period; and the second physical layer control signaling indicates whether data scheduling within the first time period supports the HARQ feedback function.

14. The method according to claim 11, wherein the control command is a third physical layer control signaling to indicate HARQ enabled or HARQ disabled, and the third physical layer control signaling indicates whether data scheduling within a second time period supports the HARQ feedback function,

wherein the second time period is a time period starting from reception of the third physical layer control signaling to indicate HARQ enabled, and ending until reception of the third physical layer control signaling to indicate HARQ disabled; or the second time period

is a time period starting from reception of the third physical layer control signaling to indicate HARQ disabled, and ending until reception of the third physical layer control signaling to indicate HARQ enabled.

15. The method according to any one of claims 11 to 14, wherein the control command is a control command for uplink transmission or a control command for downlink transmission.

16. The method according to any one of claims 11 to 15, wherein the control command comprises a predetermined information field; and the predetermined information field indicates whether the scheduled data supports the HARQ feedback function,

wherein at least one of a length or a position of the predetermined information field is defined by a protocol or preconfigured.

17. The method according to any one of claims 11 to 15, wherein the transmitting the control command to the terminal device comprises:

scrambling the control command based on a target radio network temporary identifier (RNTI) value, wherein the control command is a scheduling command; and

transmitting the scheduling command scrambled with the target RNTI value to the terminal device, wherein the scheduling command scrambled with the target RNTI value implicitly indicates whether the scheduled data supports the HARQ feedback function.

18. The method according to any one of claims 11 to 15, wherein the transmitting the control command to the terminal device comprises:

scrambling the control command on a radio network temporary identifier (RNTI) with a target scrambling sequence, wherein the control command is a scheduling command; and

transmitting the scheduling command scrambled with the target scrambling sequence to the terminal device, wherein the scheduling command scrambled with the target scrambling sequence is used to implicitly indicate whether the scheduled data supports the HARQ feedback function.

19. A terminal device, comprising a processor and a memory for storing a computer program executable by the processor, wherein the processor is configured to perform the method according to any one of claims 1 to 10.

20. A network device, comprising a processor and a memory for storing a computer

program executable by the processor, wherein the processor is configured to perform the method according to any one of claims 11 to 18.