

CLAIMS

What is claimed is:

1. A wireless communications method, comprising:

5 determining a second slottime unit according to a time domain location of ~~a last~~ at least one of a plurality of ~~consecutive~~ first slottime units used to transmit data; and

transmitting feedback information by using the second slottime unit, wherein the feedback information is feedback information for the data transmitted in the plurality of first slottime units;

10 wherein determining the second time unit according to the time domain location of at least one of the plurality of first time units used to transmit data comprises:

in a case that granularity of a first time unit of the plurality of first time units is the same as granularity of the second time unit and the first time unit and the second time unit are slots, determining the second time unit according to a time domain location of a last one of the plurality of first time units used to transmit a transport block (TB) repeatedly for a
15 plurality of times, wherein the granularity comprises a symbol, a slot, a sub-slot, a half-slot, or a subframe; and

in a case that the granularity of the first time unit of the plurality of first time units is different from the granularity of the second time unit, determining the second time unit according to a time domain location of a second time unit to which the at least one of the
20 plurality of first time units belongs, wherein the second time unit used to transmit the feedback information is an $(n+k)^{\text{th}}$ second time unit, and an n^{th} second time unit is a second time unit to which the last one of the plurality of first time units belongs.

~~2. The method according to claim 1, wherein the first slots are used to transmit a transport block (TB) repeatedly for a plurality of times.~~

25 32. The method according to claim 21, wherein the feedback information comprises an acknowledgement (ACK)/negative acknowledgement (NACK), and the ACK/NACK corresponds to the TB transmitted repeatedly for a plurality of times; or

the feedback information comprises a plurality of ACKs/NACKs, and the plurality of ACKs/NACKs correspond one-to-one with a plurality of code block groups (CBG) of the TB.

43. The method according to ~~any one of claims 1 to 3~~ claim 1 or 2, wherein in the case that granularity of the first time unit is the same as granularity of the second time unit and the first time unit and the second time unit are slots, the second slottime unit used to transmit the feedback information is ~~the an~~ (n+k)th second slottime unit, and ~~the an~~ nth second slottime unit is the last one of the first slottime units.

54. The method according to ~~any one of claims 1 to 3~~ claim 1 or 2, wherein in the case that granularity of the first time unit is the same as granularity of the second time unit and the first time unit and the second time unit are slots, the second slottime unit is ~~the an~~ ((n+k)2^a/2^b)th slottime unit, k and n are positive integers, a represents a subcarrier spacing of a second slottime unit, and b represents a subcarrier spacing of a first slottime unit; the n is the time domain position of the last one of the plurality of consecutive first slottime units.

65. The method according to claim ~~4-3~~ or 54, wherein the method is performed by a terminal device, and k is preset in the terminal device based on a protocol, or configured for the terminal device through a higher-layer parameter of a network side, or indicated to the terminal device by a network side through downlink control information (DCI).

6. The method according any one of claims 1 to 5, wherein the plurality of first time units are consecutive first time units.

7. A communications device, comprising a processing unit and a communications unit, wherein

the processing unit is configured to: determine a second slottime unit according to a time domain location of ~~a last at least~~ one of a plurality of consecutive first slottime units used to transmit data; and

the communications unit is configured to: transmit feedback information by using the second slottime unit, wherein the feedback information is feedback information for the data transmitted in the plurality of first slottime units.

wherein the processing unit is further configured to:

in a case that granularity of a first time unit of the plurality of first time units is the same as granularity of the second time unit and the first time unit and the second time unit are slots, determining the second time unit according to a time domain location of a last one of the plurality of first time units used to transmit a transport block (TB) repeatedly for a plurality of times, wherein the granularity comprises a symbol, a slot, a sub-slot, a half-slot, or a subframe; and

in a case that the granularity of the first time unit of the plurality of first time units is different from the granularity of the second time unit, determining the second time unit according to a time domain location of a second time unit to which the at least one of the plurality of first time units belongs, wherein the second time unit used to transmit the feedback information is an $(n+k)^{\text{th}}$ second time unit, and an n^{th} second time unit is a second time unit to which the last one of the plurality of first time units belongs.

~~8. The communications device according to claim 7, wherein the first slots are used to transmit a transport block (TB) repeatedly for a plurality of times.~~

98. The communications device according to claim 87, wherein the feedback information comprises an acknowledgement (ACK)/negative acknowledgement (NACK), and the ACK/NACK corresponds to the TB transmitted repeatedly for a plurality of times; or

the feedback information comprises a plurality of ACKs/NACKs, and the plurality of ACKs/NACKs correspond one-to-one with a plurality of code block groups (CBG) of the TB.

~~109.~~ The communications device according to ~~any one of claims 7 to 9~~ claim 7 or 8, wherein in the case that granularity of the first time unit is the same as granularity of the second time unit and the first time unit and the second time unit are slots, the second ~~slot~~time unit used to transmit the feedback information is an $(n+k)^{\text{th}}$ second ~~slot~~time unit, and an n^{th} second ~~slot~~time unit is the last one of the first ~~slot~~time units.

~~110.~~ The communications device according to ~~any one of claims 7 to 9~~ claim 7 or 8,

wherein in the case that granularity of the first time unit is the same as granularity of the second time unit and the first time unit and the second time unit are slots, the second slottime unit is ~~the an~~ $((n+k)2^a/2^b)^{\text{th}}$ slottime unit, k and n are positive integers, a represents a subcarrier spacing of a second slottime unit, and b represents a subcarrier spacing of a first slottime unit; the n is the time domain position of the last one of the plurality of consecutive first slottime units.

1211. The communications device according to claim ~~10-9~~ or ~~1110~~, wherein the communications device is performed by a terminal device, and k is preset in the terminal device based on a protocol, or configured for the terminal device through a higher-layer parameter of a network side, or indicated to the terminal device by a network side through downlink control information (DCI).

12. The communications device according any one of claims 7 to 11, wherein the plurality of first time units are consecutive first time units.

13. A communications device, comprising a processor and a memory, wherein the memory is configured to store a computer program, and the processor is configured to invoke and run the computer program stored in the memory, to cause the communications device to perform the method according to any one of claims 1 to 6.

14. A chip, comprising: a processor, configured to invoke a computer program from a memory and run the computer program, to cause a device in which the chip is installed to perform the method according to any one of claims 1 to 6.

15. A computer-readable storage medium, configured to store a computer program, wherein the computer program causes a computer to perform the method according to any one of claims 1 to 6.