CLAIMS

What is claimed is:

1. A channel monitoring indication method, applied to a terminal and comprising:

monitoring a first physical downlink control channel PDCCH; and

if non-scheduling downlink control information DCI is received on the first PDCCH, determining, based on the non-scheduling DCI, whether to monitor a second PDCCH;

wherein after the step of monitoring a first physical downlink control channel PDCCH, the method further comprises:

if the non-scheduling DCI is received on the first PDCCH, feeding back acknowledgement ACK information.

2. The channel monitoring indication method according to claim 1, wherein a cyclic redundancy check CRC of the non-scheduling DCI is scrambled by using a target radio network temporary identifier RNTI, and the target RNTI is a cell radio network temporary identifier C-RNTI or a dedicated RNTI.

3. The channel monitoring indication method according to claim 1, wherein after the step of monitoring a first physical downlink control channel PDCCH, the method further comprises:

if the non-scheduling DCI is not received on the first PDCCH, feeding back negative acknowledgement NACK information.

4. The channel monitoring indication method according to claim 3, wherein a start time of the step of determining, based on the non-scheduling DCI, whether to monitor a second PDCCH is one of the following:

a slot next to a slot in which the non-scheduling DCI is located;

a slot subsequent to a time gap after a slot in which the non-scheduling DCI is located, wherein the gap is predefined or is configured by the network device; and

an Mth slot after a slot in which the ACK information is located, wherein M is a positive integer.

5. The channel monitoring indication method according to any one of claims 1 to 4, wherein

the non-scheduling DCI comprises a first indication field used to indicate at least one of the following of the terminal or a terminal group to which the terminal belongs:

not monitoring the second PDCCH within a first transmission time;

monitoring the second PDCCH within a second transmission time or not;

a monitoring parameter related to the second PDCCH;

a connected discontinuous reception CDRX parameter; and

monitoring the second PDCCH based on received target signaling, wherein the target signaling is different from the non-scheduling DCI, and the target signaling is used to indicate a monitoring parameter related to the second PDCCH.

6. The channel monitoring indication method according to claim 5, wherein the non-scheduling DCI uses a dedicated DCI format; or the non-scheduling DCI uses one of preset scheduling DCI formats or preset non-scheduling DCI formats.

7. The channel monitoring indication method according to claim 6, wherein when the non-scheduling DCI uses one of the preset scheduling DCI formats, the indication field comprises at least one of the following fields in the preset scheduling DCI format: a hybrid automatic repeat request process number field, a redundancy version field, a modulation and coding scheme field, and a resource block assignment field.

8. The channel monitoring indication method according to claim 5, wherein the first indication field is used to indicate that the monitoring parameter related to the second PDCCH is one parameter in a monitoring parameter candidate set, and the monitoring parameter candidate set is indicated by the network device by using radio resource control RRC signaling; wherein the monitoring parameter related to the second PDCCH comprises at least one of a monitoring period, a monitoring offset, and monitoring duration.

9. The channel monitoring indication method according to claim 5, wherein before the step of monitoring a first physical downlink control channel PDCCH, the method further comprises:

sending report information to the network device, wherein the report information is used to indicate that the second PDCCH is not to be monitored within the first transmission time, or used

to indicate whether the second PDCCH is to be monitored within the second transmission time.

10. A terminal, comprising:

a first monitoring module, adapted to monitor a first physical downlink control channel PDCCH; and

a second monitoring module, adapted to: if non-scheduling downlink control information DCI is received on the first PDCCH, determine, based on the non-scheduling DCI, whether to monitor a second PDCCH;

wherein the terminal further comprises:

a first feedback module, adapted to feed back acknowledgement ACK information if the non-scheduling DCI is received on the first PDCCH.

11. A channel monitoring indication method, applied to a network device and comprising:

sending a first physical downlink control channel PDCCH, wherein the first PDCCH carries non-scheduling downlink control information DCI, and the non-scheduling DCI is used to indicate whether a terminal is to monitor a second PDCCH;

wherein after the step of sending a first physical downlink control channel PDCCH, the method further comprises:

receiving acknowledgement ACK information, wherein the ACK information is used to indicate that the terminal has received the non-scheduling DCI on the first PDCCH.

12. The channel monitoring indication method according to claim 11, wherein a cyclic redundancy check CRC of the non-scheduling DCI is scrambled by using a target radio network temporary identifier RNTI, and the target RNTI is a cell radio network temporary identifier C-RNTI or a dedicated RNTI.

13. The channel monitoring indication method according to claim 11, wherein after the step of sending a first physical downlink control channel PDCCH, the method further comprises:

receiving negative acknowledgement NACK information, wherein the NACK information is used to indicate that the terminal has not received the non-scheduling DCI on the first PDCCH.

14. The channel monitoring indication method according to claim 13, wherein in the non-scheduling DCI, a start effective time of an indication about whether the terminal is to monitor the second PDCCH is one of the following:

a slot next to a slot in which the non-scheduling DCI is located;

a slot subsequent to a time gap after a slot in which the non-scheduling DCI is located, wherein the gap is predefined or is configured by the network device; and

an Mth slot after a slot in which the ACK information is located, wherein M is a positive integer.

15. The channel monitoring indication method according to any one of claims 11 to 14, wherein the non-scheduling DCI comprises a first indication field used to indicate at least one of the following of the terminal or a terminal group to which the terminal belongs:

not monitoring the second PDCCH within a first transmission time;

monitoring the second PDCCH within a second transmission time or not;

a monitoring parameter related to the second PDCCH;

a connected discontinuous reception CDRX parameter; and

monitoring the second PDCCH based on received target signaling, wherein the target signaling is different from the non-scheduling DCI, and the target signaling is used to indicate a monitoring parameter related to the second PDCCH.

16. The channel monitoring indication method according to claim 15, wherein the non-scheduling DCI uses a dedicated DCI format; or the non-scheduling DCI uses one of preset scheduling DCI formats or preset non-scheduling DCI formats.

17. The channel monitoring indication method according to claim 16, wherein when the non-scheduling DCI uses one of the preset scheduling DCI formats, the indication field comprises at least one of the following fields in the preset scheduling DCI format: a hybrid automatic repeat request process number field, a redundancy version field, a modulation and coding scheme field, and a resource block assignment field.

18. The channel monitoring indication method according to claim 15, wherein the network

device indicates a monitoring parameter candidate set by using radio resource control RRC signaling, the monitoring parameter candidate set comprises at least one monitoring parameter related to the second PDCCH, and the first indication field is used to indicate one parameter in the monitoring parameter candidate set; wherein the monitoring parameter related to the second PDCCH comprises at least one of a monitoring period, a monitoring offset, and monitoring duration.

19. The channel monitoring indication method according to claim 15, wherein before the step of sending a first physical downlink control channel PDCCH, the method further comprises:

receiving report information, wherein the report information is used to indicate that the second PDCCH is not to be monitored within the first transmission time, or used to indicate whether the second PDCCH is to be monitored within the second transmission time.

20. A network device, comprising:

a first sending module, adapted to send a first physical downlink control channel PDCCH, wherein the first PDCCH carries non-scheduling downlink control information DCI, and the non-scheduling DCI is used to indicate whether a terminal is to monitor a second PDCCH;

wherein the network device further comprises:

a first receiving module, adapted to receive acknowledgement ACK information, wherein the ACK information is used to indicate that the terminal has received the non-scheduling DCI on the first PDCCH.