

## WHAT IS CLAIMED IS:

1. A method for configuring a random access parameter, ~~applicable to~~performed by a network device, the method comprising:

determining a physical uplink control channel (PUCCH) configuration parameter, wherein the PUCCH configuration parameter comprises a configuration parameter of performing hybrid automatic repeat request feedback of a fourth message (Msg.4 HARQ feedback) in a random access process for a first-type terminal and a second-type terminal, and a capability of the first-type terminal is different from a capability of the second-type terminal.

2. The method of claim 1, wherein the PUCCH configuration parameter comprises a first PUCCH configuration parameter and a second PUCCH configuration parameter;

the first PUCCH configuration parameter is partially different from the second PUCCH configuration parameter; and

the first PUCCH configuration parameter corresponds to the first-type terminal and the second PUCCH configuration parameter corresponds to the second-type terminal.

3. The method of claim 2, wherein at least one of the following parameters in the first PUCCH configuration parameter and the second PUCCH configuration parameter is different:

a physical resource block (PRB) located by the PUCCH;

a PUCCH format;

the PUCCH supporting frequency hopping (FH) or the PUCCH not supporting FH;

a PRB position where the PUCCH supports FH; and

an FH width when the PUCCH supporting FH.

4. The method of claim 2 or 3, wherein the capability of the first-type terminal is stronger than the capability of the second-type terminal;

the first PUCCH configuration parameter comprises a configuration parameter supporting FH, and the second PUCCH configuration parameter comprises a configuration parameter not supporting FH; and/or

an FH width configured in the first PUCCH configuration parameter is greater than an FH width configured in the second PUCCH configuration parameter.

5. The method of any one of claims 1 to 4, wherein the PUCCH configuration parameter comprises a common PUCCH configuration parameter for the first-type terminal and the second-type terminal.

6. The method of claim 5, wherein the capability of the first-type terminal is stronger than the capability of the second-type terminal;

the PUCCH configuration parameter comprises one or a combination of:

the PUCCH not supporting FH; and

the PUCCH supporting FH and an FH width being within a bandwidth range supported by the second-type terminal.

7. The method of any one of claims 1 to 6, further comprising:

sending the PUCCH configuration parameter.

8. The method of claim 7, wherein the PUCCH configuration parameter is carried in remaining minimum system information (RMSI).

9. The method of any one of claims 1 to 8, further comprising:

receiving a terminal capability reported by a terminal, wherein the terminal capability represents that the terminal is the first-type terminal or the second-type terminal; and

determining a resource for the terminal to perform the Msg.4 HARQ feedback according to the terminal capability.

10. A method for configuring a random access parameter, ~~applicable to~~ performed by a terminal, the method comprising:

determining a PUCCH configuration parameter, wherein the PUCCH configuration parameter comprises a configuration parameter of performing Msg.4 HARQ feedback in a random access process for a first-type terminal and a second-type terminal, and a capability of the first-type terminal is different from a capability of the second-type terminal; and

determining a resource of performing the Msg.4 HARQ feedback in the random access process according to the PUCCH configuration parameter.

11. The method of claim 10, wherein determining the PUCCH configuration parameter

comprises:

determining a terminal type, wherein the terminal type is the first-type terminal or the second-type terminal, ~~and the capability of the first-type terminal is different from the capability of the second-type terminal~~; and

determining the PUCCH configuration parameter according to the terminal type;

the PUCCH configuration parameter comprising a first PUCCH configuration parameter and a second PUCCH configuration parameter;

the first PUCCH configuration parameter being partially different from the second PUCCH configuration parameter; and

the first PUCCH configuration parameter corresponding to the first-type terminal and the second PUCCH configuration parameter corresponding to the second-type terminal.

12. The method of claim 11, wherein at least one of the following parameters in the first PUCCH configuration parameter and the second PUCCH configuration parameter is different:

a PRB located by the PUCCH;

a PUCCH format;

the PUCCH supporting FH or the PUCCH not supporting FH;

a PRB position where the PUCCH supports FH; and

an FH width when the PUCCH supporting FH.

13. The method of claim 11 or 12, wherein the capability of the first-type terminal is stronger than the capability of the second-type terminal;

the first PUCCH configuration parameter comprises a configuration parameter supporting FH, and the second PUCCH configuration parameter comprises a configuration parameter not supporting FH; and/or

an FH width configured in the first PUCCH configuration parameter is greater than an FH width configured in the second PUCCH configuration parameter.

14. The method of any one of claims 10 to 13, wherein the PUCCH configuration parameter comprises a common PUCCH configuration parameter for the first-type terminal and the second-type terminal;

~~15. The method of claim 14, wherein the capability of the first-type terminal is stronger~~

than the capability of the second-type terminal; and

the PUCCH configuration parameter comprises one or a combination of:

the PUCCH not supporting FH; and

the PUCCH supporting FH and an FH width being within a bandwidth range supported by the second-type terminal.

~~14~~15. The method of any one of claims 10 to ~~14~~14, wherein determining the PUCCH configuration parameter comprises:

receiving the PUCCH configuration parameter from a network device;

~~17. The method of claim 16, wherein the PUCCH configuration parameter is carried in RMSI.~~

~~18~~16. The method of any one of claims 10 to 15, further comprising:

reporting a terminal capability of the terminal, wherein the terminal capability represents that the terminal type is the first-type terminal or the second-type terminal.

~~19. An apparatus for configuring a random access parameter, applicable to a network device, the apparatus comprising:~~

~~a processing unit, configured to determine a PUCCH configuration parameter, wherein the PUCCH configuration parameter comprises a configuration parameter of performing Msg.4 HARQ feedback in a random access process for a first type terminal and a second type terminal, and a capability of the first type terminal is different from a capability of the second type terminal.~~

~~20. An apparatus for configuring a random access parameter, applicable to a terminal, the apparatus comprising:~~

~~a processing unit, configured to determine a PUCCH configuration parameter and determine a resource of performing the Msg.4 HARQ feedback in the random access process according to the PUCCH configuration parameter, wherein the PUCCH configuration parameter comprises a configuration parameter of performing Msg.4 HARQ feedback in a random access process for a first type terminal and a second type terminal, and a capability of the first type terminal is different from a capability of the second type terminal.~~

~~21~~17. A device for configuring a random access parameter, comprising:  
a processor; and  
a memory for storing instructions executable by the processor;  
wherein the processor is configured to perform the method for configuring a random access parameter of any one of claims 1 to 9.

~~22~~18. A device for configuring a random access parameter, comprising:  
a processor; and  
a memory for storing instructions executable by the processor;  
wherein the processor is configured to perform the method for configuring a random access parameter of any one of claims 10 to ~~15~~16.

~~23~~19. A non-transitory computer-readable storage medium, wherein when instructions in the storage medium are executed by a processor of a network device, the network device is caused to perform the method for configuring a random access parameter of any one of claims 1 to 9.

~~24~~20. A non-transitory computer-readable storage medium, wherein when instructions in the storage medium are executed by a processor of a mobile terminal, the mobile terminal is caused to perform the method for configuring a random access parameter of any one of claims 10 to ~~15~~16.