

CLAIMS

CLAIMS:

1. A method, comprising:

generating, by a network device in a 3GPP NR system, indication information,
5 wherein the indication information is configured to indicate resources of one of at least two uplink carriers that is used by a terminal device in a 3GPP NR system to perform non-contention random access, wherein the at least two uplink carriers at least comprise an uplink carrier and a supplementary uplink carrier and have different frequencies; and

sending, by the network device, the indication information to the terminal device,
10 wherein the sending of the indication information to the terminal device comprises:
sending, by the network device, a physical downlink control channel, PDCCH, order to the terminal device, wherein the PDCCH order comprises the indication information.

2. The method according to claim 1, wherein the indication information comprises at least one of:

15 identification information of a non-supplementary uplink carrier and information for indicating a resource of the non-supplementary uplink carrier; or

identification information of the supplementary uplink carrier and information for indicating a resource of the supplementary uplink carrier.

3. The method according to claim 2, wherein before generating, by the network
20 device, the indication information, the method further comprises:

receiving, by the network device, a channel quality measurement report sent by the terminal device; and

determining, one from the at least two uplink carriers that will be used by the terminal device for non-contention random access according to the channel quality
25 measurement report.

4. The method according to claim 3, wherein the channel quality measurement report comprises:

one or more of a reference signal received power, RSRP, or a reference signal

received quality, RSRQ, of a first cell, the first cell corresponding to the non-supplementary uplink carrier; and

one or more of an RSRP or an RSRQ of a second cell, the second cell corresponding to the supplementary uplink carrier.

5 5. The method according to claim 1, wherein the indication information comprises:

priority information corresponding to a resource of a non-supplementary uplink carrier of the at least two uplink carriers or priority information corresponding to a resource of a supplementary uplink carrier of the at least two uplink carriers..

10 6. The method according to claim 5, further comprising, prior to generating the indication information:

determining, by the network device, the priority information corresponding to the resource of the non-supplementary uplink carrier or the priority information corresponding to the resource of the supplementary uplink carrier according to at least one or more of the following information:

15 processing a load of the non-supplementary uplink carrier, processing a load of the supplementary uplink carrier, processing a load status of a physical random access channel, PRACH, resource of the non-supplementary uplink carrier, or processing a load status of a PRACH resource of the supplementary uplink carrier.

20 7. The method according to any of claims 1 to 6, wherein a resource of the one of at least two uplink carriers that is used by the terminal device to perform non-contention random access comprises:

identification information of a preamble and a physical random access channel, PRACH, resource for sending the preamble.

8. A method comprising:

25 receiving, by a terminal device in a 3GPP NR system, indication information sent by a network device in a 3GPP NR system, wherein the indication information is configured to indicate resources of one of at least two uplink carriers capable of being used by the terminal device to perform non-contention random access, wherein the at least two uplink carriers comprise a supplementary uplink carrier and have different

frequencies; and

performing, by the terminal device, non-contention random access according to the indication information,

wherein the receiving, by the terminal device, indication information sent by the network device comprises:

receiving, by the terminal device, a physical downlink control channel, PDCCH, order sent by the network device, the PDCCH order comprising the indication information.

9. The method according to claim 8, wherein the indication information comprises at least one of:

identification information of a non-supplementary uplink carrier and information for indicating a resource of the non-supplementary uplink carrier; or

identification information of the supplementary uplink carrier and information for indicating a resource of the supplementary uplink carrier.

10. The method according to claim 9, wherein before the receiving the indication information sent by the network device, the method further comprises:

sending, by the terminal device, a channel quality measurement report to the network device.

11. The method according to claim 10, wherein the channel quality measurement report comprises:

one or more of a reference signal received power, RSRP, or a reference signal received quality, RSRQ, of a first cell, the first cell corresponding to the non-supplementary uplink carrier; and

one or more of an RSRP or an RSRQ of a second cell, the second cell corresponding to the supplementary uplink carrier.

12. The method according to claim 8, wherein the indication information further comprises:

priority information corresponding to a resource of a non-supplementary uplink carrier of the at least two uplink carriers or priority information corresponding to a

resource of a supplementary uplink carrier of the at least two uplink carriers..

13. The method according to any of claims 8 to 12, wherein a resource of the one of at least two uplink carriers capable of being used by the terminal device to perform non-contention random access comprises:

- 5 identification information of a preamble and a physical random access channel, PRACH, resource for sending the preamble.

14. Network device comprising a processor configured to implement the method according to any one of claims 1 to 7.

- 10 15. Terminal device comprising a processor configured to implement the method according to any one of claims 8 to 13.