

WHAT IS CLAIMED IS:

1. A method for determining random access occasion resource information, performed by a terminal, comprising:

initiating 2-step contention-free random access (CFRA); and

in case that separate random access occasion (RO) resource information configured in configuration information for the CFRA is absent for the terminal, determining RO resource information for the initiated 2-step CFRA according to RO resource information for contention-based random access (CBRA) in a specified release.

2. The method of claim 1, wherein the specified release is determined according to a protocol agreement,

wherein the specified release comprises at least one of:

a legacy release, or Release 17,

wherein the legacy release comprises at least one of:

Release 15, or Release 16.

3. The method of claim 2, wherein the RO resource information comprises at least one of:

RO configuration information; or

correspondence between synchronization signal block (SSB) and RO.

4. The method of claim 3, wherein the RO resource information comprises the RO configuration information, and in case that separate RO resource information configured in configuration information for the CFRA is absent for the terminal, determining RO resource information for the initiated 2-step CFRA according to RO resource information for CBRA in a specified release, comprises:

in case that separate RO resource information configured in the configuration information for the CFRA is absent for the terminal, determining the RO configuration information in the RO resource information for 4-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

5. The method of claim 4, wherein determining the RO configuration information in the RO resource information for the 4-step CBRA in specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

determining the RO configuration information in the RO resource information for the 4-step CBRA in the legacy release as the RO configuration information in the RO resource information for the initiated 2-step CFRA; or

determining the RO configuration information in a subset or all of multiple resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

6. The method of claim 5, wherein determining the RO configuration information in a subset or all of multiple resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

when receiving an indication from a network side device indicating to determine the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 4-step CBRA in the Release 17, determining the RO configuration information in a subset or all of multiple resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

when not receiving an indication from a network side device indicating to determine the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 4-step CBRA in the Release 17, determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 4-step CBRA in the legacy release.

7. The method of claim 5, wherein determining the RO configuration information in a subset or all of multiple resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

in case that the terminal supports determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 4-step CBRA in the Release 17, determining the RO configuration information in the subset or all of multiple resource information in the RO resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

in case that the terminal does not support determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 4-step CBRA in the Release 17, determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 4-step CBRA in the legacy release.

8. The method of claim 3, wherein the RO resource information comprises RO configuration information and the correspondence, and in case that separate RO resource information configured in the configuration information for the CFRA is absent for the terminal, determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for CBRA in the specified release comprises:

in case that separate RO configuration and correspondence in the configuration information for the CFRA is absent for the terminal, determining the RO configuration information in the RO resource information for 2-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

9. The method of claim 8, wherein determining the RO configuration information in the RO resource information for the 2-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

determining the RO configuration information in the RO resource information for the 2-step CBRA in the legacy release as the RO configuration information in the RO resource information for the initiated 2-step CFRA; or

determining the RO configuration information in a subset or all of multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

10. The method of claim 9, wherein determining the RO configuration information in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

when receiving an indication from a network side device indicating to determine the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 2-step CFRA in the Release 17, determining the RO configuration information in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

when not receiving an indication from a network side device indicating to determine the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CFRA in the Release 17, determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CBRA in the legacy release.

11. The method of claim 9, wherein determining the RO configuration information in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

in case that the terminal supports determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CFRA in the Release 17, determining the RO configuration information

in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

in case that the terminal does not support determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 2-step CFRA in the Release 17, determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CBRA in the legacy release.

12. The method of claim 8, wherein in case that separate RO resource information configured in configuration information for the CFRA is absent for the terminal, determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for the CBRA in specified release further comprises:

determining the correspondence between SSB and RO in the RO resource information for the initiated 2-step CFRA.

13. The method of claim 12, wherein determining the correspondence between SSB and RO in the RO resource information for the initiated 2-step CFRA comprises:

determining the correspondence between SSB and RO in the RO resource information for the 2-step CBRA in the specified release as the correspondence between SSB and RO in the RO resource information for the initiated 2-step CFRA.

14. A method for indicating random access occasion resource information, performed by a network side device, comprising:

initiating a terminal to perform a 2-step contention-free random access (CFRA); and

in case that separate random access occasion (RO) resource information configured in configuration information for the CFRA is absent for a terminal, indicating the terminal to determine RO resource information for the initiated 2-step CFRA according to RO resource information for contention-based random access (CBRA) in a specified release.

15. The method of claim 14, wherein the specified release comprises at least one of:

a legacy release, or Release 17,

wherein the legacy release comprises at least one of:

Release 15, or Release 16.

16. The method of claim 15, wherein the RO resource information comprises at least one of:

RO configuration information; or

correspondence between synchronization signal block (SSB) and RO.

17. The method of claim 16, wherein the RO resource information comprises the RO configuration

information, and in case that separate RO resource information configured in the configuration information for the CFRA is absent for the terminal, determining RO resource information for the initiated 2-step CFRA according to RO resource information for the CBRA in the specified release, comprises:

in case that separate RO configuration information configured in the configuration information for the CFRA is absent for the terminal, indicating the terminal to determine the RO configuration information in the RO resource information for 4-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

18. The method of claim 17, wherein indicating the terminal to determine the RO configuration information in the RO resource information for 4-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

indicating the terminal to determine the RO configuration information in the RO resource information for the 4-step CBRA in the legacy release as the RO configuration information in the RO resource information for the initiated 2-step CFRA; or

indicating the terminal to determine the RO configuration information in a subset or all of multiple RO resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

19. The method of claim 18, wherein indicating the terminal to determine the RO configuration information in the subset or all of the multiple RO resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

in case that the terminal supports determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 4-step CBRA in the Release 17, indicating the terminal to determine the RO configuration information in the subset or all of the multiple RO resource information for the 4-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

in case that the terminal does not support determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 4-step CBRA in the Release 17, indicating the terminal to determine the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 4-step CBRA in the legacy release.

20. The method of claim 16, wherein the RO resource information comprises the RO configuration information and the correspondence, and in case that separate RO resource information configured in the

configuration information for the CFRA is absent for the terminal, indicating the terminal to determine the RO resource information for the initiated 2-step CFRA according to the RO resource information for the CBRA in the specified release comprises:

in case that separate RO configuration and correspondence configured in the configuration information for the CFRA is absent for the terminal, indicating the terminal to determine the RO configuration information in the RO resource information for the 2-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

21. The method of claim 20, wherein indicating the terminal to determine the RO configuration information in the RO resource information for the 2-step CBRA in the specified release as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

indicating the terminal to determine the RO configuration information in the RO resource information for the 2-step CBRA in the legacy release as the RO configuration information in the RO resource information for the initiated 2-step CFRA; or

indicating the terminal to determine the RO configuration information in the subset or all of multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA.

22. The method of claim 21, wherein indicating the terminal to determine the RO configuration information in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA comprises:

in case that the terminal supports determining the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CFRA in the Release 17, indicating the terminal to determine the RO configuration information in the subset or all of the multiple RO resource information for the 2-step CBRA in the Release 17 as the RO configuration information in the RO resource information for the initiated 2-step CFRA;

the method further comprises:

in case that the terminal does not support determining the RO resource information for the initiated 2-step CFRA according to the RO resource information for the 2-step CFRA in the Release 17, indicating the terminal to determine the RO configuration information in the RO resource information for the initiated 2-step CFRA according to the RO configuration information in the RO resource information for the 2-step CBRA in the legacy release.

23. The method of claim 20, wherein in case that separate RO resource information configured in the configuration information for CFRA is absent for the terminal, indicating the terminal to determine the

RO resource information for the initiated 2-step CFRA according to the RO resource information for CBRA in the specified release further comprises:

indicating the terminal to determine a correspondence between SSB and RO in the RO resource information for the initiated 2-step CFRA in a specified manner.

24. The method of claim 23, wherein the specified manner comprises:

determining the correspondence between SSB and RO in the RO resource information for the 2-step CBRA in the specified release as the correspondence between SSB and RO in the RO resource information for the initiated 2-step CFRA.

25. A terminal, comprising:

a processor; and

a memory, configured to store a computer program,

wherein when the computer program is executed by the processor, the method for determining random access occasion resource information according to any of claims 1-13 is implemented or the method for indicating random access occasion resource information according to any of claims 14-24 is implemented.