

WHAT IS CLAIMED IS:

1. A first device comprising:
at least one processor; and
at least one memory storing computer program codes;
5 the at least one memory and the computer program codes being configured, with the
at least one processor, to cause the first device to:
receive, from a second device, an indication to perform Msg3 transmission;
transmit, to the second device, information of the first device for contention
resolution; and
10 in case a configuration of a 4-step random access channel is unavailable in an
active bandwidth part for the first device, determine a duration for monitoring a contention
resolution message based on one of:
a first configuration of a 2-step random access channel in the active
bandwidth part, or
15 a second configuration of a 4-step random access channel in a
bandwidth part different from the active bandwidth part.
2. The first device of claim 1, wherein the first device is caused to determine the
duration by:
20 in accordance with a determination that the first configuration indicates a contention
resolution timer, determining the duration as a time length of the contention resolution timer.
3. The first device of claim 1, wherein the first device is caused to determine the
duration by:
25 in case the first configuration does not indicate a contention resolution timer,
determining the duration as a time length of a contention resolution timer indicated in the
second configuration.
4. The first device of claim 1, wherein the active bandwidth part comprises one of
30 the following:
an initial bandwidth part for the first device,
a default bandwidth part for the first device,
a first active bandwidth part for the first device, or

a predetermined bandwidth part indicated by the second device.

5 5. The first device of claim 1, wherein the at least one memory and the computer program codes are further configured, with the at least one processor, to cause the first device to:

in case the first configuration does not indicate a contention resolution timer, determine the duration as a time length for monitoring a MSGB from the second device, the MSGB being monitored by the first device in response to a MSGA being transmitted over the 2-step random access channel.

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6. The first device of claim 5, wherein the time length for monitoring the MSGB is a time length of an MSGB response window.

15 7. The first device of claim 1, wherein the information of the first device for contention resolution is transmitted via a Msg3 of a random access procedure.

8. The first device of claim 1, wherein the at least one memory and the computer program codes are further configured, with the at least one processor, to cause the first device to:

20 receive at least one of the first configuration and the second configuration from the second device.

9. The first device of claim 1, wherein the first device comprises a terminal device, and the second device comprises a network device.

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10. A second device comprising:
at least one processor; and
at least one memory storing computer program codes;
the at least one memory and the computer program codes being configured, with the
30 at least one processor, to cause the second device to:

transmit, to a first device, an indication to perform Msg3 transmission;
in case a configuration of a 4-step random access channel is unavailable in an active bandwidth part for the first device, determine a duration for transmitting a contention resolution message to the first device based on one of:

a first configuration of a 2-step random access channel in the active bandwidth part, or

a second configuration of a 4-step random access channel in a bandwidth part different from the active bandwidth part; and

5 in accordance with a determination that information of the first device for contention resolution is received from the first device, transmit the contention resolution message to the first device within the duration.

11. The second device of claim 10, wherein the second device is caused to
10 determine the duration by:

in accordance with a determination that the first configuration indicates a contention resolution timer, determining the duration as a time length of the contention resolution timer.

12. The second device of claim 10, wherein the second device is caused to
15 determine the duration by:

in case the first configuration does not indicate a contention resolution timer, determining the duration as a time length of a contention resolution timer indicated in the second configuration.

20 13. The second device of claim 10, wherein the active bandwidth part comprises one of the following:

an initial bandwidth part for the first device,
a default bandwidth part for the first device,
a first active bandwidth part for the first device, or
25 a predetermined bandwidth part indicated by the second device.

14. The second device of claim 10, wherein the at least one memory and the computer program codes are further configured, with the at least one processor, to cause the second device to:

30 in case the first configuration does not indicate a contention resolution timer, determine the duration as a time length for the first device to monitor a MSGB from the second device, the MSGB being transmitted by the second device in response to a MSGA being received over the 2-step random access channel.

15. The second device of claim 14, wherein the time length for monitoring the MSGB is a time length of an MSGB response window.

16. The second device of claim 10, wherein the information of the first device for contention resolution is received via a Msg3 of a random access procedure.

17. The second device of claim 10, wherein the at least one memory and the computer program codes are further configured, with the at least one processor, to cause the second device to:

10 determine at least one of the first configuration and the second configuration; and
 transmit at least one of the first configuration and the second configuration to the first device.

18. The second device of claim 17, wherein the second device is caused to

15 determine the first configuration by:

 in accordance with a determination that the configuration of the 4-step random access channel is unavailable in the active bandwidth part, determining the first configuration to indicate a contention resolution timer for the active bandwidth part.

19. The second device of claim 17, wherein the second device is caused to

20 determine the first configuration by:

 determining the first configuration to indicate a contention resolution timer for the active bandwidth part, regardless of whether the 4-step random access channel is available in the active bandwidth part.

25 20. The second device of claim 10, wherein the first device comprises a terminal device, and the second device comprises a network device.

21. A method comprising:

30 receiving, at a first device from a second device, an indication to perform Msg3 transmission;

 transmitting, to the second device, information of the first device for contention resolution; and

 in case a configuration of a 4-step random access channel is unavailable in an active

bandwidth part for the first device, determining a duration for monitoring a contention resolution message based on one of:

a first configuration of a 2-step random access channel in the active bandwidth part, or

5 a second configuration of a 4-step random access channel in a bandwidth part different from the active bandwidth part.

22. A method comprising:

transmitting, at a second device to a first device, an indication to perform Msg3
10 transmission;

in case a configuration of a 4-step random access channel is unavailable in an active bandwidth part for the first device, determining a duration for transmitting a contention resolution message to the first device based on one of:

a first configuration of a 2-step random access channel in the active bandwidth
15 part, or

a second configuration of a 4-step random access channel in a bandwidth part different from the active bandwidth part; and

in accordance with a determination that information of the first device for contention resolution is received from the first device, transmitting the contention resolution message to
20 the first device within the duration.