WHAT IS CLAIMED IS:

1. A user equipment (110, 400) comprising:

at least one processor (410); and

at least one memory (420) including computer program codes;

the at least one memory and the computer program codes are configured to, with the at least one processor, cause the user equipment at least to:

determine whether a physical downlink control channel, PDCCH, addressed to a temporary cell radio network temporary identifier and indicating an uplink grant for a retransmission of a message has been received after a start of a random access contention resolution timer for monitoring the PDCCH between a network device (120) and the user equipment, wherein the message is a Message 3 of a random access procedure and wherein the Message 3 is transmitted on a non-terrestrial network, NTN (100); and

if the random access contention resolution timer expires, perform the following operations on a condition that the PDCCH addressed to the temporary cell radio network temporary identifier and indicating the uplink grant for the retransmission of the Message 3 has not been received after the start of the random access contention resolution timer:

discard the temporary cell radio network temporary identifier; and

consider a contention resolution not successful.

2. The user equipment of claim 1, wherein the at least one memory and the computer program codes are configured to, with the at least one processor, cause the user equipment to:

in accordance with a determination that the PDCCH addressed to the temporary cell radio network temporary identifier and indicating the uplink grant for the retransmission of the Message 3 has been received after the start of the random access contention resolution timer, determine that no contention resolution failure has occurred if the random access contention resolution timer expires.

3. The user equipment of claim 2, wherein the at least one memory and the computer program codes are configured to, with the at least one processor, cause the user equipment to:

keep monitoring the PDCCH after the expiry of the random access contention resolution timer.

4. The user equipment of claim 1, wherein the at least one memory and the computer program codes are configured to, with the at least one processor, cause the user equipment to:

start a further timer associated with a reception of the uplink grant while terminating the random access contention resolution timer; and

keep monitoring the PDCCH within a duration of the further timer.

5. The user equipment of any of claims 1 to 4, wherein the random access contention resolution timer is started in a first symbol after the end of the Message 3 transmission plus a round trip time, RTT, between the user equipment and the network device.

6. A method comprising:

determining, by a user equipment, whether a physical downlink control channel, PDCCH, addressed to a temporary cell radio network temporary identifier and indicating an uplink grant for a retransmission of a message has been received after a start of a random access contention resolution timer for monitoring the PDCCH between a network device and the user equipment, wherein the message is a Message 3 of a random access procedure and wherein the Message 3 is transmitted on a non-terrestrial network, NTN (100); and

if the random access contention resolution timer expires, performing the following operations on a condition that the PDCCH addressed to the temporary cell radio network temporary identifier and indicating the uplink grant for the retransmission of the Message 3 has not been received after the start of the random access contention resolution timer:

discarding the temporary cell radio network temporary identifier; and

considering a contention resolution not successful.

7. The method of claim 6, wherein the method comprises:

in accordance with a determination that the PDCCH addressed to the temporary cell radio network temporary identifier and indicating the uplink grant for the retransmission of the Message 3 has been received after the start of the random access contention resolution timer, determining that no contention resolution failure has occurred if the random access contention resolution timer expires.

8. The method of claim 7, wherein the method comprises:

keeping monitoring the PDCCH after the expiry of the random access contention resolution timer.

9. The method of claim 6, wherein the method comprises

starting a further timer associated with a reception of the uplink grant while terminating the random access contention resolution timer; and

keeping monitoring the PDCCH within a duration of the further timer.

10. The method of any of claims 6 to 9, wherein the random access contention resolution timer is started in a first symbol after the end of the Message 3 transmission plus a round trip time, RTT, between the user equipment and the network device.

11. An apparatus comprising:

means for determining, by a user equipment, whether a physical downlink control channel, PDCCH, addressed to a temporary cell radio network temporary identifier and indicating an uplink grant for a retransmission of a message has been received after a start of a random access contention resolution timer for monitoring the PDCCH between a network device and the user equipment, wherein the message is a Message 3 of a random access procedure and wherein the Message 3 is transmitted on a non-terrestrial network, NTN (100); and

means for, if the random access contention resolution timer expires and on a condition that the PDCCH addressed to the temporary cell radio network temporary identifier and indicating the uplink grant for the retransmission of the Message 3 has not been received after the start of the random access contention resolution timer, performing the following operations:

discarding the temporary cell radio network temporary identifier; and

considering a contention resolution not successful.

12. A non-transitory computer readable medium comprising program instructions for causing a user equipment to perform at least the method of any of claims 6 to 10.