CLAIMS

1. A method for wireless communication at a user equipment (UE), comprising: transmitting, as part of a two-step random access procedure, a first random access message including a random access preamble and a connection request, wherein a value of a redundancy version of the connection request is statically configured and is for both an initial transmission of the connection request associated with the two-step random access procedure and a retransmission of the connection request associated with a fallback to a four-step random access procedure; and monitoring a response window of a channel to receive a second random access message in response to the first random access message, the response window associated with a configured timer, wherein the second random access message indicates one of: a success of the two-step random access procedure or the fallback to the four-step random access procedure.

2. The method of claim 1, wherein the second random access message comprises at least a random access response and a connection setup message, the random access response and the connection setup message indicating the success of the two-step random access procedure.

3. The method of claim 1, wherein the second random access message comprises at least a preamble index and an uplink grant, the preamble index and the uplink grant indicating the fallback to the four-step random access procedure.

4. The method of claim 3, further comprising: transmitting a third random access message in accordance with the second random access message indicating the fallback to the four-step random access procedure, the third random access message comprising the retransmission of the connection request, wherein the value of the redundancy version of the third random access message is statically configured for the retransmission of the connection request; and receiving a fourth random access message in response to the third random access message, the fourth random access message comprising a connection setup message in response to the connection request.

5. The method of claim 4, wherein transmitting the third random access message is associated with the value of the redundancy version of the connection request.

6. The method of claim 1, wherein monitoring the response window of the channel further comprises: monitoring the response window of the channel following the initial transmission of the connection request.

7. The method of claim 1, further comprising: establishing a connection with a network device based, at least in part, on the first random access message and the second random access message.

8. The method of claim 1, wherein the value of the redundancy version that is statically configured is a redundancy version number 0.

9. The method of claim 1, wherein the connection request comprises a radio resource control (RRC) connection request.

10. The method of claim 1, further comprising: sensing a first channel prior to the first random access message, wherein the connection request is transmitted over one or more physical uplink shared channel (PUSCH) transmit occasions based at least in part on sensing the first channel.

11. An apparatus for wireless communication at a user equipment (UE), comprising: a processor; memory coupled with the processor; and instructions stored in the memory and executable by the processor to cause the apparatus to: transmit, as part of a two-step random access procedure, a first random access message including a random access preamble and a connection request, wherein a value of a redundancy version of the connection request is statically configured and is for both an initial transmission of the connection request associated with the two-step random access procedure and a retransmission of the connection request associated with a fallback to a four-step random access procedure; and monitor a response window of a channel to receive a second random access message in response to the first random access message, the response window associated with a configured timer, wherein the second random access message indicates one of: a success of the two-step random access procedure or the fallback to the four-step random access procedure.

12. The apparatus of claim 11, wherein the second random access message comprises at least a random access response and a connection setup message, the random access response and the connection setup message indicating the success of the two-step random access procedure.

13. The apparatus of claim 11, wherein the second random access message comprises at least a preamble index and an uplink grant, the preamble index and the uplink grant indicating the fallback to the four-step random access procedure.

14. The apparatus of claim 13, wherein the instructions are further executable by the processor to cause the apparatus to: transmit a third random access message in accordance with the second random access message indicating the fallback to the four-step random access procedure, the third random access message comprising the retransmission of the connection request, wherein the value of the redundancy version of the third random access message is statically configured for the retransmission of the connection request; and receive a fourth random access message in response to the third random access message, the fourth random access message comprising a connection setup message in response to the connection request.

15. The apparatus of claim 14, wherein transmitting the third random access message is associated with the value of the redundancy version of the connection request.

16. The apparatus of claim 11, wherein the instructions to monitor the response window of the channel are further executable by the processor to cause the apparatus to: monitor the response window of the channel following the initial transmission of the connection request.

17. The apparatus of claim 11, wherein the instructions are further executable by the processor to cause the apparatus to: establish a connection with a network device based, at least in part, on the first random access message and the second random access message.

18. The apparatus of claim 11, wherein the value of the redundancy version that is statically configured is a redundancy version number 0.

19. The apparatus of claim 11, wherein the connection request comprises a radio resource control (RRC) connection request.

20. The apparatus of claim 11, wherein the instructions are further executable by the processor to cause the apparatus to: sense a first channel prior to the first random access message, wherein the connection request is transmitted over one or more physical uplink shared channel (PUSCH) transmit occasions based at least in part on sensing the first channel.

21. An apparatus for wireless communication at a user equipment (UE), comprising: means for transmitting, as part of a two-step random access procedure, a first random access message including a random access preamble and a connection request, wherein a value of a redundancy version of the connection request is statically configured and is for both an initial transmission of the connection request associated with the two-step random access procedure and a for retransmission of the connection request associated with a fallback to a four-step random access procedure; and means for monitoring a response window of a channel to receive a second random access message in response to the first random access message, the response window associated with a configured timer, wherein the second random access message indicates one of: a success of the two-step random access procedure or the fallback to the four-step random access procedure.

22. The apparatus of claim 21, wherein the second random access message comprises at least a random access response and a connection setup message, the random access response and the connection setup message indicating the success of the two-step random access procedure.

23. The apparatus of claim 21, wherein the second random access message comprises at least a preamble index and an uplink grant, the preamble index and the uplink grant indicating the fallback to the four-step random access procedure.

24. The apparatus of claim 23, further comprising: means for transmitting a third random access message in accordance with the second random access message indicating the fallback to the four-step random access procedure, the third random access message comprising the retransmission of the connection request, wherein the value of the redundancy version of the third random access message is statically configured for the retransmission of the connection request; and means for receiving a fourth random access message in response to the third random access message, the fourth random access message comprising a connection setup message in response to the connection request.

25. The apparatus of claim 24, wherein transmitting the third random access message is associated with the value of the redundancy version of the connection request.

26. The apparatus of claim 21, wherein the means for monitoring the response window of the channel further comprise: means for monitoring the response window of the channel following the initial transmission of the connection request.

27. The apparatus of claim 21, further comprising: means for establishing a connection with a network device based, at least in part, on the first random access message and the second random access message.

28. The apparatus of claim 21, wherein the value of the redundancy version that is statically configured is a redundancy version number 0.

29. The apparatus of claim 21, further comprising: means for sensing a first channel prior to the first random access message, wherein the connection request is transmitted over one or more physical uplink shared channel (PUSCH) transmit occasions based at least in part on sensing the first channel.

30. A non-transitory computer-readable medium storing code for wireless communication at a user equipment (UE), the code comprising instructions executable by a processor to: transmit, as part of a two-step random access procedure, a first random access message including a random access preamble and a connection request, wherein a value of a redundancy version of the connection request is statically configured and is for both an initial transmission of the connection request associated with the two-step random access procedure and a retransmission of the connection request associated with a fallback to a four-step random access procedure; and monitor a response window of a channel to receive a second random access message in response to the first random access message, the response window associated with a configured timer, wherein the second random access message indicates one of: a success of the two-step random access procedure or the fallback to the four-step random access procedure.