CLAIMS

1. A method of wireless communication at a base station, comprising:

performing a Listen-Before-Talk (LBT) procedure at a beginning of each of a plurality of frames; and

transmitting at least a portion of a plurality of repetitions of a transmission, comprising determining whether to drop at least one repetition of the plurality of repetitions in a first frame when the plurality of repetitions span multiple frames and the LBT procedure is not successful for the first frame or to postpone the at least one repetition in the first frame until a second frame when the LBT procedure is successful.

2. The method of claim 1, wherein the transmission comprises a control channel transmission.

3. The method of claim 2, wherein the transmission comprises a Machine Type Communication Physical Downlink Control Channel (MPDCCH) transmission.

4. The method of claim 1, wherein the transmission comprises a data transmission.

5. The method of claim 4, wherein the transmission comprises a Machine Type Communication Physical Downlink Shared Channel (MPDSCH) transmission.

6. The method of claim 1, wherein the base station drops the at least one repetition in the first frame.

7. The method of claim 1, wherein the base station postpones the at least one repetition in the first frame until the second frame when the LBT procedure is successful.

8. The method of claim 1, wherein the determining is based on at least one of:

an interference environment;

a likelihood of a user equipment missing the transmission directed to the user equipment;

a likelihood of the user equipment making a false detection;

a reliability of the user equipment detecting whether the base station drops or postpones the transmission; and

user equipment procedures of the UE.

9. The method of claim 1, further comprising:

receiving at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

10. The method of claim 9, wherein the base station receives the RACH transmission from the user equipment, and wherein the RACH transmission is based on an allocated cell specific configuration.

11. The method of claim 1, wherein the wireless communication comprises Internet of Things (IoT) communication.

12. An apparatus for wireless communication at a base station, comprising:

means for performing a Listen-Before-Talk (LBT) procedure at a beginning of each of a plurality of frames; and

means for transmitting at least a portion of a plurality of repetitions of a transmission, wherein the means for transmitting determines whether to drop at least one repetition of the plurality of repetitions in a first frame when the plurality of repetitions span multiple frames and the LBT procedure is not successful for the first frame or to postpone the at least one repetition in the first frame until a second frame when the LBT procedure is successful.

13. The apparatus of claim 12, wherein the determining is based on at least one of:

an interference environment;

a likelihood of a user equipment missing the transmission directed to the user equipment;

a likelihood of the user equipment making a false detection;

a reliability of the user equipment detecting whether the base station drops or postpones the transmission; and

user equipment procedures of the UE.

14. The apparatus of claim 12, further comprising:

means for receiving at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

15. The apparatus of claim 14, wherein the base station receives the RACH transmission from the user equipment, and wherein the RACH transmission is based on an allocated cell specific configuration.

16. An apparatus for wireless communication at a base station, comprising:

a memory; and

at least one processor coupled to the memory and configured to:

perform a Listen-Before-Talk (LBT) procedure at a beginning of each of a plurality of frames;

transmit at least a portion of a plurality of repetitions of a transmission, wherein the at least one processor is configured to determine whether to drop at least one repetition of the plurality of repetitions in a first frame when the plurality of repetitions span multiple frames and the LBT procedure is not successful for the first frame or to postpone the at least one repetition in the first frame until a second frame when the LBT procedure is successful.

17. The apparatus of claim 16, wherein the determining is based on at least one of:

an interference environment;

a likelihood of a user equipment missing the transmission directed to the user equipment;

a likelihood of the user equipment making a false detection;

a reliability of the user equipment detecting whether the base station drops or postpones the transmission; and

user equipment procedures of the UE.

18. The apparatus of claim 16, wherein the at least one processor is further configured to:

receive at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

19. The apparatus of claim 18, wherein the base station receives the RACH transmission from the user equipment, and wherein the RACH transmission is based on an allocated cell specific configuration.

20. A non-transitory computer-readable medium storing computer executable code for wireless communication at a base station, comprising code to:

perform a Listen-Before-Talk (LBT) procedure at a beginning of each of a plurality of frames;

transmit at least a portion of a plurality of repetitions of a transmission, comprising determining whether to drop at least one repetition of the plurality of repetitions in a first frame when the plurality of repetitions span multiple frames and the LBT procedure is not successful for the first frame or to postpone the at least one repetition in the first frame until a second frame when the LBT procedure is successful.

21. The non-transitory computer-readable medium of claim 20, wherein the determining is based on at least one of:

an interference environment;

a likelihood of a user equipment missing the transmission directed to the user equipment;

a likelihood of the user equipment making a false detection;

a reliability of the user equipment detecting whether the base station drops or postpones the transmission; and

user equipment procedures of the UE.

22. The non-transitory computer-readable medium of claim 20, further comprising code to:

receive at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

23. The non-transitory computer-readable medium of claim 22, wherein the base station receives the RACH transmission from the user equipment, and wherein the RACH transmission is based on an allocated cell specific configuration.

24. A method of wireless communication at a user equipment, comprising:

receiving at least a portion of a plurality of repetitions of a downlink transmission from a base station;

when the plurality of repetitions span multiple frames, determining whether the base station transmits at least one repetition of the downlink transmission in a first frame; and

determining whether the base station drops the at least one repetition in the first frame or postpones the at least one repetition in the first frame until a second frame.

25. The method of claim 24, further comprising:

combining the plurality of repetitions across the multiple frames.

26. The method of claim 24, wherein the transmission comprises a control channel transmission.

27. The method of claim 26, wherein the transmission comprises a Machine Type Communication Physical Downlink Control Channel (MPDCCH) transmission.

28. The method of claim 24, wherein the transmission comprises a data transmission.

29. The method of claim 28, wherein the transmission comprises a Machine Type Communication Physical Downlink Shared Channel (MPDSCH) transmission.

30. The method of claim 24, further comprising:

transmitting at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

31. The method of claim 30, wherein the user equipment transmits the RACH transmission to the base station in the frame when the base station did not transmit the downlink transmission, and wherein the RACH transmission is based on an allocated cell specific configuration.

32. The method of claim 24, wherein the wireless communication comprises Internet of Things (IoT) communication.

33. An apparatus for wireless communication at a user equipment, comprising:

means for receiving at least a portion of a plurality of repetitions of a downlink transmission from a base station;

means for determining whether the base station transmits at least one repetition of the downlink transmission in a first frame, when the plurality of repetitions span multiple frames; and

wherein the means for determining is configured to determine whether the base station drops the at least one repetition in the first frame or postpones the at least one repetition in the first frame until a second frame.

34. The apparatus of claim 33, further comprising:

means for combining the plurality of repetitions across the multiple frames.

35. The apparatus of claim 33, further comprising:

means for transmitting at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

36. The apparatus of claim 35, wherein the user equipment transmits the RACH transmission to the base station in the frame when the base station did not transmit the downlink transmission, and wherein the RACH transmission is based on an allocated cell specific configuration.

37. An apparatus for wireless communication at a user equipment, comprising:

a memory; and

at least one processor coupled to the memory and configured to:

receive at least a portion of a plurality of repetitions of a downlink transmission from a base station;

determine whether the base station transmits at least one repetition of the downlink transmission in a first frame, when the plurality of repetitions span multiple frames; and

determine whether the base station drops the at least one repetition in the first frame or postpones the at least one repetition in the first frame until a second frame.

38. The apparatus of claim 37, wherein the at least one processor is further configured to:

combine the plurality of repetitions across the multiple frames.

39. The apparatus of claim 37, wherein the at least one processor is further configured to:

transmit at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

40. The apparatus of claim 39, wherein the user equipment transmits the RACH transmission to the base station in the frame when the base station did not transmit the downlink transmission, and wherein the RACH transmission is based on an allocated cell specific configuration.

41. A non-transitory computer-readable medium storing computer executable code for wireless communication at a user equipment, comprising code to:

receive at least a portion of a plurality of repetitions of a downlink transmission from a base station;

determine whether the base station transmits at least one repetition of the downlink transmission in a first frame, when the plurality of repetitions span multiple frames; and

determine whether the base station drops the at least one repetition in the first frame or postpones the at least one repetition in the first frame until a second frame.

42. The non-transitory computer-readable medium of claim 41, further comprising code to:

combine the plurality of repetitions across the multiple frames.

43. The non-transitory computer-readable medium of claim 41, further comprising code to:

transmit at least one of an uplink control transmission, an uplink data transmission, or a Random Access Channel (RACH) transmission from a user equipment in a frame when the base station did not transmit a downlink transmission.

44. The non-transitory computer-readable medium of claim 43, wherein the user equipment transmits the RACH transmission to the base station in the frame when the base station did not transmit the downlink transmission, and wherein the RACH transmission is based on an allocated cell specific configuration.