CLAIMS

1. A method for wireless communication by a user equipment (UE), comprising:

identifying, at the UE, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determining a second tuning band based at least in part on the second resource allocation and a set of resource block groups (RBGs) for a system bandwidth, wherein a starting RB of the second tuning band is based at least in part on an alignment of a starting RB of the second resource allocation with a boundary of an RBG of the set of RBGs; and

retuning from a first tuning band to the second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

2. The method of claim 1, further comprising:

determining an ending RB of the second tuning band based at least in part on an alignment of an ending RB of the second resource allocation with the boundary of the RBG of the set of RBGs.

3. The method of claim 1, wherein the UE is configured for monitoring a control channel within the first narrowband.

4. The method of claim 3, further comprising:

refraining from monitoring the control channel in the second TTI based at least in part on determining that at least a portion of the control channel does not overlap with the second tuning band.

5. The method of claim 3, further comprising:

identifying a portion of the control channel within the first narrowband that overlaps in frequency with the second tuning band; and

monitoring, in the second TTI, the portion of the control channel for control information.

6. The method of claim 5, further comprising:

monitoring an adjusted control channel in the second TTI for control information, the adjusted control channel being adjusted based at least in part on a relative offset of the second tuning band to the first narrowband.

7. The method of claim 1, further comprising:

receiving one or more bits indicating a shift of the second narrowband; and

determining the second tuning band based at least in part on the shift.

8. The method of claim 1, further comprising:

receiving one or more bits indicating a shift of the second resource allocation relative to the second narrowband; and

determining the second tuning band based at least in part on the shift.

9. The method of claim 8, wherein the second tuning band starts at a starting RB of the second resource allocation.

10. The method of claim 8, wherein the second tuning band ends at an ending RB of the second resource allocation.

11. The method of claim 1, further comprising:

determining the second tuning band to start from a lowest RB of the system bandwidth when the at least one RB of the second resource allocation located outside the second narrowband includes one or more edge RBs at a lower end of the system bandwidth that are not included in a narrowband of the system bandwidth.

12. The method of claim 1, further comprising:

determining the second tuning band to end at a highest RB of the system bandwidth when the at least one RB of the second resource allocation outside the second narrowband includes one or more edge RBs at an upper end of the system bandwidth that are not included in a narrowband of the system bandwidth.

13. The method of claim 1, further comprising:

determining the second tuning band to start from a starting RB of the second resource allocation, or end at an ending RB of the second resource allocation.

14. The method of claim 1, further comprising:

receiving, from a base station, control information indicating the first resource allocation, the second resource allocation, or both.

15. The method of claim 1, wherein the first tuning band corresponds to the first narrowband.

16. The method of claim 1, wherein the second tuning band corresponds to the second narrowband.

17. The method of claim 1, wherein:

identifying the second resource allocation comprises receiving control information in a TTI prior to the second TTI, the control information comprising a grant for the second resource allocation.

18. The method of claim 1, wherein each of the first and second tuning bands are composed of continuous frequency resources having a same size as the first or the second narrowband.

19. The method of claim 1, wherein the first narrowband and the second narrowband correspond to a common narrowband.

20. The method of claim 19, wherein the first tuning band corresponds to the common narrowband.

21. The method of claim 1, wherein the first narrowband is different from the second narrowband.

22. The method of claim 1, further comprising:

identifying a configuration for transmitting a sounding reference signal (SRS) in the first TTI; and

refraining from transmitting the SRS based at least in part on determining the first tuning band is different from the second tuning band.

23. The method of claim 1, further comprising:

identifying a configuration for transmitting a sounding reference signal (SRS) in the first TTI, wherein a portion of the SRS is outside the second tuning band; and

refraining from transmitting the SRS based at least in part on identifying that the portion of the SRS is outside the second tuning band.

24. The method of claim 1, further comprising:

identifying a configuration for a sounding reference signal (SRS) in the first TTI, wherein a portion of the SRS is outside the second tuning band;

establishing a guard period between the first communication in the first TTI and the second communication in the second TTI; and

transmitting the SRS based at least in part on the establishing.

25. The method of claim 1, further comprising:

establishing a guard period between the first communication in the first TTI and the second communication in the second TTI.

26. The method of claim 25, wherein establishing the guard period comprises:

puncturing one or more symbols of the second communication based at least in part on the retuning.

27. The method of claim 26, wherein the puncturing is based at least in part on determining that the first and second communications are downlink communications.

28. The method of claim 26, wherein the puncturing is based at least in part on determining that the first communication is an uplink communication and the second communication is a downlink communication.

29. A method for wireless communication by a user equipment (UE), comprising:

identifying, at the UE, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the second communication comprises an uplink communication, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determining a center frequency of the second communication based at least in part on a coverage enhancement mode for the UE, a tuning time capability of the UE, a tuning configuration received from a base station, a reference signal configuration for the second communication, or a combination thereof; and

retuning from a first tuning band to a second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

30. The method of claim 29, wherein the determining the center frequency of the second communication comprises:

setting the center frequency associated with the second communication to coincide with a center of the second tuning band.

31. The method of claim 29, wherein the determining the center frequency of the second communication comprises:

setting the center frequency associated with the second communication to coincide with a center of the second resource allocation.

32. The method of claim 29, wherein the tuning configuration is received from the base station in a unicast transmission or a broadcast transmission.

33. The method of claim 29, wherein the coverage enhancement mode for the UE is one of a first coverage enhancement mode associated with a first amount of repetition or a second coverage enhancement mode associated with a second, larger amount of repetition.

34. An apparatus for wireless communication, comprising:

a processor;

memory in electronic communication with the processor; and

instructions stored in the memory and executable by the processor to cause the apparatus to:

identify, at the apparatus, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determine a second tuning band based at least in part on the second resource allocation and a set of resource block groups (RBGs) for a system bandwidth, wherein a starting RB of the second tuning band is based at least in part on an alignment of a starting RB of the second resource allocation with a boundary of an RBG of the set of RBGs; and

retune from a first tuning band to the second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

35. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

determine an ending RB of the second tuning band based at least in part on an alignment of an ending RB of the second resource allocation with the boundary of the RBG of the set of RBGs.

36. The apparatus of claim 34, wherein the apparatus is configured for monitoring a control channel within the first narrowband.

37. The apparatus of claim 36, wherein the instructions are further executable by the processor to cause the apparatus to:

refrain from monitoring the control channel in the second TTI based at least in part on determining that at least a portion of the control channel does not overlap with the second tuning band.

38. The apparatus of claim 36, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a portion of the control channel within the first narrowband that overlaps in frequency with the second tuning band; and

monitor, in the second TTI, the portion of the control channel for control information.

39. The apparatus of claim 38, wherein the instructions are further executable by the processor to cause the apparatus to:

monitor an adjusted control channel in the second TTI for control information, the adjusted control channel being adjusted based at least in part on a relative offset of the second tuning band to the first narrowband.

40. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

receive one or more bits indicating a shift of the second narrowband; and

determine the second tuning band based at least in part on the shift.

41. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

receive one or more bits indicating a shift of the second resource allocation relative to the second narrowband; and

determine the second tuning band based at least in part on the shift.

42. The apparatus of claim 41, wherein the second tuning band starts at a starting RB of the second resource allocation.

43. The apparatus of claim 41, wherein the second tuning band ends at an ending RB of the second resource allocation.

44. The apparatus of claim 34, wherein the instructions to determine the second tuning band are executable by the processor to cause the apparatus to:

determine the second tuning band to start from a lowest RB of the system bandwidth when the at least one RB of the second resource allocation located outside the second narrowband includes one or more edge RBs at a lower end of the system bandwidth that are not included in a narrowband of the system bandwidth.

45. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

determine the second tuning band to end at a highest RB of the system bandwidth when the at least one RB of the second resource allocation outside the second narrowband includes one or more edge RB s at an upper end of the system bandwidth that are not included in a narrowband of the system bandwidth.

46. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

determine the second tuning band to start from a starting RB of the second resource allocation, or end at an ending RB of the second resource allocation.

47. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

receive, from a base station, control information indicating the first resource allocation, the second resource allocation, or both.

48. The apparatus of claim 34, wherein the first tuning band corresponds to the first narrowband.

49. The apparatus of claim 34, wherein the second tuning band corresponds to the second narrowband.

50. The apparatus of claim 34, wherein the instructions to identify the second resource allocation are executable by the processor to cause the apparatus to receive control information in a TTI prior to the second TTI, the control information comprising a grant for the second resource allocation.

51. The apparatus of claim 34, wherein each of the first and second tuning bands are composed of continuous frequency resources having a same size as the first or the second narrowband.

52. The apparatus of claim 34, wherein the first narrowband and the second narrowband correspond to a common narrowband.

53. The apparatus of claim 52, wherein the first tuning band corresponds to the common narrowband.

54. The apparatus of claim 34, wherein the first narrowband is different from the second narrowband.

55. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a configuration for transmitting a sounding reference signal (SRS) in the first TTI; and

refrain from transmitting the SRS based at least in part on determining the first tuning band is different from the second tuning band.

56. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a configuration for transmitting a sounding reference signal (SRS) in the first TTI, wherein a portion of the SRS is outside the second tuning band; and

refrain from transmitting the SRS based at least in part on identifying that the portion of the SRS is outside the second tuning band.

57. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a configuration for a sounding reference signal (SRS) in the first TTI, wherein a portion of the SRS is outside the second tuning band;

establish a guard period between the first communication in the first TTI and the second communication in the second TTI; and

transmit the SRS based at least in part on the establishing.

58. The apparatus of claim 34, wherein the instructions are further executable by the processor to cause the apparatus to:

establish a guard period between the first communication in the first TTI and the second communication in the second TTI.

59. The apparatus of claim 58, wherein the instructions to establish the guard period are executable by the processor to cause the apparatus to:

puncture one or more symbols of the second communication based at least in part on the retuning.

60. The apparatus of claim 59, wherein the puncturing is based at least in part on determining that the first and second communications are downlink communications.

61. The apparatus of claim 59, wherein the puncturing is based at least in part on determining that the first communication is an uplink communication and the second communication is a downlink communication.

62. An apparatus for wireless communication, comprising:

a processor;

memory in electronic communication with the processor; and

instructions stored in the memory and executable by the processor to cause the apparatus to:

identify, at the UE, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the second communication comprises an uplink communication, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determine a center frequency of the second communication based at least in part on a coverage enhancement mode for the apparatus, a tuning time capability of the apparatus, a tuning configuration received from a base station, a reference signal configuration for the second communication, or a combination thereof; and

retune from a first tuning band to a second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band

associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

63. The apparatus of claim 62, wherein the instructions to determine the center frequency of the second communication are executable by the processor to cause the apparatus to:

set the center frequency associated with the second communication to coincide with a center of the second tuning band.

64. The apparatus of claim 62, wherein the instructions to determine the center frequency of the second communication are executable by the processor to cause the apparatus to:

set the center frequency associated with the second communication to coincide with a center of the second resource allocation.

65. The apparatus of claim 62, wherein the tuning configuration is received from the base station in a unicast transmission or a broadcast transmission.

66. The apparatus of claim 62, wherein the coverage enhancement mode for the apparatus is one of a first coverage enhancement mode associated with a first amount of repetition or a second coverage enhancement mode associated with a second, larger amount of repetition.

67. An apparatus for wireless communication, comprising:

means for identifying, at the apparatus, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

means for determining a second tuning band based at least in part on the second resource allocation and a set of resource block groups (RBGs) for a system bandwidth, wherein a starting

RB of the second tuning band is based at least in part on an alignment of a starting RB of the second resource allocation with a boundary of an RBG of the set of RBGs; and

means for retuning from a first tuning band to the second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

68. A non-transitory computer-readable medium storing code for wireless communication, the code comprising instructions executable by a processor to:

identify, at a user equipment (UE), a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determine a second tuning band based at least in part on the second resource allocation and a set of resource block groups (RBGs) for a system bandwidth, wherein a starting RB of the second tuning band is based at least in part on an alignment of a starting RB of the second resource allocation with a boundary of an RBG of the set of RBGs; and

retune from a first tuning band to a second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

69. An apparatus for wireless communication, comprising:

means for identifying, at the apparatus, a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the second communication comprises an uplink communication, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource

allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

means for determining a center frequency of the second communication based at least in part on a coverage enhancement mode for the apparatus, a tuning time capability of the apparatus, a tuning configuration received from a base station, a reference signal configuration for the second communication, or a combination thereof; and

means for retuning from a first tuning band to a second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.

70. A non-transitory computer-readable medium storing code for wireless communication, the code comprising instructions executable by a processor to:

identify, at a user equipment (UE), a first resource allocation for a first communication in a first transmission time interval (TTI) and a second resource allocation for a second communication in a second, subsequent TTI, wherein the second communication comprises an uplink communication, wherein the first resource allocation is associated with a first narrowband comprising a first set of resource blocks (RBs) and the second resource allocation is associated with a second narrowband comprising a second set of RBs, and wherein at least one RB of the first resource allocation is located outside the first set of RBs or at least one RB of the second resource allocation is located outside the second set of RBs;

determine a center frequency of the second communication based at least in part on a coverage enhancement mode for the UE, a tuning time capability of the UE, a tuning configuration received from a base station, a reference signal configuration for the second communication, or a combination thereof; and

retune from a first tuning band to a second tuning band between the first communication and the second communication based at least in part on determining that the first tuning band associated with the first resource allocation for the first TTI is different from the second tuning band associated with the second resource allocation for the second TTI.