

CLAIMS

1. A method for wireless communication at a user equipment (UE), comprising: receiving a directional synchronization subframe comprising a set of directional synchronization signals from a base station; identifying a scheduling request for transmission to the base station; identifying a set of time resources for a random access procedure based at least in part on a directional synchronization signal of the set of directional synchronization signals; transmitting a random access message to the base station during the set of time resources based at least in part on the identified scheduling request; receiving a grant to transmit a buffer status report (BSR) based at least in part on the scheduling request; and transmitting the BSR to the base station using resources indicated in the grant.
2. The method of claim 1, wherein the resources indicated in the grant comprise physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.
3. The method of claim 1, further comprising: identifying the directional synchronization signal from the set of directional synchronization signals.
4. The method of claim 1, wherein the set of directional synchronization signals comprises a primary synchronization signal, a secondary synchronization signal, a beam reference signal, or any combination thereof.
5. The method of claim 1, further comprising: receiving an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request from the base station.
6. The method of claim 1, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.
7. The method of claim 1, wherein the set of time resources for transmitting the random access message is associated with a random access channel (RACH).
8. The method of claim 7, further comprising: identifying a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is transmitted using resources located within the frequency region associated with scheduling requests.
9. The method of claim 7, further comprising: identifying a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

10. A method for wireless communication at a base station, comprising: transmitting a directional synchronization subframe comprising a set of directional synchronization signals to a user equipment (UE); receiving a random access message from the UE during a set of time resources selected by the UE based at least in part on a directional synchronization signal of the set of directional synchronization signals and a scheduling request at the UE; transmitting a grant for transmitting a buffer status report (BSR) based at least in part on the random access message; and receiving the BSR from the UE using resources indicated in the grant.

11. The method of claim 10, wherein the resources indicated in the grant comprises physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

12. The method of claim 10, wherein the set of time resources for receiving the random access message is associated with a random access channel (RACH).

13. The method of claim 12, further comprising: identifying a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is received using resources located within the frequency region associated with scheduling requests.

14. The method of claim 12, further comprising: identifying a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

15. The method of claim 10, further comprising: transmitting an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request to the UE.

16. The method of claim 10, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

17. An apparatus for wireless communication at a user equipment (UE), comprising: means for receiving a directional synchronization subframe comprising a set of directional synchronization signals from a base station; means for identifying a scheduling request for transmission to the base station; means for identifying a set of time resources for a random access procedure based at least in part on a directional synchronization signal of the set of directional synchronization signals; means for transmitting a random access message to the base station during the set of time resources based at least in part on the identified scheduling request; means for receiving a grant to transmit a buffer status report (BSR) based at least in part on the scheduling request; and means for transmitting the BSR to the base station using resources indicated in the grant.

18. The apparatus of claim 17, wherein the resources indicated in the grant comprise physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

19. The apparatus of claim 17, further comprising: means for identifying the directional synchronization from the set of directional synchronization signals.

20. The apparatus of claim 17, wherein each set of directional synchronization signals comprises a primary synchronization signal, a secondary synchronization signal, a beam reference signal, or any combination thereof.

21. The apparatus of claim 17, further comprising: means for receiving an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request from the base station.

22. The apparatus of claim 17, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

23. The apparatus of claim 17, wherein the set of time resources for transmitting the random access message is associated with a random access channel (RACH).

24. The apparatus of claim 23, further comprising: means for identifying a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is transmitted using resources located within the frequency region associated with scheduling requests.

25. The apparatus of claim 23, further comprising: means for identifying a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

26. An apparatus for wireless communication at a base station, comprising: means for transmitting a directional synchronization subframe comprising a set of directional synchronization signals to a user equipment (UE); means for receiving a random access message from the UE during a set of time resources selected by the UE based at least in part on a directional synchronization signal of the set of directional synchronization signals and a scheduling request at the UE; means for transmitting a grant for transmitting a buffer status report (BSR) based at least in part on the random access message; and means for receiving the BSR from the UE using resources indicated in the grant.

27. The apparatus of claim 26, wherein the resources indicated in the grant comprises physical uplink shared channel (PUSCH) resources, physical uplink control channel

(PUCCH) resources, or both.

28. The apparatus of claim 26, wherein the set of time resources for receiving the random access message is associated with a random access channel (RACH).

29. The apparatus of claim 28, further comprising: means for identifying a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is received using resources located within the frequency region associated with scheduling requests.

30. The apparatus of claim 28, further comprising: means for identifying a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

31. The apparatus of claim 26, further comprising: means for transmitting an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request to the UE.

32. The apparatus of claim 26, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

33. An apparatus for wireless communication, in a system comprising: a processor; memory in electronic communication with the processor; and instructions stored in the memory and operable, when executed by the processor, to cause the apparatus to: receive, at a user equipment (UE), a directional synchronization subframe comprising a set of directional synchronization signals from a base station; identify a scheduling request for transmission to the base station; identify a set of time resources for a random access procedure station based at least in part on a directional synchronization signal of the set of directional synchronization signals; transmit, by the UE, a random access message to the base station during the set of time resources based at least in part on the identified scheduling request; receive a grant to transmit a buffer status report (BSR) based at least in part on the scheduling request; and transmit the BSR to the base station using resources indicated in the grant.

34. The apparatus of claim 33, wherein the resources indicated in the grant comprise physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

35. The apparatus of claim 24, wherein the instructions are further executable by the processor to: identify the directional synchronization signal from the set of directional synchronization signals.

36. The apparatus of claim 33, wherein each set of directional synchronization signals

comprises a primary synchronization signal, a secondary synchronization signal, a beam reference signal, or any combination thereof.

37. The apparatus of claim 33, wherein the instructions are further executable by the processor to: receive an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request from the base station.

38. The apparatus of claim 33, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

39. The apparatus of claim 33, wherein the set of time resources for transmitting the random access message is associated with a random access channel (RACH).

40. The apparatus of claim 39, wherein the instructions are further executable by the processor to: identify a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is transmitted using resources located within the frequency region associated with scheduling requests.

41. The apparatus of claim 39, wherein the instructions are further executable by the processor to: identify a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

42. An apparatus for wireless communication, in a system comprising: a processor; memory in electronic communication with the processor; and instructions stored in the memory and operable, when executed by the processor, to cause the apparatus to: transmit, by a base station, a directional synchronization subframe comprising a set of directional synchronization signals to a user equipment (UE); receive a random access message from the UE during a set of time resources selected by the UE based at least in part on a directional synchronization signal of the set of directional synchronization signals and a scheduling request at the UE; transmit a grant for transmitting a buffer status report (BSR) based at least in part on the random access message; and receive the BSR from the UE using resources indicated in the grant.

43. The apparatus of claim 42, wherein the resources indicated in the grant comprises physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

44. The apparatus of claim 42, wherein the set of time resources for receiving the random access message is associated with a random access channel (RACH).

45. The apparatus of claim 44, wherein the instructions are further executable by the processor to: identify a frequency region associated with the RACH and a frequency region

associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is received using resources located within the frequency region associated with scheduling requests.

46. The apparatus of claim 44, wherein the instructions are further executable by the processor to: identify a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

47. The apparatus of claim 42, wherein the instructions are further executable by the processor to: transmit an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request to the UE.

48. The apparatus of claim 42, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

49. A non-transitory computer readable medium storing code for wireless communication, the code comprising instructions executable by a processor to: receive, at a user equipment (UE), a directional synchronization subframe comprising a set of directional synchronization signals from a base station; identify a scheduling request for transmission to the base station; identify a set of time resources for a random access procedure based at least in part on the a directional synchronization signal of the set of directional synchronization signals; transmit, by the UE, a random access message to the base station during the set of time resources based at least in part of the identified scheduling request; receive a grant to transmit a buffer status report (BSR) based at least in part on the scheduling request; and transmit the BSR to the base station using resources indicated in the grant.

50. The non-transitory computer-readable medium of claim 49, wherein the resources indicated in the grant comprise physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

51. The non-transitory computer-readable medium of claim 49, wherein the instructions are further executable by the processor to: identifying the directional synchronization signal from the set of directional synchronization signals.

52. The non-transitory computer-readable medium of claim 49, wherein each set of directional synchronization signals comprises a primary synchronization signal, a secondary synchronization signal, a beam reference signal, or any combination thereof.

53. The non-transitory computer-readable medium of claim 49, wherein the instructions are further executable by the processor to: receive an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request from the base station.

54. The non-transitory computer-readable medium of claim 49, wherein the scheduling

request comprises a sequence repeated a plurality of times over a plurality of symbol periods.

55. The non-transitory computer-readable medium of claim 49, wherein the set of time resources for transmitting the random access message is associated with a random access channel (RACH).

56. The non-transitory computer-readable medium of claim 55, wherein the instructions are further executable by the processor to: identify a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is transmitted using resources located within the frequency region associated with scheduling requests.

57. The non-transitory computer-readable medium of claim 55, wherein the instructions are further executable by the processor to: identify a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

58. A non-transitory computer readable medium storing code for wireless communication, the code comprising instructions executable by a processor to: transmit, by a base station, a directional synchronization subframe comprising a set of directional synchronization signals to a user equipment (UE); receive a random access message from the UE during a set of time resources selected by the UE based at least in part on a directional synchronization signal of the set of directional synchronization signals and a scheduling request at the UE; transmit a grant for transmitting a buffer status report (BSR) based at least in part on the random access message; and receive the BSR from the UE using resources indicated in the grant.

59. The non-transitory computer-readable medium of claim 58, wherein the resources indicated in the grant comprises physical uplink shared channel (PUSCH) resources, physical uplink control channel (PUCCH) resources, or both.

60. The non-transitory computer-readable medium of claim 58, wherein the set of time resources for receiving the random access message is associated with a random access channel (RACH).

61. The non-transitory computer-readable medium of claim 60, wherein the instructions are further executable by the processor to: identify a frequency region associated with the RACH and a frequency region associated with scheduling requests that does not overlap with the frequency region associated with the RACH, wherein the scheduling request is received using resources located within the frequency region associated with scheduling requests.

62. The non-transitory computer-readable medium of claim 60, wherein the instructions are further executable by the processor to: identify a cyclic prefix length for the scheduling request, wherein the cyclic prefix length comprises a long cyclic prefix length associated with the RACH or a short cyclic prefix length associated with non-RACH transmissions.

63. The non-transitory computer-readable medium of claim 58, wherein the instructions are further executable by the processor to: transmit an indication of at least one of a cyclic shift, a set of subcarriers, or a sequence index for the scheduling request to the UE.

64. The non-transitory computer-readable medium of claim 58, wherein the scheduling request comprises a sequence repeated a plurality of times over a plurality of symbol periods.