

WHAT IS CLAIMED IS:

1. A method of wireless communication performed by a user equipment (UE), comprising:
selecting a first communication, associated with a first traffic type, or a second communication, associated with a second traffic type, as a selected communication for transmission in an overlapping resource,
wherein the first communication and the second communication at least partially overlap in time,
wherein the first traffic type is an ultra-reliable low latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type,
and
wherein the selection is performed based at least in part on a rule; and
transmitting the selected communication.
2. The method of claim 1, wherein the rule indicates that the first communication is always selected based at least in part on the first communication being an ultra-reliable low-latency communication and the second communication being an enhanced mobile broadband communication.
3. The method of claim 1, further comprising:
dropping an other communication, of the first communication and the second communication and other than the selected communication.
4. The method of claim 3, wherein a portion of the other communication that is non-overlapped with the selected communication is dropped, wherein the portion is after the selected communication.
5. The method of claim 4, wherein the portion is dropped based at least in part on a capability of the UE.
6. The method of claim 4, wherein the portion is dropped based at least in part on the portion and an other portion of the other communication that is non-overlapped with the selected communication being non-phase-continuous.
7. The method of claim 1, wherein the selection is performed while a communication, of the first communication and the second communication, is transmitted.

8. The method of claim 1, wherein the selected communication punctures an other communication, of the first communication and the second communication and other than the selected communication, and wherein the first communication is a positive scheduling request and the second communication is a data channel.
9. The method of claim 8, wherein a punctured portion of the other communication is replaced with a sequence of equal power and bandwidth as the other communication, wherein the sequence indicates the selected communication.
10. The method of claim 9, wherein the selected communication is transmitted in a physical resource corresponding to the punctured portion of the other communication.
11. The method of claim 9, wherein a time duration of the sequence or a number of orthogonal frequency division multiplexing symbols of the sequence is equal to that of a physical resource scheduled to transmit the selected communication.
12. The method of claim 1, wherein the first communication and the second communication comprise at least one of:
a positive scheduling request,
an uplink data channel with dynamic grant, or
an uplink data channel with configured grant.
13. The method of claim 1, wherein the rule indicates that, when the first communication is overlapped with a first portion of the second communication, the second communication is to be delayed until an end of the first portion and the first communication is to be transmitted as the selected communication.
14. The method of claim 1, wherein the selection is at least partially performed in a physical layer of the UE.
15. The method of claim 1, wherein the rule is based at least in part on respective priority levels of the first communication and the second communication.
16. The method of claim 15, wherein at least one of the first communication or the second communication comprise a data channel with a configured grant.

17. The method of claim 16, wherein a priority level of the at least one of the first communication or the second communication is indicated by respective uplink configured grant configurations of the first traffic type and the second traffic type.

18. The method of claim 16, wherein the priority level of the data channel with the configured grant is indicated by a field of a configuration of the configured grant.

19. The method of claim 16, wherein the respective priority levels are associated with corresponding modulation and coding scheme tables, and wherein the respective priority levels of the first communication and the second communication are indicated by which modulation and coding scheme tables, of the corresponding modulation and coding scheme tables, are to be used for the first communication and the second communication.

20. The method of claim 19, wherein the priority level of the data channel with the configured grant is determined based on a modulation and coding scheme table configuration that is included as a parameter in a configuration of the configured grant.

21. A method of wireless communication performed by a user equipment (UE), comprising:
selecting a first logical channel associated with an uplink data communication and a first traffic type, or a second logical channel associated with a buffer status report and a second traffic type, as a selected communication for transmission,
wherein the selection is performed based at least in part on a logical channel prioritization rule; and
transmitting the selected communication in a physical resource scheduled for the first traffic type or the second traffic type.

22. The method of claim 21, wherein the first logical channel is prioritized over the second logical channel when the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.

23. The method of claim 22, further comprising:
receiving a configuration of the UE that indicates whether the buffer status report associated with the enhanced mobile broadband traffic type can be carried in a physical layer resource associated with the ultra-reliable low-latency communication traffic type.

24. The method of claim 23, wherein, when the configuration indicates that the buffer status report cannot be carried in the physical layer resource associated with the ultra-reliable low-latency communication traffic type, the method further comprises:

mapping the buffer status report to a resource not associated with the ultra-reliable low-latency communication traffic type.

25. The method of claim 21, wherein, when the first traffic type and the second traffic type are the same traffic type, the logical channel prioritization rule indicates to select the second logical channel as the selected communication.

26. The method of claim 21, wherein the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.

27. A non-transitory computer-readable medium storing one or more instructions for wireless communication, the one or more instructions comprising:

one or more instructions that, when executed by one or more processors of a user equipment (UE), cause the one or more processors to:

select a first communication, associated with a first traffic type, or a second communication, associated with a second traffic type, as a selected communication for transmission in an overlapping resource,

wherein the first communication and the second communication at least partially overlap in time,

wherein the first traffic type is an ultra-reliable low latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type, and

wherein the selection is performed based at least in part on a rule; and transmit the selected communication.

28. The non-transitory computer-readable medium of claim 27, wherein the rule indicates that the first communication is always selected based at least in part on the first communication being an ultra-reliable low-latency communication and the second communication being an enhanced mobile broadband communication.

29. The non-transitory computer-readable medium of claim 27, wherein the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

drop an other communication, of the first communication and the second communication and other than the selected communication.

30. The non-transitory computer-readable medium of claim 29, wherein a portion of the other communication that is non-overlapped with the selected communication is dropped, wherein the portion is after the selected communication.

31. The non-transitory computer-readable medium of claim 30, wherein the portion is dropped based at least in part on a capability of the UE.

32. The non-transitory computer-readable medium of claim 30, wherein the portion is dropped based at least in part on the portion and an other portion of the other communication that is non-overlapped with the selected communication being non-phase-continuous.

33. The non-transitory computer-readable medium of claim 27, wherein the selection is performed while a communication, of the first communication and the second communication, is transmitted.

34. The non-transitory computer-readable medium of claim 27, wherein the selected communication punctures an other communication, of the first communication and the second communication and other than the selected communication, and wherein the first communication is a positive scheduling request and the second communication is a data channel.

35. The non-transitory computer-readable medium of claim 34, wherein a punctured portion of the other communication is replaced with a sequence of equal power and bandwidth as the other communication, wherein the sequence indicates the selected communication.

36. The non-transitory computer-readable medium of claim 35, wherein the selected communication is transmitted in a physical resource corresponding to the punctured portion of the other communication.

37. The non-transitory computer-readable medium of claim 35, wherein a time duration of the sequence or a number of orthogonal frequency division multiplexing symbols of the sequence is equal to that of a physical resource scheduled to transmit the selected communication.

38. The non-transitory computer-readable medium of claim 27, wherein the first communication and the second communication comprise at least one of:
a positive scheduling request,
an uplink data channel with dynamic grant, or
an uplink data channel with configured grant.
39. The non-transitory computer-readable medium of claim 27, wherein the rule indicates that, when the first communication is overlapped with a first portion of the second communication, the second communication is to be delayed until an end of the first portion and the first communication is to be transmitted as the selected communication.
40. The non-transitory computer-readable medium of claim 27, wherein the selection is at least partially performed in a physical layer of the UE.
41. The non-transitory computer-readable medium of claim 27, wherein the rule is based at least in part on respective priority levels of the first communication and the second communication.
42. The non-transitory computer-readable medium of claim 41, wherein at least one of the first communication or the second communication comprise a data channel with a configured grant.
43. The non-transitory computer-readable medium of claim 42, wherein a priority level of the at least one of the first communication or the second communication is indicated by respective uplink configured grant configurations of the first traffic type and the second traffic type.
44. The non-transitory computer-readable medium of claim 42, wherein the priority level of the data channel with the configured grant is indicated by a field of a configuration of the configured grant.
45. The non-transitory computer-readable medium of claim 42, wherein the respective priority levels are associated with corresponding modulation and coding scheme tables, and wherein the respective priority levels of the first communication and the second communication are indicated by which modulation and coding scheme tables, of the corresponding modulation and coding scheme tables, are to be used for the first communication and the second communication.

46. The non-transitory computer-readable medium of claim 45, wherein the priority level of the data channel with the configured grant is determined based on a modulation and coding scheme table configuration that is included as a parameter in a configuration of the configured grant.

47. A non-transitory computer-readable medium storing one or more instructions for wireless communication, the one or more instructions comprising:

one or more instructions that, when executed by one or more processors of a user equipment (UE), cause the one or more processors to:

select a first logical channel associated with an uplink data communication and a first traffic type, or a second logical channel associated with a buffer status report and a second traffic type, as a selected communication for transmission,

wherein the selection is performed based at least in part on a logical channel prioritization rule; and

transmit the selected communication in a physical resource scheduled for the first traffic type or the second traffic type.

48. The non-transitory computer-readable medium of claim 47, wherein the first logical channel is prioritized over the second logical channel when the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.

49. The non-transitory computer-readable medium of claim 48, wherein the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

receive a configuration of the UE that indicates whether the buffer status report associated with the enhanced mobile broadband traffic type can be carried in a physical layer resource associated with the ultra-reliable low-latency communication traffic type.

50. The non-transitory computer-readable medium of claim 49, wherein, when the configuration indicates that the buffer status report cannot be carried in the physical layer resource associated with the ultra-reliable low-latency communication traffic type, the non-transitory computer-readable medium wherein the one or more instructions, when executed by the one or more processors, further cause the one or more processors to:

map the buffer status report to a resource not associated with the ultra-reliable low-latency communication traffic type.

51. The non-transitory computer-readable medium of claim 47, wherein, when the first traffic type and the second traffic type are the same traffic type, the logical channel prioritization rule indicates to select the second logical channel as the selected communication.

52. The non-transitory computer-readable medium of claim 47, wherein the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.

53. An apparatus for wireless communication, comprising:
means for selecting a first communication, associated with a first traffic type, or a second communication, associated with a second traffic type, as a selected communication for transmission in an overlapping resource,

wherein the first communication and the second communication at least partially overlap in time,

wherein the first traffic type is an ultra-reliable low latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type, and

wherein the selection is performed based at least in part on a rule; and
means for transmitting the selected communication.

54. The apparatus of claim 53, wherein the rule indicates that the first communication is always selected based at least in part on the first communication being an ultra-reliable low-latency communication and the second communication being an enhanced mobile broadband communication.

55. The apparatus of claim 53, further comprising:
means for dropping an other communication, of the first communication and the second communication and other than the selected communication.

56. The apparatus of claim 55, wherein a portion of the other communication that is non-overlapped with the selected communication is dropped, wherein the portion is after the selected communication.

57. The apparatus of claim 56, wherein the portion is dropped based at least in part on a capability of the apparatus.

58. The apparatus of claim 56, wherein the portion is dropped based at least in part on the portion and an other portion of the other communication that is non-overlapped with the selected communication being non-phase-continuous.

59. The apparatus of claim 53, wherein the selection is performed while a communication, of the first communication and the second communication, is transmitted.

60. The apparatus of claim 53, wherein the selected communication punctures an other communication, of the first communication and the second communication and other than the selected communication, and wherein the first communication is a positive scheduling request and the second communication is a data channel.

61. The apparatus of claim 60, wherein a punctured portion of the other communication is replaced with a sequence of equal power and bandwidth as the other communication, wherein the sequence indicates the selected communication.

62. The apparatus of claim 61, wherein the selected communication is transmitted in a physical resource corresponding to the punctured portion of the other communication.

63. The apparatus of claim 61, wherein a time duration of the sequence or a number of orthogonal frequency division multiplexing symbols of the sequence is equal to that of a physical resource scheduled to transmit the selected communication.

64. The apparatus of claim 53, wherein the first communication and the second communication comprise at least one of:

- a positive scheduling request,
- an uplink data channel with dynamic grant, or
- an uplink data channel with configured grant.

65. The apparatus of claim 53, wherein the rule indicates that, when the first communication is overlapped with a first portion of the second communication, the second communication is to be delayed until an end of the first portion and the first communication is to be transmitted as the selected communication.

66. The apparatus of claim 53, wherein the selection is at least partially performed in a physical layer of the apparatus.

67. The apparatus of claim 53, wherein the rule is based at least in part on respective priority levels of the first communication and the second communication.
68. The apparatus of claim 67, wherein at least one of the first communication or the second communication comprise a data channel with a configured grant.
69. The apparatus of claim 68, wherein a priority level of the at least one of the first communication or the second communication is indicated by respective uplink configured grant configurations of the first traffic type and the second traffic type.
70. The apparatus of claim 68, wherein the priority level of the data channel with the configured grant is indicated by a field of a configuration of the configured grant.
71. The apparatus of claim 68, wherein the respective priority levels are associated with corresponding modulation and coding scheme tables, and wherein the respective priority levels of the first communication and the second communication are indicated by which modulation and coding scheme tables, of the corresponding modulation and coding scheme tables, are to be used for the first communication and the second communication.
72. The apparatus of claim 71, wherein the priority level of the data channel with the configured grant is determined based on a modulation and coding scheme table configuration that is included as a parameter in a configuration of the configured grant.
73. An apparatus for wireless communication, comprising:
means for selecting a first logical channel associated with an uplink data communication and a first traffic type, or a second logical channel associated with a buffer status report and a second traffic type, as a selected communication for transmission,
wherein the selection is performed based at least in part on a logical channel prioritization rule; and
means for transmitting the selected communication in a physical resource scheduled for the first traffic type or the second traffic type.
74. The apparatus of claim 73, wherein the first logical channel is prioritized over the second logical channel when the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.
75. The apparatus of claim 74, further comprising:

means for receiving a configuration of the apparatus that indicates whether the buffer status report associated with the enhanced mobile broadband traffic type can be carried in a physical layer resource associated with the ultra-reliable low-latency communication traffic type.

76. The apparatus of claim 75, wherein, when the configuration indicates that the buffer status report cannot be carried in the physical layer resource associated with the ultra-reliable low-latency communication traffic type, the apparatus further comprises:

means for mapping the buffer status report to a resource not associated with the ultra-reliable low-latency communication traffic type.

77. The apparatus of claim 73, wherein, when the first traffic type and the second traffic type are the same traffic type, the logical channel prioritization rule indicates to select the second logical channel as the selected communication.

78. The apparatus of claim 73, wherein the first traffic type is an ultra-reliable low-latency communication traffic type and the second traffic type is an enhanced mobile broadband traffic type.