

CLAIMS

What is claimed is:

CLAIMS

1. A method for wireless communication at a user equipment (UE), comprising:
 - receiving, from a base station, a data transmission including a transport block (TB);
 - attempting to decode the data transmission;
 - transmitting a feedback message to the base station indicating that at least a portion of the data transmission including the TB was unsuccessfully decoded;
 - receiving, from the base station, one or more subsequent data transmissions of at least the TB; and
 - determining whether to attempt to decode a subsequent data transmission of the one or more subsequent data transmissions based at least in part on whether an effective UE throughput of the one or more subsequent ~~transmissions exceeds a predetermined decoding throughput threshold~~data transmissions exceeds a predetermined decoding throughput threshold, wherein the effective UE throughput is based at least in part on a circular buffer size, a number of scheduled codeblocks for the TB, and a subcarrier spacing factor, and wherein the predetermined decoding throughput threshold is based at least in part on a code rate associated with limited-buffer rate-matching and a transport block size associated with the limited-buffer rate-matching.
2. The method of claim 1, further comprising:
 - decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions being less than the predetermined decoding throughput threshold.
3. The method of claim 1, further comprising:
 - refraining from decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.
4. The method of claim 1, further comprising:
 - refraining from decoding any of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

5. The method of claim 1, further comprising:

refraining from decoding the TB of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

6. The method of claim 1, wherein the subsequent data transmission of the one or more subsequent data transmissions is a last-received subsequent data transmission.

7. The method of claim 1, wherein the predetermined decoding throughput threshold is based at least in part on a throughput for decoding a TB of a maximum TB size transmitted in a fourteen-symbol duration.

8. The method of claim 1, wherein the predetermined decoding throughput threshold is based at least in part on a maximum TB size, a number of codeblocks for transmitting a TB of the maximum TB size, a length of a codeblock-level cyclic redundancy check (CRC), a length of a transport-level CRC, a coding rate for transmitting a TB of the maximum TB size with limited-buffer rate-matching (LBRM) enabled, and a scaling factor.

9. The method of claim 8, wherein the scaling factor is one.

10. The method of claim 8, wherein the scaling factor is greater than one.

11. The method of claim 1, wherein the effective UE throughput of the one or more subsequent data transmissions is based at least in part on a ~~number of transmitted codeblocks in the TB, a circular buffer size, and a~~ physical downlink shared channel (PDSCH) duration for the one or more subsequent data transmissions.

12. The method of claim 11, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration but is not applicable for subsequent data transmissions involving different sub-carrier spacing values or back-to-back subsequent data transmissions whose PDSCH durations are of a mini-slot.

13. The method of claim 11, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sub-carrier spacing of the subsequent data transmission and a minimum sub-carrier spacing of a component carrier carrying the one or more subsequent data transmissions.

14. The method of claim 13, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration and is applicable for a subsequent data transmission involving different sub-carrier spacing values.

15. The method of claim 13, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sum of UE throughputs for multiple TBs in the one or more subsequent data transmissions.

16. The method of claim 15, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable for subsequent data transmissions that are not using redundancy version zero.

17. The method of claim 15, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable regardless of a redundancy version used by the one or more subsequent data transmissions.

18. The method of claim 1, wherein determining whether to attempt to decode the subsequent data transmission of the one or more subsequent data transmissions comprises:

determining whether the UE is required to decode the subsequent data transmission of the one or more subsequent data transmissions.

19. The method of claim 18, wherein determining whether the UE is required to decode the subsequent data transmission of the one or more subsequent data transmissions is based at least in part on whether an effective UE throughput of at least the one or more subsequent data transmissions exceeds the predetermined decoding throughput threshold.

20. An apparatus for wireless communication at a user equipment (UE), 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:

receive, from a base station, a data transmission including a transport block (TB);

attempt to decode the data transmission;

transmit a feedback message to the base station indicating that at least a portion of the data transmission including the TB was unsuccessfully decoded;

receive, from the base station, one or more subsequent data transmissions of at least the TB; and

determine whether to attempt to decode a subsequent data transmission of the one or more subsequent data transmissions based at least in part on whether an effective UE throughput of the one or more subsequent ~~transmissions exceeds a predetermined decoding throughput threshold~~data transmissions exceeds a predetermined decoding throughput threshold, wherein the effective UE throughput is based at least in part on a circular buffer size, a number of scheduled codeblocks for the TB, and a subcarrier spacing factor, and wherein the predetermined decoding throughput threshold is based at least in part on a code rate associated with limited-buffer rate-matching and a transport block size associated with the limited-buffer rate-matching.

21. The apparatus of claim 20, wherein the instructions are further executable by the processor to cause the apparatus to:

decode the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions being less than the predetermined decoding throughput threshold.

22. The apparatus of claim 20, wherein the instructions are further executable by the processor to cause the apparatus to:

refrain from decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

23. The apparatus of claim 20, wherein the instructions are further executable by the processor to cause the apparatus to:

refrain from decoding any of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

24. The apparatus of claim 20, wherein the instructions are further executable by the processor to cause the apparatus to:

refrain from decoding the TB of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent transmissions exceeding the predetermined decoding throughput threshold.

25. The apparatus of claim 20, wherein the subsequent data transmission of the one or more subsequent data transmissions is a last-received subsequent transmission.

26. The apparatus of claim 20, wherein the predetermined decoding throughput threshold is based at least in part on a throughput for decoding a TB of a maximum TB size transmitted in a fourteen-symbol duration.

27. The apparatus of claim 20, wherein the predetermined decoding throughput threshold is based at least in part on a maximum TB size, number of codeblocks for transmitting a TB of the maximum TB size, a length of a codeblock-level cyclic redundancy check (CRC), a length of a transport-level CRC, a coding rate for transmitting a TB of the maximum TB size with limited-buffer rate-matching (LBRM) enabled, and a scaling factor.

28. The apparatus of claim 27, wherein the scaling factor is one.

29. The apparatus of claim 27, wherein the scaling factor is greater than one.

30. The apparatus of claim 20, wherein the effective UE throughput of the one or more subsequent data transmissions is based at least in part on a ~~number of transmitted codeblocks in the TB, a circular buffer size, and a~~ physical downlink shared channel (PDSCH) duration for the one or more subsequent data transmissions.

31. The apparatus of claim 30, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration but is not applicable for subsequent data transmissions involving different sub-carrier spacing values or back-to-back subsequent data transmissions whose PDSCH durations are of a mini-slot.

32. The apparatus of claim 30, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sub-carrier spacing of the subsequent data transmission and a minimum sub-carrier spacing of a component carrier carrying the one or more subsequent data transmissions.

33. The apparatus of claim 32, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH

duration is greater than a mini-slot duration and is applicable for a subsequent data transmission involving different sub-carrier spacing values.

34. The apparatus of claim 32, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sum of UE throughputs for multiple TBs in the one or more subsequent data transmissions.

35. The apparatus of claim 34, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable for subsequent transmissions that are not using redundancy version zero.

36. The apparatus of claim 34, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable regardless of a redundancy version used by the one or more subsequent data transmissions.

37. The apparatus of claim 20, wherein the instructions for determining whether to attempt to decode the subsequent data transmission of the one or more subsequent data transmissions are further executable by the processor to cause the apparatus to:

determine whether the UE is required to decode at least one or more of the one or more subsequent data transmissions.

38. The apparatus of claim 37, wherein the instructions for determining whether the UE is required to decode the subsequent data transmission of the one or more subsequent data transmissions are based at least in part on whether an effective UE throughput of the at least one or more of the one or more subsequent data transmissions exceeds the predetermined decoding throughput threshold.

39. An apparatus for wireless communication at a user equipment (UE), comprising:

means for receiving, from a base station, a data transmission including a transport block (TB);

means for attempting to decode the data transmission;

means for transmitting a feedback message to the base station indicating that at least a portion of the data transmission including the TB was unsuccessfully decoded;

means for receiving, from the base station, one or more subsequent data transmissions of at least the TB; and

means for determining whether to attempt to decode a subsequent data transmission of the one or more subsequent data transmissions based at least in part on

whether an effective UE throughput of the one or more subsequent data transmissions exceeds a predetermined decoding throughput threshold, wherein the effective UE throughput is based at least in part on a circular buffer size, a number of scheduled codeblocks for the TB, and a subcarrier spacing factor, and wherein the predetermined decoding throughput threshold is based at least in part on a code rate associated with limited-buffer rate-matching and a transport block size associated with the limited-buffer rate-matching.

40. The apparatus of claim 39, further comprising:

means for decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions being less than the predetermined decoding throughput threshold.

41. The apparatus of claim 39, further comprising:

means for refraining from decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

42. The apparatus of claim 39, further comprising:

means for refraining from decoding any of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

43. The apparatus of claim 39, further comprising:

means for refraining from decoding the TB of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

44. The apparatus of claim 39, wherein the subsequent data transmission of the one or more subsequent data transmissions is a last-received subsequent transmission.

45. The apparatus of claim 39, wherein the predetermined decoding throughput threshold is based at least in part on a throughput for decoding a TB of a maximum TB size transmitted in a fourteen-symbol duration.

46. The apparatus of claim 39, wherein the predetermined decoding throughput threshold is based at least in part on a maximum TB size, a number of codeblocks for transmitting a TB of the maximum TB size, a length of a codeblock-level cyclic redundancy check (CRC), a length of a transport-level CRC, a coding rate for transmitting a TB of the maximum TB size with limited-buffer rate-matching (LBRM) enabled, and a

scaling factor.

47. The apparatus of claim 46, wherein the scaling factor is one.

48. The apparatus of claim 46, wherein the scaling factor is greater than one.

49. The apparatus of claim 39, wherein the effective UE throughput of the one or more subsequent data transmissions is based at least in part on a ~~number of transmitted codeblocks in the TB, a circular buffer size, and a~~ physical downlink shared channel (PDSCH) duration for the one or more subsequent data transmissions.

50. The apparatus of claim 49, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration but is not applicable for subsequent data transmissions involving different sub-carrier spacing values or back-to-back subsequent data transmissions whose PDSCH durations are of a mini-slot.

51. The apparatus of claim 49, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sub-carrier spacing of the subsequent data transmission and a minimum sub-carrier spacing of a component carrier carrying the one or more subsequent data transmissions.

52. The apparatus of claim 51, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration and is applicable for a subsequent data transmission involving different sub-carrier spacing values.

53. The apparatus of claim 51, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sum of UE throughputs for multiple TBs in the one or more subsequent data transmissions.

54. The apparatus of claim 53, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable for subsequent data transmissions that are not using redundancy version zero.

55. The apparatus of claim 53, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable regardless of a redundancy version used by the one or more subsequent data transmissions.

56. The apparatus of claim 39, wherein the means for determining whether to attempt to decode the subsequent data transmission of the one or more subsequent data

transmissions comprise:

means for determining whether the UE is required to decode at least one or more of the one or more subsequent data transmissions.

57. The apparatus of claim 56, wherein the means for determining whether the UE is required to decode the subsequent data transmission of the one or more subsequent data transmissions are based at least in part on whether an effective UE throughput of the at least one or more of the one or more subsequent data transmissions exceeds the predetermined decoding throughput threshold.

58. 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:

receive, from a base station, a data transmission including a transport block (TB);

attempt to decode the data transmission;

transmit a feedback message to the base station indicating that at least a portion of the data transmission including the TB was unsuccessfully decoded;

receive, from the base station, one or more subsequent data transmissions of at least the TB; and

determine whether to attempt to decode a subsequent data transmission of the one or more subsequent data transmissions based at least in part on whether an effective UE throughput of the one or more subsequent ~~transmissions exceeds a predetermined decoding throughput threshold~~ data transmissions exceeds a predetermined decoding throughput threshold, wherein the effective UE throughput is based at least in part on a circular buffer size, a number of scheduled codeblocks for the TB, and a subcarrier spacing factor, and wherein the predetermined decoding throughput threshold is based at least in part on a code rate associated with limited-buffer rate-matching and a transport block size associated with the limited-buffer rate-matching.

59. The non-transitory computer-readable medium of claim 58, wherein the instructions are further executable to:

decode the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions being less than the predetermined decoding throughput threshold.

60. The non-transitory computer-readable medium of claim 58, wherein the instructions are further executable to:

refrain from decoding the subsequent data transmission based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

61. The non-transitory computer-readable medium of claim 58, wherein the instructions are further executable to:

refrain from decoding any of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

62. The non-transitory computer-readable medium of claim 58, wherein the instructions are further executable to:

refrain from decoding the TB of the one or more subsequent data transmissions based on the effective UE throughput of the one or more subsequent data transmissions exceeding the predetermined decoding throughput threshold.

63. The non-transitory computer-readable medium of claim 58, wherein the subsequent data transmission of the one or more subsequent data transmissions is a last-received subsequent data transmission.

64. The non-transitory computer-readable medium of claim 58, wherein the predetermined decoding throughput threshold is based at least in part on a throughput for decoding a TB of a maximum TB size transmitted in a fourteen-symbol duration.

65. The non-transitory computer-readable medium of claim 58, wherein the predetermined decoding throughput threshold is based at least in part on a maximum TB size, a number of codeblocks for transmitting a TB of the maximum TB size, a length of a codeblock-level cyclic redundancy check (CRC), a length of a transport-level CRC, a coding rate for transmitting a TB of the maximum TB size with limited-buffer rate-matching (LBRM) enabled, and a scaling factor.

66. The non-transitory computer-readable medium of claim 65, wherein the scaling factor is one.

67. The non-transitory computer-readable medium of claim 65, wherein the scaling factor is greater than one.

68. The non-transitory computer-readable medium of claim 58, wherein the effective UE throughput of the one or more subsequent data transmissions is based at least in part on a ~~number of transmitted codeblocks in the TB, a circular buffer size, and a~~ physical downlink shared channel (PDSCH) duration for the one or more subsequent data transmissions.

69. The non-transitory computer-readable medium of claim 68, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration but is not applicable for subsequent data transmissions involving different sub-carrier spacing values or back-to-back subsequent data transmissions whose PDSCH durations are of a mini-slot.

70. The non-transitory computer-readable medium of claim 68, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sub-carrier spacing of the subsequent data transmission and a minimum sub-carrier spacing of a component carrier carrying the one or more subsequent data transmissions.

71. The non-transitory computer-readable medium of claim 70, wherein the effective UE throughput of the subsequent data transmission is applicable for a subsequent data transmission whose PDSCH duration is greater than a mini-slot duration and is applicable for a subsequent data transmission involving different sub-carrier spacing values.

72. The non-transitory computer-readable medium of claim 70, wherein the effective UE throughput of the one or more subsequent data transmissions is further based on a sum of UE throughputs for multiple TBs in the one or more subsequent data transmissions.

73. The non-transitory computer-readable medium of claim 72, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable for subsequent data transmissions that are not using redundancy version zero.

74. The non-transitory computer-readable medium of claim 72, wherein the effective UE throughput of the one or more subsequent data transmissions is applicable regardless of a redundancy version used by the one or more subsequent data transmissions.

75. The non-transitory computer-readable medium of claim 58, wherein the instructions for determining whether to attempt to decode the subsequent data

transmission of the one or more subsequent data transmissions are further executable to:

determine whether the UE is required to decode at least one or more of the one or more subsequent data transmissions.

76. The non-transitory computer-readable medium of claim 75, wherein the instructions for determining whether the UE is required to decode the subsequent data transmission of the one or more subsequent data transmissions are based at least in part on whether an effective UE throughput of the at least one or more of the one or more subsequent data transmissions exceeds the predetermined decoding throughput threshold.