CLAIMS

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

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

attempting to decode the transmission;

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

receiving, from the base station, one or more subsequent transmissions including at least a retransmission of the TB;

determining an effective UE throughput as:

$$2^{\max(0,\mu-\mu')} \cdot \sum_{i \in S} \left\lfloor \frac{C_i'}{L_i} \right\rfloor \cdot x_i F_i \,,$$

where μ relates to a sub-carrier spacing (SCS) for the one or more subsequent transmissions for an active bandwidth part, μ' corresponds to an SCS of a bandwidth part across all configured bandwidth parts of a carrier that has a largest configured number of physical resource blocks, S is a set of TBs scheduled partially or fully in a fourteen consecutive symbol duration, C_i' is a number of scheduled codeblocks for an i^{th} TB, L_i is a physical downlink shared channel (PDSCH) duration for the i^{th} TB, x_i is a number of orthogonal frequency division multiplexing (OFDM) symbols used for transmission of the i^{th} TB, F_i is a maximum value of a $\min(k_{0,i}^{j} + E_i^{j}, N_{cb,i})$, where $k_{0,i}^{j}$ is a starting location of a redundancy value for a j^{th} transmission, E_i^{j} is a $\min(E_r)$ of scheduled code blocks for the j^{th} transmission, $N_{cb,i}$ is a circular buffer length, where j ranges from 0 to $J-1$, which is a current transmission for the i^{th} TB, and $\left\lfloor \frac{C_{i'}}{L_i} \right\rfloor$ is a floor function for the input of $\frac{C_{i'}}{L_i}$,

wherein the effective UE throughput is evaluated ending at a last symbol of a latest occurring PDSCH transmission; and

processing a subsequent transmission of the one or more subsequent transmissions based at least in part on whether the effective UE throughput exceeds a predetermined decoding throughput threshold.

2. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

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

3. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

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

4. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

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

5. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

refraining from decoding at least one TB of the subsequent transmission based on the effective UE throughput exceeding the predetermined decoding throughput threshold.

6. The method of claim 1, wherein the predetermined decoding throughput threshold (TP_{max}) is defined as:

$$TP_{max} = \frac{1}{R_{LBRM}} TBS_{LBRM},$$

where TBS_{LBRM} is a maximum TB size with limited buffer rate matching (LBRM) enabled, and where R_{LBRM} is a coding rate when transmitting a TB of the maximum TB size with LBRM enabled.

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

8. 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.

9. 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.

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

11. The method of claim 9, wherein the scaling factor is greater than one.

12. The method of claim 1, wherein the effective UE throughput is applicable for a subsequent transmission whose PDSCH duration is greater than a mini-slot duration but is not applicable for subsequent transmissions involving different sub-carrier spacing values or back-to-back subsequent transmissions whose PDSCH durations are of a mini-slot.

13. The method of claim 1, wherein the effective UE throughput is further based on a sub-carrier spacing of the one or more subsequent transmissions and a minimum sub-carrier spacing of a component carrier carrying the one or more subsequent transmissions.

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

15. The method of claim 13, wherein the effective UE throughput is applicable for subsequent transmissions that are not using a redundancy version zero, the redundancy version zero indicating the subsequent transmissions begin at a bit zero of an encoded information message.

16. The method of claim 13, wherein the effective UE throughput is applicable regardless of a redundancy version used by the one or more subsequent transmissions, the

redundancy version indicating a location in an encoded information message where the one or more subsequent transmissions begin.

17. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

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

18. The method of claim 17, wherein determining whether the UE is required to decode the subsequent transmission of the one or more subsequent transmissions is based at least in part on whether the effective UE throughput exceeds the predetermined decoding throughput threshold.

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

a processor,

memory coupled 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 transmission including a transport block (TB);

attempt to decode the transmission;

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

receive, from the base station, one or more subsequent transmissions including at least a retransmission of the TB;

determine an effective UE throughput throughput as:

$$2^{\max(0,\mu-\mu')} \cdot \sum_{i \in S} \left\lfloor \frac{C_i'}{L_i} \right\rfloor \cdot x_i F_i \,,$$

where μ relates to a sub-carrier spacing (SCS) for the one or more subsequent transmissions for an active bandwidth part, μ' corresponds to an SCS of a bandwidth part across all configured bandwidth parts of a carrier that has a largest configured number of physical

resource blocks, S is a set of TBs scheduled partially or fully in a fourteen consecutive symbol duration, C_i' is a number of scheduled codeblocks for an i^{th} TB, L_i is a physical downlink shared channel (PDSCH) duration for the i^{th} TB, x_i is a number of orthogonal frequency division multiplexing (OFDM) symbols used for transmission of the i^{th} TB, F_i is a maximum value of a $\min(k_{0,i}^{j} + E_i^j, N_{cb,i})$, where $k_{0,i}^{j}$ is a starting location of a redundancy value for a j^{th} transmission, E_i^j is a $\min(E_r)$ of scheduled code blocks for the j^{th} transmission, $N_{cb,i}$ is a circular buffer length, where j ranges from 0 to $J-1$, which is a current transmission for the i^{th} TB, and $\left\lfloor \frac{C_{i'}}{L_i} \right\rfloor$ is a floor function for the input of $\frac{C_{i'}}{L_i}$,

wherein the effective UE throughput is evaluated ending at a last symbol of the latest occurring PDSCH transmission; and

process a subsequent transmission of the one or more subsequent transmissions based at least in part on whether the effective UE throughput exceeds a predetermined decoding throughput threshold.

20. The apparatus of claim 19, wherein the instructions to process the subsequent transmission of the one or more subsequent transmissions are further executable by the processor to cause the apparatus to:

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

21. The apparatus of claim 19, wherein the instructions to process the subsequent transmission of the one or more subsequent transmissions are further executable by the processor to cause the apparatus to:

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

22. The apparatus of claim 19, wherein the predetermined decoding throughput threshold (TP_{max}) is defined as:

$$TP_{max} = \frac{1}{R_{LBRM}} TBS_{LBRM},$$

where TBS_{LBRM} is a maximum TB size with limited buffer rate matching (LBRM) enabled, and where R_{LBRM} is a coding rate when transmitting a TB of the maximum TB size with LBRM enabled.

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

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

means for attempting to decode the transmission;

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

means for receiving, from the base station, one or more subsequent transmissions including at least a retransmission of the TB;

means for determining an effective UE throughput as:

$$2^{\max(0,\mu-\mu')} \cdot \sum_{i \in S} \left\lfloor \frac{C_i'}{L_i} \right\rfloor \cdot x_i F_i \,,$$

where μ relates to a sub-carrier spacing (SCS) for the one or more subsequent transmissions for an active bandwidth part, μ' corresponds to an SCS of a bandwidth part across all configured bandwidth parts of a carrier that has a largest configured number of physical resource blocks, S is a set of TBs scheduled partially or fully in a fourteen consecutive symbol duration, C_i' is a number of scheduled codeblocks for an i^{th} TB, L_i is a physical downlink shared channel (PDSCH) duration for the i^{th} TB, x_i is a number of orthogonal frequency division multiplexing (OFDM) symbols used for transmission of the i^{th} TB, F_i is a maximum value of a $\min(k_{0,i}^j + E_i^j, N_{cb,i})$, where $k_{0,i}^j$ is a starting location of a redundancy value for a j^{th} transmission, E_i^j is a $\min(E_r)$ of scheduled code blocks for the j^{th} transmission, $N_{cb,i}$ is a circular buffer length, where j ranges from 0 to $J-1$, which is a current transmission for the i^{th} TB, and $\left\lfloor \frac{C_i'}{L_i} \right\rfloor$ is a floor function for the input of $\frac{C_i'}{L_i}$,

wherein the effective UE throughput is evaluated ending at a last symbol of the latest occurring PDSCH transmission; and

means for processing a subsequent transmission of the one or more subsequent transmissions based at least in part on whether the effective UE throughput of the one or more subsequent transmissions exceeds a predetermined decoding throughput threshold.

24. 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 transmission including a transport block (TB);

attempt to decode the transmission;

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

receive, from the base station, one or more subsequent transmissions including at least a retransmission of the TB;

determine an effective UE throughput as:

$$2^{\max(0,\mu-\mu')} \cdot \sum_{i \in S} \left\lfloor \frac{C_i'}{L_i} \right\rfloor \cdot x_i F_i \,,$$

where μ relates to a sub-carrier spacing (SCS) for the one or more subsequent transmissions for an active bandwidth part, μ' corresponds to an SCS of a bandwidth part across all configured bandwidth parts of a carrier that has a largest configured number of physical resource blocks, S is a set of TBs scheduled partially or fully in a fourteen consecutive symbol duration, C_i' is a number of scheduled codeblocks for an i^{th} TB, L_i is a physical downlink shared channel (PDSCH) duration for the i^{th} TB, x_i is a number of orthogonal frequency division multiplexing (OFDM) symbols used for transmission of the i^{th} TB, F_i is a maximum value of a $\min(k_{0,i}^j + E_i^j, N_{cb,i})$, where $k_{0,i}^j$ is a starting location of a redundancy value for a j^{th} transmission, E_i^j is a $\min(E_r)$ of scheduled code blocks for the j^{th} transmission, $N_{cb,i}$ is a circular buffer length, where j ranges from 0 to $J-1$, which is a current transmission for the i^{th} TB, and $\left\lfloor \frac{C_{i'}}{L_i} \right\rfloor$ is a floor function for the input of $\frac{C_{i'}}{L_i}$,

wherein the effective UE throughput is evaluated ending at a last symbol of the latest occurring PDSCH transmission; and

process a subsequent transmission of the one or more subsequent transmissions

based at least in part on whether the effective UE throughput exceeds a predetermined decoding throughput threshold.

25. The method of claim 1, wherein processing the subsequent transmission of the one or more subsequent transmissions comprises:

refraining from decoding at least one TB associated with the subsequent transmission, and

sending a NACK for the at least one TB to the base station.

26. The apparatus of claim 19, wherein the instructions to process the subsequent transmission of the one or more subsequent transmissions are further executable by the processor to cause the apparatus to:

refrain from decoding at least one TB associated with the subsequent transmission, and

send a NACK for the at least one TB to the base station.

27. The apparatus of claim 23, wherein the means for processing a subsequent transmission of the one or more subsequent transmissions are configured to:

refrain from decoding at least one TB associated with the subsequent transmission, and

send a NACK for the at least one TB to the base station.