CLAIMS

1. A method at a receiver node, comprising:

receiving a data transmission from a transmitter node, the data transmission including transmission of an associated reference signal;

determining, from the reference signal, a transmission-specific channel quality indicator (CQI) associated with the received data transmission; and

transmitting feedback to the transmitter node indicating the transmission-specific CQI.

2. The method of claim 1, wherein the reference signal is a demodulation reference signal (DMRS).

3. The method of claim 1, wherein the data transmission includes one or more code blocks, the method further comprising performing a decoding operation to decode the one or more code blocks;

the method further comprising one of:

in response to successful decoding of the one or more code blocks, the feedback indicating the transmission-specific CQI represents a positive acknowledgement (ACK) indicating decoding was successful; or

in response to unsuccessful decoding of at least one of the one or more code blocks, the feedback indicating the transmission-specific CQI represents a negative acknowledgement (NACK) indicating decoding was not successful.

4. The method of claim 1, wherein the feedback indicating the transmission-specific CQI is transmitted separately from acknowledgement feedback.

5. The method of claim 1, wherein the transmission-specific CQI indicates a highest supported modulation and coding scheme (MCS) that can be supported by a current channel quality measured from the reference signal, and that provides a block error rate (BLER) below a defined threshold.

6. The method of claim 5, wherein the transmission-specific CQI is determined by:

identifying, from a defined CQI table, a CQI index value corresponding to the highest supported MCS, wherein the identified CQI index value is used as the transmission-specific CQI.

7. The method of claim 6, wherein a reserved CQI index value of the defined CQI table is defined to indicate ACK.

8. The method of claim 1, wherein determining the transmission-specific CQI comprises:

determining a differential CQI that represents a difference in channel quality between a current channel quality measured from the reference signal of the received data transmission and a previously reported channel quality, wherein the differential CQI is used as the transmission-specific CQI.

9. The method of claim 8, wherein the differential CQI is indicated as a difference between a first MCS used for the received data transmission, the first MCS being based on the previously reported channel quality, and a second MCS that is a highest supported MCS that can be supported by the current channel quality.

10. The method of claim 1, wherein the data transmission is a retransmission comprising one or more retransmitted code blocks or one or more cross-block check blocks generated from bits selected from across one or more code blocks of the data transmission.

11. The method of claim 1, further comprising:

subsequent to transmitting the feedback to the transmitter node, receiving a retransmission from the transmitter node, wherein the retransmission uses at least one retransmission parameter different from a corresponding parameter used for the data transmission.

12. A method at a transmitter node, comprising:

sending a data transmission to a receiver node, the data transmission including one or more code blocks and transmission of an associated reference signal;

receiving, from the receiver node, feedback indicating a transmission-specific channel quality indicator (CQI) associated with the received data transmission; and

sending a retransmission to the receiver node, using retransmission parameters determined based on the received feedback.

13. The method of claim 12, wherein the reference signal is a demodulation reference signal (DMRS).

14. The method of claim 12, wherein the feedback indicating the transmission-specific CQI represents a negative acknowledgement (NACK) indicating decoding of the one or more code blocks at the receiver node was not successful.

15. The method of claim 12, wherein the feedback indicating the transmission-specific CQI is transmitted separately from NACK feedback.

16. The method of claim 12, further comprising determining at least one retransmission parameter, the at least one retransmission parameter being one of:

a retransmission rate;

a modulation and coding scheme (MCS);

a power level;

a beamforming parameter;

a number of retransmitted code blocks; or

a number of check blocks.

17. The method of claim 12, wherein the transmission-specific CQI corresponds to a suggested retransmission rate, and wherein the retransmission is performed using the suggested retransmission rate.

18. The method of claim 12, wherein the retransmission comprises one or more retransmitted code blocks or one or more cross-block check blocks generated from bits selected from across the one or more code blocks of the data transmission.

19. A method at a receiver node, comprising:

receiving a data transmission of one or more code blocks from a transmitter node;

performing a decoding operation to decode the one or more code blocks;

determining channel coding-related feedback based on the decoding operation; and

transmitting the channel coding-related feedback to the transmitter node.

20. The method of claim 19, wherein the channel coding-related feedback is determined based on hard decision output, from a decoder at the receiver node, generated from the decoding operation.

21. The method of claim 19, wherein the channel coding-related feedback is determined based on soft output, from a decoder at the receiver node, generated from the decoding operation.

22. The method of claim 19, wherein the channel coding-related feedback is determined based on decoding convergence behaviour of a decoder at the receiver node during the decoding operation.

23. An apparatus comprising:

a processing unit; and

a non-transitory memory including instructions that, when executed by the processing unit, cause the apparatus to perform the method of any one of claims 1 to 22.

24. A non-transitory computer readable medium having machine-executable instructions stored thereon, wherein the instructions, when executed by a processing unit of an apparatus, cause the apparatus to perform the method of any one of claims 1 to 22.