CLAIMS

1. A method for wireless communication by a base station (BS), comprising:

receiving a channel quality indicator (CQI) from a user equipment (UE);

retrieving parameters from a modulation and coding scheme (MCS) table using the CQI, wherein the table has entries corresponding to different spectral efficiency (SE) values selected to allow the BS to efficiently allocate resources at low SE values to achieve at least a target block error rate (BLER); and

sending a transmission to the UE based on the retrieved parameters.

2. The method of claim 1, wherein the MCS table has an entry corresponding to a minimum SE value included in a CQI table used by the UE to select the CQI.

3. The method of claim 1, wherein the SE values are selected so that steps in signal to noise ratio (SNR) at the target BLER are smaller for low SE values.

4. The method of claim 1, wherein the SE values are selected so that a difference in allocated resource blocks (RBs) between adjacent entries in the MCS table is within a threshold limit.

5. The method of claim 1, wherein:

the UE is configured to support a service of a first type; and

the SE values are determined based on an interpolation of SE values from an MCS table used for UEs configured to support a service of a second type.

6. The method of claim 1, wherein:

the UE is configured to support a service of a first type; and

the SE values are determined based on an interpolation of performance metrics from an MCS table used for UEs configured to support a service of a second type.

7. The method of claim 1, further comprising determining a rank indicator (RI) value, based at least in part on the received CQI.

8. The method of claim 7, wherein:

a first set of one or more CQI values maps to a first set of RI values; and

a second set of one or more CQI values maps to a second set of RI values.

9. The method of claim 8, wherein:

the first set of CQI values comprise CQI values less than or equal to a threshold value; and

the second set of CQI values comprise CQI values greater than the threshold value.

10. The method of claim 8, wherein the CQI value determines a number of bits used to convey the RI value.

11. A method for wireless communication by a user equipment (UE), comprising:

determining a channel quality indicator (CQI) based on measurement of signals from a base station;

determining a rank indicator (RI) value; and

signaling the CQI to the base station, wherein the CQI value is used to indicate the RI value.

12. The method of claim 11, wherein:

a first set of one or more CQI values maps to a first set of RI values; and

a second set of one or more CQI values maps to a second set of RI values.

13. The method of claim 12, wherein:

the first set of CQI values comprise CQI values less than or equal to a threshold value; and

the second set of CQI values comprise CQI values greater than the threshold value.

14. The method of claim 11, wherein the CQI value determines a number of bits used to convey the RI value.

15. An apparatus for wireless communication, comprising:

an interface configured to:

obtain a channel quality indicator (CQI) from a user equipment (UE), and

send a transmission to the UE based on retrieved parameters; and

a processing system configured to retrieve parameters from a modulation and coding scheme (MCS) table using the CQI, wherein the table has entries corresponding to different spectral efficiency (SE) values selected to allow the BS to efficiently allocate resources at low SE values to achieve at least a target block error rate (BLER).

16. An apparatus for wireless communication, comprising:

a processing system configured to:

determine a channel quality indicator (CQI) based on measurement of signals from a base station, and

determine a rank indicator (RI) value; and

an interface configured to signal the CQI to the base station, wherein the CQI value is used to indicate the RI value.

17. An apparatus for wireless communication, comprising:

means for receiving a channel quality indicator (CQI) from a user equipment (UE);

means for retrieving parameters from a modulation and coding scheme (MCS) table using the CQI, wherein the table has entries corresponding to different spectral efficiency (SE) values selected to allow the BS to efficiently allocate resources at low SE values to achieve at least a target block error rate (BLER); and

means for sending a transmission to the UE based on the retrieved parameters.

18. An apparatus for wireless communication, comprising:

means for determining a channel quality indicator (CQI) based on measurement of signals from a base station;

means for determining a rank indicator (RI) value; and

means for signaling the CQI to the base station, wherein the CQI value is used to indicate the RI value.

19. A non-transitory computer readable medium for wireless communication, comprising code that, when executed by at least one processor, causes the at least one processor to:

obtain a channel quality indicator (CQI) from a user equipment (UE);

retrieve parameters from a modulation and coding scheme (MCS) table using the CQI, wherein the table has entries corresponding to different spectral efficiency (SE) values selected to allow the BS to efficiently allocate resources at low SE values to achieve at least a target block error rate (BLER); and

send a transmission to the UE based on the retrieved parameters and the RI value.

20. A non-transitory computer readable medium for wireless communication, comprising code that, when executed by at least one processor, causes the at least one processor to:

determine a channel quality indicator (CQI) based on measurement of signals from a base station;

determine a rank indicator (RI) value; and

signal the CQI to the base station, wherein the CQI value is used to indicate the RI value.