CLAIMS

1. A method for wireless communications, the method comprising:

generating (310; 1505) a first set of bits indicating a plurality of transmission configuration indicator states for communication with a user equipment, UE, (115);

generating (310; 1510) a second set of bits indicating a set of antenna ports and a multi-transmission/reception point scheme from a set of possible schemes for multi-transmission/reception point operation based at least in part on the first set of bits indicating the plurality of transmission configuration indicator states;

selecting, from a plurality of lookup tables, a lookup table mapping both the set of antenna ports and the multi-transmission/reception point scheme to the second set of bits, wherein the generating the second set of bits is based at least in part on the selecting; and

transmitting (315; 1515), to the UE (115), a downlink control information message comprising an indication of the first set of bits and the second set of bits.

2. The method of claim 1, further comprising:

configuring the lookup table, the plurality of lookup tables, or a combination thereof; and

transmitting, to the UE (115), an indication of the lookup table, the plurality of lookup tables, or a combination thereof.

3. The method of claim 1, wherein the second set of bits further indicates a modulation order for at least one transmission configuration indicator state of the plurality of transmission configuration indicator states.

4. The method of claim 1, wherein the second set of bits further indicates a redundancy version for a transport block for at least one transmission configuration indicator state of the plurality of transmission configuration indicator states.

5. The method of claim 1, wherein the multi-transmission/reception point scheme comprises a joint spatial division multiplexing scheme, a separate spatial division multiplexing scheme, a joint frequency division multiplexing scheme, a separate frequency division multiplexing scheme, a joint time division multiplexing scheme, a separate time division multiplexing scheme, or a combination thereof.

6. The method of claim 1, wherein the second set of bits comprises a same number of bits as a set of bits indicating a set of antenna ports for single transmission/reception point operation.

7. The method of claim 1, wherein a lookup table mapping both the set of antenna ports and the multi-transmission/reception point scheme to the second set of bits is pre-configured in memory.

8. The method of claim 1, wherein the multi-transmission/reception point operation comprises communication with the UE (115) by a plurality of transmission/reception points at a base station (105) or distributed across a plurality of base stations (105).

9. A method for wireless communications at a user equipment, UE, (115), the method comprising:

receiving (315; 1605), from a base station (105), a downlink control information message comprising an indication of a first set of bits and a second set of bits;

identifying (320; 1610), using the first set of bits, a plurality of transmission configuration indicator states for communication with the base station (105);

identifying (325; 1615), using the second set of bits, a set of antenna ports and a multi-transmission/reception point scheme from a set of possible schemes for multi-transmission/reception point operation based at least in part on the identifying the plurality of transmission configuration indicator states; and

selecting (330), from a plurality of lookup tables, a lookup table mapping the second set of bits to both the set of antenna ports and the multi-transmission/reception point scheme, wherein the identifying the set of antenna ports and the multi-transmission/reception point scheme is based at least in part on the selecting.

10. The method of claim 9, further comprising:

identifying, using the second set of bits, a modulation order for at least one transmission configuration indicator state of the plurality of transmission configuration indicator states.

11. The method of claim 9, further comprising:

identifying, using the second set of bits, a redundancy version for a transport block for at least one transmission configuration indicator state of the plurality of transmission configuration indicator states.

12. An apparatus for wireless communications, the apparatus comprising:

means for generating (310; 1505) a first set of bits indicating a plurality of transmission configuration indicator states for communication with a user equipment, UE (115);

means for generating (310; 1510) a second set of bits indicating a set of antenna ports and a multi-transmission/reception point scheme from a set of possible schemes for multi-transmission/reception point operation based at least in part on the first set of bits indicating the plurality of transmission configuration indicator states;

selecting, from a plurality of lookup tables, a lookup table mapping both the set of antenna ports and the multi-transmission/reception point scheme to the second set of bits, wherein the generating the second set of bits is based at least in part on the selecting; and

means for transmitting (315; 1515), to the UE (115), a downlink control information message comprising an indication of the first set of bits and the second set of bits.

13. An apparatus for wireless communications at a user equipment, UE, (115), the apparatus comprising:

means for receiving (315; 1605), from a base station (105), a downlink control information message comprising an indication of a first set of bits and a second set of bits;

means for identifying (320; 1610), using the first set of bits, a plurality of transmission configuration indicator states for communication with the base station (105);

means for identifying (325; 1615), using the second set of bits, a set of antenna ports and a multi-transmission/reception point scheme from a set of possible schemes for multi-transmission/reception point operation based at least in part on the identifying the plurality of transmission configuration indicator states; and

selecting (330), from a plurality of lookup tables, a lookup table mapping the second set of bits to both the set of antenna ports and the multi-transmission/reception point scheme, wherein the identifying the set of antenna ports and the multi-transmission/reception point scheme is based at least in part on the selecting.