~~**WHAT IS CLAIMED IS:**~~

CLAIMS

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

receiving a first configuration message and a second configuration message, wherein: the first configuration message, in part, configures the UE to communicate coordinated transmissions with a plurality of transmission reception points (TRPs) using a coordinated transmission mode~~;~~, the second configuration message includes an indication of a first hybrid automatic repeated request acknowledgment (HARQ-ACK) feedback mode or a second HARQ-ACK feedback mode, and the first configuration message and the second configuration message are radio resource control (RRC) messages; receiving one or more physical downlink shared channel (PDSCH) transmissions from the TRPs in accordance with the coordinated transmission mode;

selecting a ~~hybrid automatic repeated request (HARQ) Acknowledgment (~~HARQ-ACK~~)~~ feedback mode, from at least the first HARQ-ACK feedback and second HARQ-ACK feedback ~~modes~~mode, based ~~in part~~ on the ~~coordinated transmission mode~~indication in the second configuration message; and

transmitting HARQ-ACK feedback for the at least one or more PDSCH transmissions to at least one of the plurality of TRPs using the selected HARQ-ACK feedback mode.

2.~~————~~ The method of claim 1, wherein:

~~————the configuration message is a radio resource control (RRC) message; and~~

~~————selecting the HARQ-ACK feedback mode is based in part on information contained in the RRC message.~~

~~3. The method of claim 1, wherein:~~

~~————~~ the first HARQ-ACK feedback mode comprises a joint HARQ-ACK feedback mode; and

~~———~~the second HARQ-ACK feedback mode comprises a separate HARQ-ACK feedback mode.

~~4.~~~~————~~3. The method of claim ~~3,~~2, further comprising:

~~———~~generating HARQ-ACK feedback using a joint codebook when the first HARQ-ACK feedback mode is selected; and transmitting the generated HARQ-ACK feedback to the plurality of TRPs.

5. 4. The method of claim 3,2, further comprising:

generating a first HARQ-ACK feedback from a first codebook and a second HARQ-ACK feedback from a second codebook when the second HARQ-ACK feedback mode is selected.

6. 5. The method of claim 54, further comprising:

transmitting the first HARQ-ACK feedback to a first TRP, and the second HARQ-ACK feedback to a second TRP.

7. 6. The method of claim 54, wherein the first codebook is a semi-static codebook of a first size and the second codebook is a semi-static codebook of a second size that is different from the first size.

8. 7. The method of claim 1, wherein the coordinated transmission mode is one of:

a first mode comprising a physical downlink control channel (PDCCH) and a PDSCH, wherein the PDSCH comprises different spatial layers from different TRPs; or

a second mode comprising a first PDCCH, a second PDCCH, a first PDSCH and a second PDSCH, wherein the first PDSCH is transmitted from a first TRP, and the second PDSCH is transmitted from a second TRP, and the first PDSCH and the second PDSCH carry different transport blocks (TBs).

9. 8. The method of claim 8, comprising:

7, wherein: when the coordinated transmission mode is one of a first set of transmission modes including the first mode, selecting the HARQ feedback mode comprises selecting the first HARQ-ACK feedback mode; and

when the coordinated transmission mode is one of a second set of transmission modes including the second mode, selecting the HARQ feedback mode comprises selecting comprises selecting the first HARQ-ACK feedback mode or the second HARQ-ACK feedback mode based at least in part on a type of signalingone or more parameters.

10. 9. The method of claim 98, wherein:

the signaling indicatesone or more parameters related toindicate a backhaul condition; and

when the parameters indicate a high performance backhaul condition, selecting the HARQ feedback mode comprises selecting the first HARQ-ACK feedback mode, and when the one or more parameters indicate a low performance backhaul condition, selecting the HARQ feedback mode comprises selecting the second HARQ-ACK feedback mode.

11. 10. The method of claim 1, wherein the configuration message in part indicates at least one downlink control information (DCI) indicative of a first codebook and the method comprises: receiving at least one DCI from at least one of the plurality of TRPs; selecting the first codebook based on the at least one DCI; generating HARQ-ACK feedback from the first codebook; and transmitting the HARQ-ACK feedback to the plurality of TRPs.

~~receiving at least one DCI from at least one of the plurality of TRPs;~~

~~selecting the first codebook based on the at least one DCI;~~

~~generating HARQ-ACK feedback from the first codebook; and~~

~~transmitting the HARQ-ACK feedback to the plurality of TRPs.~~

~~12.~~ 11. The method of claim ~~11~~10, wherein the at least one DCI is indicative of ~~a~~the first HARQ-ACK feedback mode or ~~a~~the second HARQ-ACK feedback mode.

~~13.~~ 12. The method of claim ~~12, comprising:~~

11, wherein: when the at least one DCI is indicative of a first codebook and the first codebook is indicative of the second HARQ-ACK feedback mode, selecting the HARQ feedback mode comprises selecting the second HARQ-ACK feedback mode.

~~14.~~ 13. The method of claim ~~11,~~10, further comprising:

when two or more of the at least one DCI contain different information, selecting one of the DCIs based on a DCI order, DCI aggregation level, or control resource set identification (CORESET ID~~); and~~), wherein transmitting HARQ-ACK feedback is based on information contained in the selected DCI.

~~transmitting HARQ-ACK feedback based on information contained in the selected DCI.~~

~~15.~~ 14. The method of claim 1, further comprising:

selecting a physical uplink control channel (PUCCH) resource based in part on an index of one or more control channel elements (CCE) in one or more physical downlink control channel (PDCCHs~~); and~~), wherein transmitting the HARQ-ACK feedback comprises transmitting the HARQ-ACK feedback on the selected PUCCH resource.

~~transmitting the HARQ-ACK feedback on the selected PUCCH resource.~~

~~16.~~ 15. A method for wireless communication by a network entity, comprising:

sending a first configuration message and a second configuration message to a user equipment (UE), wherein: the first configuration message, in part, configures the UE to communicate coordinated transmissions with a plurality of transmission reception points (TRPs) using a coordinated transmission mode~~;~~, the second configuration message includes an indication of a first hybrid automatic repeated request acknowledgment (HARQ-ACK) feedback mode or a second HARQ-ACK feedback mode, and the first configuration message and the second configuration message are radio resource control (RRC) messages; transmitting one or more physical downlink shared channel (PDSCH) transmissions from the plurality of TRPs in accordance with the coordinated transmission mode;

determining a ~~hybrid automatic repeated request (HARQ) Acknowledgment (~~HARQ-ACK~~)~~ feedback mode, selected from at least the first HARQ-ACK feedback mode and second HARQ-ACK feedback ~~modes~~mode, based ~~in part~~ on the ~~coordinated transmission mode~~indication in the second configuration message; and

receiving HARQ-ACK feedback for the at least one or more PDSCH transmissions to at least one of the plurality of TRPs using the determined HARQ-ACK feedback mode.

~~17.~~ 16. The method of claim ~~16~~15, wherein:

~~the configuration message is a radio resource control (RRC) message; and~~

~~determining the HARQ-ACK feedback mode is based in part on information contained in the RRC message.~~

~~18. The method of claim 16, wherein:~~

the first HARQ-ACK feedback mode comprises a joint HARQ-ACK feedback mode; and

the second HARQ-ACK feedback mode comprises a separate HARQ-ACK feedback mode.

~~19.~~ 17. The method of claim ~~18~~16, wherein~~:~~

the HARQ-ACK feedback is ~~generated by the UE using~~based a joint codebook when the first HARQ-ACK feedback mode is selected.

~~20.~~ 18. The method of claim ~~16~~15, wherein the coordinated transmission mode is one of:

a first mode comprising a physical downlink control channel (PDCCH) and a PDSCH, wherein the PDSCH comprises different spatial layers from different TRPs; or

a second mode comprising a first PDCCH, a second PDCCH, a first PDSCH and a second PDSCH, wherein the first PDSCH is transmitted from a first TRP, and the second PDSCH is transmitted from a second TRP, and the first PDSCH and the second PDSCH carry different transport blocks (TBs).

~~21.~~ 19. The method of claim ~~20, comprising:~~

18, wherein: when the coordinated transmission mode is one of a first set of transmission modes including the first mode, determining the HARQ-ACK feedback mode comprises selecting the first HARQ-ACK feedback mode; and

when the coordinated transmission mode is one of a second set of transmission modes including the second mode, determining the HARQ-ACK feedback mode comprises selecting the first HARQ-ACK feedback mode or the second HARQ-ACK feedback mode based at least in part on ~~a type of signaling~~one or more parameters provided to the UE.

~~22.~~ 20. The method of claim ~~21~~19, wherein:

the ~~signaling indicates~~one or more parameters ~~related to~~indicate a backhaul condition; and

when the parameters indicate a high performance backhaul condition, determining the HARQ-ACK feedback mode comprises selecting the first HARQ-ACK feedback mode, and when the parameters indicate a low performance backhaul condition, determining the HARQ-ACK feedback mode comprises selecting the second HARQ-ACK feedback mode.

~~23.~~ 21. The method of claim ~~16~~15, wherein~~:~~

the configuration message in part indicates at least one downlink control information (DCI) indicative of a first codebook.

~~24.~~ 22. The method of claim ~~23~~21, wherein the at least one DCI is indicative of ~~a~~the first HARQ-ACK feedback mode or ~~a~~the second HARQ-ACK feedback mode.

~~25.~~ 23. The method of claim ~~24, comprising:~~

22, wherein: when the at least one DCI is indicative of a first codebook and the first codebook is indicative of the second HARQ-ACK feedback mode, determining the HARQ-ACK feedback mode comprises the second HARQ-ACK feedback mode.

~~26.~~ 24. The method of claim ~~16,~~15, further comprising:

determining a physical uplink control channel (PUCCH) resource based in part on an index of one or more control channel elements (CCE) in one or more physical downlink control channels (PDCCHs); and monitoring the determined PUCCH resource for the HARQ-ACK feedback.

~~27.~~ 25. An apparatus for wireless communication, comprising:

~~———~~ at least one processor coupled with a memory and configured to:

receive a first configuration message and a second configuration message, wherein: the first configuration message, in part, configures a user equipment (UE) to communicate coordinated transmissions with a plurality of transmission reception points (TRPs) using a coordinated transmission mode~~;~~, the second configuration message includes an indication of a first hybrid automatic repeated request acknowledgment (HARQ-ACK) feedback mode or a second HARQ-ACK feedback mode, and the first configuration message and the second configuration message are radio resource control (RRC) messages; receive one or more physical downlink shared channel (PDSCH) transmissions from the plurality of TRPs in accordance with the coordinated transmission mode;

select a ~~hybrid automatic repeated request (HARQ) Acknowledgment (~~HARQ-ACK~~)~~ feedback mode, from at least first HARQ-ACK feedback mode and the second HARQ-ACK feedback ~~modes~~mode, based ~~in part~~ on the ~~coordinated transmission mode~~indication in the second configuration message; and

transmit HARQ-ACK feedback for the at least one or more PDSCH transmissions to at least one of the plurality of TRPs using the selected HARQ-ACK feedback mode.

~~28.~~ 26. The apparatus of claim ~~27~~25, wherein:

~~the configuration message is a radio resource control (RRC) message; and~~

~~selecting the HARQ-ACK feedback mode is based in part on information contained in the RRC message.~~

~~29. The apparatus of claim 27, wherein:~~

~~———~~ the first HARQ-ACK feedback mode comprises a joint HARQ-ACK feedback mode; and

~~———~~the second HARQ-ACK feedback mode comprises a separate HARQ-ACK feedback mode.

~~30.~~ 27. An apparatus for wireless communication, comprising:

~~———~~ at least one processor coupled with a memory and configured to:

send a first configuration message and a second configuration message to a user equipment (UE), wherein: the first configuration message, in part, configures the UE to communicate coordinated transmissions with a plurality of transmission reception points (TRPs) using a coordinated transmission mode~~;~~, the second configuration message includes an indication of a first hybrid automatic repeated request acknowledgment (HARQ-ACK)

feedback mode or a second HARQ-ACK feedback mode, and the first configuration message and the second configuration message are radio resource control (RRC) messages; transmit one or more physical downlink shared channel (PDSCH) transmissions from the plurality of TRPs in accordance with the coordinated transmission mode;

determine a ~~hybrid automatic repeated request (HARQ) Acknowledgment (~~HARQ-ACK~~)~~ feedback mode, selected from at least a first HARQ-ACK feedback mode and a second HARQ-ACK feedback ~~modes~~mode, based ~~in part~~ on the ~~coordinated transmission mode~~indication in the second configuration message; and

receive HARQ-ACK feedback for the at least one or more PDSCH transmissions to at least one of the plurality of TRPs using the determined HARQ-ACK feedback mode.