CLAIMS

1. A method of wireless communication performed by a user equipment (UE), comprising:

determining a plurality of hybrid automatic repeat request (HARQ) feedback for a plurality of sidelink communications;

identifying, at least a subset of HARQ feedback from the plurality of HARQ feedback and based at least in part on one or more parameters; and

transmitting, on a sidelink, the at least the subset of HARQ feedback in a HARQ feedback occasion, wherein the UE multiplexes HARQ feedback in the HARQ feedback occasion.

2. The method of claim 1, wherein the one or more parameters comprise at least one of:

a priority associated with the plurality of sidelink communications,

a distance between the UE and one or more other UEs,

one or more signal measurements associated with the one or more UEs,

a frequency-domain location of the plurality of HARQ feedback, or

a transmission mode associated with the plurality of sidelink communications.

3. The method of claim 1, wherein the one or more parameters comprise:

a priority associated with the plurality of sidelink communications;

wherein a priority associated with a first sidelink communication of the plurality of sidelink communications is higher relative to a priority associated with a second sidelink communication of the plurality of sidelink communications,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

identifying the first HARQ feedback based at least in part on determining that the priority associated with the first sidelink communication is higher relative to the priority associated with the second sidelink communication.

4. The method of claim 1, wherein the one or more parameters include a priority associated with the plurality of sidelink communications; and

wherein a respective priority, associated with each of the plurality of sidelink communications, is indicated in a respective sidelink control information (SCI) associated with each of the plurality of sidelink communications.

5. The method of claim 1, wherein the one or more parameters include respective priorities associated with each of the plurality of sidelink communications; and

wherein identifying the at least the subset of HARQ feedback comprises:

identifying, for the at least the subset of HARQ feedback, HARQ feedback associated with a first sidelink communication, of the plurality of sidelink communications, having a highest priority; and

identifying for the at least the subset of HARQ feedback, HARQ feedback associated with one or more second sidelink communications, of the plurality of sidelink communications, in an order of decreasing priority until the at least the subset of HARQ feedback fills the number of HARQ feedback that the UE is capable of transmitting in the HARQ feedback occasion.

6. The method of claim 1, wherein identifying the subset of HARQ feedback from the plurality of HARQ feedback comprises:

identifying the subset of HARQ feedback from the plurality of HARQ feedback based at least in part on at least one of:

determining that the UE is not capable of transmitting all of the plurality of HARQ feedback in the HARQ feedback occasion,

determining that the UE is not permitted to transmit all of the plurality of HARQ feedback in the HARQ feedback occasion,

detecting a collision between two or more sidelink communications of the plurality of sidelink communications, or

detecting a HARQ feedback collision in the HARQ feedback occasion.

7. The method of claim 1 wherein a HARQ feedback of the plurality of HARQ feedback comprises:

a negative acknowledgement (NACK) or an acknowledgement (ACK) associated with a respective sidelink communication of the plurality of sidelink communications.

8. The method of claim 1, further comprising:

identifying the HARQ feedback occasion from a plurality of periodic HARQ feedback occasions based at least in part on:

a time-domain resource location of the plurality of sidelink communications, and

a HARQ feedback delay parameter.

9. The method of claim 8, further comprising:

identifying, for the plurality of HARQ feedback, respective sets of subcarriers in the HARQ feedback occasion based at least in part on respective subchannels, of the sidelink, associated with the plurality of sidelink communications.

10. The method of claim 1, wherein the one or more parameters comprise:

a priority associated with the plurality of sidelink communications, and

a distance between the UE and one or more other UEs;

wherein a priority, associated with a first sidelink communication of the plurality of sidelink communications, and a priority, associated with a second sidelink communication of the plurality of sidelink communications, are a same priority,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

determining, based at least in part on determining that the priority associated with the first sidelink communication and the priority associated with the second sidelink

communication are the same priority, whether a distance between the UE and a first other UE of the one or more other UEs is shorter relative to a distance between the UE and a second other UE of the one or more other UEs; and

identifying the first HARQ feedback or the second HARQ feedback based at least in part on determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE.

11. The method of claim 10, wherein determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE comprises:

determining that the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the first HARQ feedback based at least in part on determining that the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE.

12. The method of claim 10, wherein determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE comprises:

determining that the distance between the UE and the first other UE is not shorter relative to the distance between the UE and the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the second HARQ feedback based at least in part on determining that the distance between the UE and the first other UE is not shorter relative to the distance between the UE and the second other UE.

13. The method of claim 1, wherein the one or more parameters comprise:

a priority associated with the plurality of sidelink communications, and

one or more measurements associated with one or more other UEs;

wherein a priority, associated with a first sidelink communication of the plurality of sidelink communications, and a priority, associated with a second sidelink communication of the plurality of sidelink communications, are a same priority,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

determining, based at least in part on determining that the priority associated with the first sidelink communication and the priority associated with the second sidelink communication are the same priority, whether a signal strength measurement associated with a first other UE of the one or more other UEs is greater relative to a signal strength measurement associated with a second other UE of the one or more other UEs; and

identifying the first HARQ feedback or the second HARQ feedback based at least in part on determining whether the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE.

14. The method of claim 13, wherein determining whether the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE comprises:

determining that the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the first HARQ feedback based at least in part on determining that the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE.

15. The method of claim 13, wherein determining whether the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE comprises:

determining that the signal strength measurement associated with the first other UE is not greater relative to the signal strength measurement associated with the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the second HARQ feedback based at least in part on determining that the signal strength measurement associated with the first other UE is not greater relative to the signal strength measurement associated with the second other UE.

16. The method of claim 1, wherein the one or more parameters comprise:

a priority associated with the plurality of sidelink communications, and

a transmission mode associated with the plurality of sidelink communications;

wherein a priority, associated with a first sidelink communication of the plurality of sidelink communications, and a priority, associated with a second sidelink communication of the plurality of sidelink communications, are a same priority,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

identifying, based at least in part on determining that the priority associated with the first sidelink communication and the priority associated with the second sidelink communication are the same priority, the first HARQ feedback or the second HARQ feedback based at least in part on a transmission mode associated with the first sidelink communication and a transmission mode associated with the second sidelink communication.

17. The method of claim 1, wherein the one or more parameters comprise:

a priority associated with the plurality of sidelink communications, and

a frequency-domain location of the plurality of HARQ feedback;

wherein a priority, associated with a first sidelink communication of the plurality of sidelink communications, and a priority, associated with a second sidelink communication of the plurality of sidelink communications, are a same priority,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

determining, based at least in part on determining that the priority associated with the first sidelink communication and the priority associated with the second sidelink communication are the same priority, whether the first HARQ feedback or the second HARQ feedback minimizes a number of HARQ feedback clusters in the HARQ feedback occasion; and

identifying the first HARQ feedback or the second HARQ feedback based at least in part on determining whether the first HARQ feedback or the second HARQ feedback minimizes the number of HARQ feedback clusters in the HARQ feedback occasion.

18. The method of claim 1, wherein the one or more parameters comprise:

a transmission mode associated with the plurality of sidelink communications; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

identifying a first HARQ feedback from the plurality of HARQ feedback or a second HARQ feedback from the plurality of HARQ feedback based at least in part on:

a transmission mode associated with a first sidelink communication, of the plurality of sidelink communications, associated with the first HARQ feedback, and

a transmission mode associated with a second sidelink communication, of the plurality of sidelink communications, associated with the second HARQ feedback.

19. The method of claim 1, wherein the one or more parameters comprise:

a transmission mode associated with the plurality of sidelink communications, and

a priority associated with the plurality of sidelink communications;

wherein a transmission mode, associated with a first sidelink communication of the plurality of sidelink communications, and a transmission mode, associated with a second sidelink communication of the plurality of sidelink communications, are a same transmission mode,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

identifying, based at least in part on determining that the transmission mode associated with the first sidelink communication and the transmission mode associated with the second sidelink communication are the same transmission mode, the first HARQ feedback or the second HARQ feedback based at least in part on a priority associated with the first sidelink communication and a priority associated with the second sidelink communication.

20. The method of claim 1, wherein the one or more parameters comprise:

a transmission mode associated with the plurality of sidelink communications, and

a distance between the UE and one or more other UEs;

wherein a transmission mode, associated with a first sidelink communication of the plurality of sidelink communications, and a transmission mode, associated with a second sidelink communication of the plurality of sidelink communications, are a same transmission mode,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

determining, based at least in part on determining that the transmission mode associated with the first sidelink communication and the transmission mode associated with the second sidelink communication are the same transmission mode, whether a distance between the UE and a first other UE of the one or more other UEs is shorter

relative to a distance between the UE and a second other UE of the one or more other UEs; and

identifying the first HARQ feedback or the second HARQ feedback based at least in part on determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE.

21. The method of claim 20, wherein determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE comprises:

determining that the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the first HARQ feedback based at least in part on determining that the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE.

22. The method of claim 20, wherein determining whether the distance between the UE and the first other UE is shorter relative to the distance between the UE and the second other UE comprises:

determining that the distance between the UE and the first other UE is not shorter relative to the distance between the UE and the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the second HARQ feedback based at least in part on determining that the distance between the UE and the first other UE is not shorter relative to the distance between the UE and the second other UE.

23. The method of claim 1, wherein the one or more parameters comprise:

a transmission mode associated with the plurality of sidelink communications, and

one or more measurements associated with one or more other UEs;

wherein a transmission mode, associated with a first sidelink communication of the plurality of sidelink communications, and a transmission mode, associated with a second sidelink communication of the plurality of sidelink communications, are a same transmission mode,

wherein the first sidelink communication is associated with a first HARQ feedback of the plurality of HARQ feedback, and

wherein the second sidelink communication is associated with a second HARQ feedback of the plurality of HARQ feedback; and

wherein identifying the at least the subset of HARQ feedback from the plurality of HARQ feedback comprises:

determining, based at least in part on determining that the transmission mode associated with the first sidelink communication and the transmission mode associated with the second sidelink communication are the same transmission mode, whether a signal strength measurement associated with a first other UE of the one or more other UEs is greater relative to a signal strength measurement associated with a second other UE of the one or more other UEs; and

identifying the first HARQ feedback or the second HARQ feedback based at least in part on determining whether the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE.

24. The method of claim 23, wherein determining whether the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE comprises:

determining that the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE; and

wherein identifying the first HARQ feedback or the second HARQ feedback comprises:

identifying the first HARQ feedback based at least in part on determining that the signal strength measurement associated with the first other UE is greater relative to the signal strength measurement associated with the second other UE.

25. A user equipment (UE) for wireless communication, comprising:

a memory; and

one or more processors, operatively coupled to the memory, configured to:

determine a plurality of hybrid automatic repeat request (HARQ) feedback for a plurality of sidelink communications;

identify, for at least a subset of HARQ feedback from the plurality of HARQ feedback and based at least in part on one or more parameters; and

transmit, on a sidelink, the at least the subset of HARQ feedback in a HARQ feedback occasion, wherein the UE multiplexes HARQ feedback in the HARQ feedback occasion.

26. The UE of claim 25, wherein the one or more parameters include a priority associated with the plurality of sidelink communications.

27. A non-transitory computer-readable medium storing one or more instructions for wireless communication, the one or more instructions comprising:

one or more instructions that, when executed by one or more processors of a user equipment (UE), cause the one or more processors to:

determine a plurality of hybrid automatic repeat request (HARQ) feedback for a plurality of sidelink communications;

identify, for at least a subset of HARQ feedback from the plurality of HARQ feedback and based at least in part on one or more parameters; and

transmit, on a sidelink, the at least the subset of HARQ feedback in a HARQ feedback occasion, wherein the UE multiplexes HARQ feedback in the HARQ feedback occasion.

28. The non-transitory computer-readable medium of claim 27, wherein the one or more parameters include a priority associated with the plurality of sidelink communications.

29. An apparatus for wireless communication, comprising:

means for determining a plurality of hybrid automatic repeat request (HARQ) feedback for a plurality of sidelink communications;

means for identifying, for at least a subset of HARQ feedback from the plurality of HARQ feedback and based at least in part on one or more parameters; and

means for transmitting, on a sidelink, the at least the subset of HARQ feedback in a HARQ feedback occasion, wherein the UE multiplexes HARQ feedback in the HARQ feedback occasion.

30. The apparatus of claim 29, wherein the one or more parameters include a priority associated with the plurality of sidelink communications.

31. The UE of claim 25, wherein a respective priority, associated with each of the plurality of sidelink communications, is indicated in a respective sidelink control information (SCI) associated with each of the plurality of sidelink communications.

32. The UE of claim 25, wherein the one or more processors, when identifying for the at least the subset of HARQ feedback, are configured to:

identify, for the at least the subset of HARQ feedback, HARQ feedback associated with a first sidelink communication, of the one or more sidelink communications, having a highest priority; and

identify, for the at least the subset of HARQ feedback, HARQ feedback associated with one or more second sidelink communications, of the one or more sidelink communications, in an order of decreasing priority until the at least the subset of HARQ feedback fills the number of HARQ feedback that the UE is capable of transmitting in the HARQ feedback occasion.