CLAIMS

1. A method for wireless communication at a first communications device, comprising:

receiving, via a sensor of the first communications device, information associated with a second communications device, the information comprising a quantity of a plurality of antennas of the second communications device;

performing, at the first communications device and based at least in part on a location of an antenna of the plurality of antennas included in the information, a beam management procedure to identify at least one transmit beam of the first communications device or receive beam of the second communications device;

predicting a potential blockage of the at least one transmit beam corresponding to the at least one receive beam of the second communications device based at least in part on receiving the information associated with the second communications device and performing the beam management procedure;

transmitting, to the second communications device, a signal indicating the potential blockage of the at least one transmit beam, the signal further indicating at least a second transmit beam of the first communications device or a second receive beam of the second communications device; and

communicating with the second communications device based at least in part on the beam management procedure and the signal indicating the potential blockage.

2. The method of claim 1, further comprising:

receiving, via a camera of the first communications device, an image of the second communications device; and

processing the image of the second communications device to identify the antenna of the second communications device, wherein the beam management procedure is based at least in part on the antenna of the second communications device.

3. The method of claim 1, further comprising:

receiving, from the second communications device, an indication to perform a beam switch procedure prior to failure of the at least one transmit beam based at least in part on the signal indicating the potential blockage; and

performing the beam switch procedure to switch to the second transmit beam based at least in part on the indication, wherein the second transmit beam is used to track the second receive beam of the second communications device.

4. The method of claim 3, wherein the at least one transmit beam has a higher priority than the second transmit beam.

5. The method of claim 1, the performing comprising:

determining a first reference signal receive power associated with the at least one transmit beam and a second reference signal receive power associated with the second transmit beam, wherein the first reference signal receive power is greater than the second reference signal receive power;

predicting the potential blockage of the at least one transmit beam based at least in part on the information associated with the second communications device; and

transmitting, to the second communications device and based at least in part on the potential blockage of the at least one transmit beam, a measurement report associated with the second transmit beam.

6. The method of claim 1, further comprising:

determining that the first communications device is located in a line of sight of the second communications device based at least in part on the information associated with the second communications device; and

transmitting, to the second communications device, an indication that the first communications device is located in the line of sight of the second communications device.

7. The method of claim 1, further comprising:

receiving, via the sensor of the first communications device, additional information associated with a third communications device; and

performing, at the first communications device, an interference management associated with the third communications device based at least in part on the information associated with the second communications device and the additional information associated with the third communications device.

8. The method of claim 1, further comprising:

establishing an initial access of the second communications device based at least in part on the information associated with the second communications device.

9. The method of claim 1, the receiving comprising:

receiving, via a radio detection and ranging sensor of the first communications device, an indication identifying the antenna of the second communications device, wherein the beam management procedure is based at least in part on the signal.

10. The method of claim 1, the receiving comprising:

receiving, via a light detection and ranging sensor of the first communications device, an indication identifying the antenna of the second communications device, wherein the beam management procedure is based at least in part on the signal.

11. The method of claim 1, wherein the information associated with the second communications device further comprises environment information identifying one or more objects surrounding the second communications device.

12. An apparatus for wireless communication at a first communications device, comprising:

means for receiving information associated with a second communications device, the information comprising a quantity of a plurality of antennas of the second communications device;

means for performing, at the first communications device and based at least in part on a location of an antenna of the plurality of antennas included in the information, a beam management procedure to identify at least one transmit beam of the first communications device or receive beam of the second communications device;

means for predicting a potential blockage of the at least one transmit beam corresponding to the at least one receive beam of the second communications device based at least in part on receiving the information associated with the second communications device and performing the beam management procedure;

means for transmitting, to the second communications device, a signal indicating the potential blockage of the at least one transmit beam, the signal further indicating at least a

second transmit beam of the first communications device or a second receive beam of the second communications device; and

means for communicating with the second communications device based at least in part on the beam management procedure and the signal indicating the potential blockage.

13. The apparatus of claim 12, further comprising:

means for receiving an image of the second communications device; and

means for processing the image of the second communications device to identify the antenna of the second communications device, wherein the beam management procedure is based at least in part on the antenna of the second communications device.

14. The apparatus of claim 12, further comprising:

means for receiving, from the second communications device, an indication to perform a beam switch procedure prior to failure of the at least one transmit beam based at least in part on the signal indicating the potential blockage; and

means for performing the beam switch procedure to switch to the second transmit beam based at least in part on the indication, wherein the second transmit beam is used to track the second receive beam of the second communications device.

15. The apparatus of claim 14, wherein the at least one transmit beam has a higher priority than the second transmit beam.

16. The apparatus of claim 12, further comprising:

means for determining a first reference signal receive power associated with the at least one transmit beam and a second reference signal receive power associated with the second transmit beam, wherein the first reference signal receive power is greater than the second reference signal receive power;

means for predicting the potential blockage of the at least one transmit beam based at least in part on the information associated with the second communications device; and

means for transmitting, to the second communications device and based at least in part on predicting the potential blockage of the at least one transmit beam, a measurement report associated with the second transmit beam.

17. The apparatus of claim 12, further comprising:

means for determining that the first communications device is located in a line of sight of the second communications device based at least in part on the information associated with the second communications device; and

means for transmitting, to the second communications device, an indication that the first communications device is located in the line of sight of the second communications device.

18. The apparatus of claim 12, further comprising:

means for receiving additional information associated with a third communications device; and

means for performing, at the first communications device, an interference management associated with the third communications device based at least in part on the information associated with the second communications device and the additional information associated with the third communications device.

19. The apparatus of claim 12, further comprising:

means for establishing an initial access of the second communications device based at least in part on the information associated with the second communications device.

20. The apparatus of claim 12, wherein the information associated with the second communications device further comprises environment information identifying one or more objects surrounding the second communications device.

21. An apparatus for wireless communication, comprising:

a processor; and

memory coupled with the processor, the processor configured to:

receive, via a sensor of the apparatus, information that includes a quantity of a plurality of antennas associated with a second communications device;

perform, based at least in part on a location of an antenna of the plurality of antennas included in the information, a beam management procedure to identify at least one transmit beam of the apparatus or receive beam of the second communications device;

predict a potential blockage of the at least one transmit beam that corresponds to the at least one receive beam of the second communications device based

at least in part on the information associated with the second communications device and the beam management procedure;

transmit, to the second communications device, a signal that indicates the potential blockage of the at least one transmit beam, wherein the signal further indicates at least a second transmit beam of the apparatus or a second receive beam of the second communications device; and

communicate with the second communications device based at least in part on the beam management procedure and the signal that indicates the potential blockage.

22. The apparatus of claim 21, wherein the processor is further configured to:

receive, via a camera of the apparatus, an image of the second communications device; and

process the image of the second communications device to identify the antenna of the second communications device, wherein the beam management procedure is based at least in part on the antenna of the second communications device.

23. The apparatus of claim 21, wherein the processor is further configured to:

receive, from the second communications device, an indication to perform a beam switch procedure prior to failure of the at least one transmit beam based at least in part on the signal that indicates the potential blockage; and

perform the beam switch procedure to switch to the second transmit beam based at least in part on the indication, wherein the second transmit beam is used to track the second receive beam.

24. The apparatus of claim 23, wherein the at least one transmit beam has a higher priority than the second transmit beam.

25. The apparatus of claim 21, wherein, to perform the beam management procedure, the processor is further configured to:

determine a first reference signal receive power associated with the at least one transmit beam and a second reference signal receive power associated with the second transmit beam, wherein the first reference signal receive power is greater than the second reference signal receive power;

predict the potential blockage of the at least one transmit beam based at least in part on the information associated with the second communications device; and

transmit, to the second communications device and based at least in part on prediction of the potential blockage of the at least one transmit beam, a measurement report associated with the second transmit beam.

26. The apparatus of claim 21, wherein the processor is further configured to:

determine that the apparatus is located in a line of sight of the second communications device based at least in part on the information associated with the second communications device; and

transmit, to the second communications device, an indication that the apparatus is located in the line of sight of the second communications device.

27. The apparatus of claim 21, wherein the processor is further configured to:

receive, via the sensor of the apparatus, additional information associated with a third communications device; and

perform an interference management associated with the third communications device based at least in part on the information associated with the second communications device and the additional information associated with the third communications device.

28. The apparatus of claim 21, wherein the processor is further configured to:

establish an initial access of the second communications device based at least in part on the information associated with the second communications device.

29. The apparatus of claim 21, wherein, to receive the information, the processor is further configured to:

receive, via a radio detection and range sensor of the apparatus, an indication that identifies the antenna of the second communications device, wherein the beam management procedure is based at least in part on the antenna.

30. The apparatus of claim 21, wherein, to receive the information, the processor is further configured to:

receive, via a light detection and ranging sensor of the apparatus, an indication that identifies the antenna of the second communications device, wherein the beam management procedure is based at least in part on the signal.

31. The apparatus of claim 21, wherein the information associated with the second communications device further comprises environment information that identifies one or more objects that surround the second communications device.

32. A non-transitory computer-readable medium storing code for wireless communication at a first communications device, the code comprising instructions executable by a processor to:

receive, via a sensor of the first communications device, information associated with a second communications device, the information comprising a quantity of a plurality of antennas of the second communications device;

perform, at the first communications device and based at least in part on a location of an antenna of the plurality of antennas included in the information, a beam management procedure to identify at least one transmit beam of the first communications device or receive beam of the second communications device;

predict a potential blockage of the at least one transmit beam that corresponds to the at least one receive beam of the second communications device based at least in part on the information associated with the second communications device and the beam management procedure;

transmit, to the second communications device, a signal that indicates the potential blockage of the at least one transmit beam, wherein the signal further indicates at least a second transmit beam of the first communications device or a second receive beam of the second communications device; and

communicate with the second communications device based at least in part on the beam management procedure and the signal that indicates the potential blockage.

33. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

receive, via a camera of the first communications device, an image of the second communications device; and

process the image of the second communications device to identify the antenna of the second communications device, wherein the beam management procedure is based at least in part on the antenna of the second communications device.

34. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

receive, from the second communications device, an indication to perform a beam switch procedure prior to failure of the at least one transmit beam based at least in part on the signal indicating the potential blockage; and

perform the beam switch procedure to switch to the second transmit beam based at least in part on the indication, wherein the second transmit beam is used to track the second receive beam of the second communications device.

35. The non-transitory computer-readable medium of claim 34, wherein the at least one transmit beam has a higher priority than the second transmit beam.

36. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

determine a first reference signal receive power associated with the at least one transmit beam and a second reference signal receive power associated with the second transmit beam, wherein the first reference signal receive power is greater than the second reference signal receive power;

predict the potential blockage of the at least one transmit beam based at least in part on the information associated with the second communications device; and

transmit, to the second communications device and based at least in part on the potential blockage of the at least one transmit beam, a measurement report associated with the second transmit beam.

37. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

determine that the first communications device is located in a line of sight of the second communications device based at least in part on the information associated with the second communications device; and

transmit, to the second communications device, an indication that the first communications device is located in the line of sight of the second communications device.

38. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

receive, via the sensor of the first communications device, additional information associated with a third communications device; and

perform, at the first communications device, an interference management associated with the third communications device based at least in part on the information associated with the second communications device and the additional information associated with the third communications device.

39. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

establish an initial access of the second communications device based at least in part on the information associated with the second communications device.

40. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

receive, via a radio detection and ranging sensor of the first communications device, an indication identifying the antenna of the second communications device, wherein the beam management procedure is based at least in part on the signal.

41. The non-transitory computer-readable medium of claim 32, wherein the instructions are further executable by the processor to:

receive, via a light detection and ranging sensor of the first communications device, an indication identifying the antenna of the second communications device, wherein the beam management procedure is based at least in part on the signal.

42. The non-transitory computer-readable medium of claim 32, wherein the information associated with the second communications device further comprises environment information identifying one or more objects surrounding the second communications device.