CLAIMS

1. A method for wireless communications, comprising: determining, based on a received signal strength, a set of potential backhaul nodes for providing a backhaul link in an integrated access and backhaul (IAB) network, wherein determining the set of potential backhaul nodes comprises determining that signal measurements of signals received from the set of potential backhaul nodes are within a range of threshold measurement values, wherein the range of threshold measurement values include a minimum threshold measurement value based on a first modulation and coding scheme (MCS) and a maximum threshold measurement value based on a second MCS; determining, based at least in part on additional information regarding the set of potential backhaul nodes, at least one backhaul node of the set of potential backhaul nodes to which to connect over the backhaul link in the IAB network; and indicating, to an access node, the at least one backhaul node for attempting connection over the backhaul link.

2. The method of claim 1, wherein the received signal strength includes one or more of reference signal received power, reference signal received quality, or received signal strength indicator.

3. The method of claim 1, further comprising receiving one or more parameters for determining the set of potential backhaul nodes based on the received signal strength.

4. The method of claim 1, wherein the range of threshold measurement values are based on one or more supported multiple-input multiple-output layers, a maximum bandwidth, or a maximum transmit power.

5. The method of claim 1, wherein the range of threshold measurement values includes a maximum signal power measurement that is at least one of measured from a strongest link of the set of potential backhaul nodes or specified in a configuration.

6. The method of claim 5, wherein the range of threshold measurement values also includes a minimum signal power measurement that is a function of the maximum signal power measurement.

7. The method of claim 1, further comprising receiving the signal measurements or the range of threshold measurement values in signaling from one or more access nodes or one or more backhaul nodes.

8. The method of claim 1, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, one or more of a highest supported modulation and coding scheme (MCS), a highest multiple-input multiple-output layer supported, a maximum transmit power, a largest supported bandwidth, multi-panel capabilities, beam-correspondence capability, timing management capabilities, whether access nodes and user equipment are supported, a mobility state, or a number of bearers supported.

9. The method of claim 8, further comprising receiving the additional information in signaling from one or more access nodes or one or more backhaul nodes.

10. The method of claim 1, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, a topological state, a traffic load, an interference measurement, or a resource management state.

11. The method of claim 10, further comprising receiving the additional information in signaling from one or more access nodes or one or more backhaul nodes.

12. The method of claim 1, further comprising connecting to the at least one backhaul node over the backhaul link to access the IAB network.

13. An apparatus for wireless communication, comprising: a transceiver; a memory configured to store instructions; and one or more processors communicatively coupled with the transceiver and the memory, wherein the one or more processors are configured to: determine, based on a received signal strength, a set of potential backhaul nodes for providing a backhaul link in an integrated access and backhaul (IAB) network, wherein the one or more processors are configured to determine the set of potential backhaul nodes based at least in part on determining that signal measurements of signals received from the set of potential backhaul nodes are within a range of threshold measurement values; determine, based at least in part on additional information regarding the set of potential backhaul nodes, at least one backhaul node of the set of potential backhaul nodes to which to connect over the backhaul link in the IAB network; and indicate the at least one backhaul node for attempting connection over the backhaul link.

14. The apparatus of claim 13, wherein the received signal strength includes one or more of reference signal received power, reference signal received quality, or received signal strength indicator.

15. The apparatus of claim 13, wherein the one or more processors are further configured to receive one or more parameters for determining the set of potential backhaul nodes based on the received signal strength.

16. The apparatus of claim 13, wherein the range of threshold measurement values are based on one or more supported multiple-input multiple-output layers, a maximum bandwidth, or a maximum transmit power.

17. The apparatus of claim 13, wherein the range of threshold measurement values includes a maximum signal power measurement that is at least one of measured from a strongest link of the set of potential backhaul nodes or specified in a configuration.

18. The apparatus of claim 17, wherein the range of threshold measurement values also includes a minimum signal power measurement that is a function of the maximum signal power measurement.

19. The apparatus of claim 13, wherein the one or more processors are further configured to receive the signal measurements or the range of threshold measurement values in signaling from one or more access nodes or one or more backhaul nodes.

20. The apparatus of claim 13, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, one or more of a highest supported modulation and coding scheme (MCS), a highest multiple-input multiple-output layer supported, a maximum transmit power, a largest supported bandwidth, multi-panel capabilities, beam-

correspondence capability, timing management capabilities, whether access nodes and user equipment are supported, a mobility state, or a number of bearers supported.

21. The apparatus of claim 20, wherein the one or more processors are further configured to receive the additional information in signaling from one or more access nodes or one or more backhaul nodes.

22. The apparatus of claim 13, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, a topological state, a traffic load, an interference measurement, or a resource management state.

23. The apparatus of claim 22, wherein the one or more processors are further configured to receive the additional information in signaling from one or more access nodes or one or more backhaul nodes.

24. The apparatus of claim 13, wherein the one or more processors are further configured to connect to the at least one backhaul node over the backhaul link to access the IAB network.

25. An apparatus for wireless communication, comprising: means for determining, based on a received signal strength, a set of potential backhaul nodes for providing a backhaul link in an integrated access and backhaul (IAB) network, wherein the means for determining the set of potential backhaul nodes comprises means for determining that signal measurements of signals received from the set of potential backhaul nodes are within a range of threshold measurement values, wherein the range of threshold measurement values include a minimum threshold measurement value based on a first modulation and coding scheme (MCS) and a maximum threshold measurement value based on a second MCS; means for determining, based at least in part on additional information regarding the set of potential backhaul nodes, at least one backhaul node of the set of potential backhaul nodes to which to connect over the backhaul link in the IAB network; and means for indicating, to an access node, the at least one backhaul node for attempting connection over the backhaul link.

26. The apparatus of claim 25, wherein the received signal strength includes one or more of reference signal received power, reference signal received quality, or received signal strength indicator.

27. The apparatus of claim 25, further comprising means for receiving one or more parameters for determining the set of potential backhaul nodes based on the received signal strength.

28. The apparatus of claim 25, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, one or more of a highest supported modulation and coding scheme (MCS), a highest multiple-input multiple-output layer supported, a maximum transmit power, a largest supported bandwidth, multi-panel capabilities, beam-correspondence capability, timing management capabilities, whether access nodes and user equipment are supported, a mobility state, or a number of bearers supported.

29. The apparatus of claim 25, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, a topological state, a traffic load, an interference measurement, or a resource management state.

30. The apparatus of claim 25, further comprising means for connecting to the at least one backhaul node over the backhaul link to access the IAB network.

31. A non-transitory computer-readable medium, comprising code executable by one or more processors for wireless communications, the code comprising code for: determining, based on a received signal strength, a set of potential backhaul nodes for providing a backhaul link in an integrated access and backhaul (IAB) network, wherein the code for determining the set of potential backhaul nodes comprises code for determining that signal measurements of signals received from the set of potential backhaul nodes are within a range of threshold measurement values, wherein the range of threshold measurement values include a minimum threshold measurement value based on a first modulation and coding scheme (MCS) and a maximum threshold measurement value based on a second MCS; determining, based at least in part on additional information regarding the set of potential backhaul nodes, at least one backhaul node of the set of potential backhaul nodes to which to connect over the backhaul link in the IAB network; and indicating, to an access node, the at least one backhaul node for attempting connection over the backhaul link.

32. The non-transitory computer-readable medium of claim 31, wherein the received signal strength includes one or more of reference signal received power, reference signal received quality, or received signal strength indicator.

33. The non-transitory computer-readable medium of claim 31, further comprising code for receiving one or more parameters for determining the set of potential backhaul nodes based on the received signal strength.

34. The non-transitory computer-readable medium of claim 31, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, one or more of a highest supported modulation and coding scheme (MCS), a highest multiple-input multiple-output layer supported, a maximum transmit power, a largest supported bandwidth, multi-panel capabilities, beam-correspondence capability, timing management capabilities, whether access nodes and user equipment are supported, a mobility state, or a number of bearers supported.

35. The non-transitory computer-readable medium of claim 31, wherein the additional information includes, for each backhaul node in the set of potential backhaul nodes, a topological state, a traffic load, an interference measurement, or a resource management state.

36. The non-transitory computer-readable medium of claim 31, further comprising code for connecting to the at least one backhaul node over the backhaul link to access the IAB network.