CLAIMS

What is claimed is:

1. A method, comprising:

sending, by a communication device comprising a processor, to each of a plurality of communication nodes a request for bandwidth utilization information;

receiving, by the communication device, the bandwidth utilization information from each of the plurality of communication nodes;

determining, by the communication device, a measure of quality of a communication link between the communication device and each of the plurality of communication nodes; and

initiating, by the communication device, communications with a first communication node selected from the plurality of communication nodes according to a comparison of the bandwidth utilization information and the measure of quality of the communication link of each of the plurality of communication nodes.

2. The method of claim 1, wherein the bandwidth utilization and the measure of quality of the communication link of the first communication node selected has a first net benefit that exceeds a second net benefit determined from the bandwidth utilization information and the measure of quality of the communication link of each of a remainder of the plurality of communication nodes.

3. The method of claim 1, wherein each communication link between the communication device and the plurality of communication nodes comprises a wireless communication link.

4. The method of claim 1, wherein each one of the plurality of communication nodes comprises one of a macro cell communication node, a small cell communication mode, a micro cell communication node, a femto cell communication node, a Bluetooth communication node, a zigbee communication node, or a wireless fidelity communication node.

5. The method of claim 1, wherein the communication device comprises a plurality of antennas having a reduced radio frequency (RF) signal correlation between antenna ports coupled thereto.

6. The method of claim 5, wherein the plurality of antennas are configured to combine common mode currents and differential mode currents resulting in the reduced RF signal correlation between the antenna ports.

7. The method of claim 1, wherein each communication link between the communication device and the plurality of communication nodes comprises a multiple-input and multiple-output (MIMO) communication session.

8. The method of claim 7, comprising initiating, by the communication device, communications with a second communication node selected from the plurality of communication nodes according to the comparison of the bandwidth utilization and the measure of quality of the communication link of each of the plurality of communication nodes.

9. The method of claim 8, wherein communications with the first communication node is based on a first MIMO communication session, wherein communications with the second communication node is based on a second MIMO communication session, wherein the first MIMO communication session operates in a first band of an antenna configuration, and wherein the second MIMO communication session operates in a second band of the antenna configuration.

10. A machine-readable storage device, comprising instructions, which when executed by a circuit, cause the circuit to perform operations comprising:

receiving bandwidth utilization information from each of a plurality of communication nodes;

determining a measure of quality of a communication link with each of the plurality of communication nodes; and

initiating communications with a first communication node selected from the plurality of communication nodes according to a comparison of the bandwidth utilization information and the measure of quality of the communication link of each of the plurality of communication nodes.

11. The machine-readable storage device of claim 10, wherein the comparison comprises determining a net benefit of communicating with each of the plurality of communication nodes according to the measure of quality of the communication link of each of the plurality of communication nodes and the bandwidth utilization information of each of the plurality of communication nodes.

12. The machine-readable storage device of claim 11, wherein the operations further comprise selecting the first communication node based on the net benefit of communicating with the first communication node exceeding the net benefit of communicating with a reminder of the plurality of communication nodes.

13. The machine-readable storage device of claim 10, wherein each one of the plurality of communication nodes comprises one of a macro cell communication node, a small cell communication mode, a micro cell communication node, a femto cell communication node, a Bluetooth communication node, a zigbee communication node, or a wireless fidelity communication node.

14. The machine-readable storage device of claim 10, wherein the machine-readable storage device is utilized in a communication device, wherein the communication device comprises a plurality of antennas having a reduced radio frequency (RF) signal correlation between antenna ports, the plurality of antennas being configured to combine common mode currents and differential mode currents to produce the reduced RF signal correlation between the antenna ports.

15. The machine-readable storage device of claim 10, wherein each communication link with the plurality of communication nodes comprises a multiple-input and multiple-output (MIMO) communication session.

16. The machine-readable storage device of claim 10, wherein the operations further comprise initiating communications with a second communication node selected from the plurality of communication nodes according to the comparison of the bandwidth utilization information and the measure of quality of the communication link of each of the plurality of communication nodes, wherein communications with the first communication node and the second communication node occur simultaneously.

17. The machine-readable storage device of claim 16, wherein the first communication node is operated by a first service provider, wherein the second communication node is operated by a second service provider, and wherein the first service provider and the second service provider are independent enterprises.

18. A communication device, comprising:

a memory to store instructions; and

a processor coupled to the memory, which responsive to executing the instructions the processor performs operations comprising:

receiving bandwidth utilization information associated with each of a plurality of communication nodes; and

initiating communications with a communication node selected from the plurality of communication nodes according to a comparison of the bandwidth utilization information and a measure of quality of a communication link of each of the plurality of communication nodes.

19. The communication device of claim 18, wherein the measure of quality of the communication link is based on one of a received signal strength indication measurement, a signal to noise ratio measurement, a bit error rate measurement, a packet loss rate measurement, or any combinations thereof.

20. The communication device of claim 18, wherein each one of the plurality of communication nodes comprises one of a macro cell communication node, a small cell communication mode, a micro cell communication node, a femto cell communication node, a Bluetooth communication node, a zigbee communication node, or a wireless fidelity communication node.

21. The communication device of claim 18, wherein the bandwidth utilization information of each of the plurality of communication nodes is received from a system communicatively coupled to the plurality of communication nodes, wherein the system monitors bandwidth utilization of each of the plurality of communication nodes.

22. The communication device of claim 18, wherein the comparison comprises determining a net benefit of communicating with each of the plurality of communication nodes according to the measure of quality of the communication link of each of the plurality of communication nodes and the bandwidth utilization information of each of the plurality of communication nodes.

23. The communication device of claim 18, wherein the communication device comprises one of a stationary communication device or a mobile communication device.

24. The communication device of claim 18, comprising an antenna structure for initiating communications with the communication node selected from the plurality of communication nodes, wherein the operations further comprise detecting an operating frequency offset of the antenna structure and tuning the antenna structure to mitigate the operating frequency offset to achieve a desire operating frequency.

24. The communication device of claim 18, wherein the bandwidth utilization information of the plurality of communication nodes is received from one of a system monitoring bandwidth utilization of the plurality of communication nodes or from each of the plurality of communication nodes, and wherein the bandwidth utilization information is received responsive to one of a bandwidth inquiry sent by the communication device or a detection of the communication device by the system or the plurality of communication nodes.