What is Claimed is:

1. A method (200) for communicating data using multiple media access control, MAC, access techniques, the method comprising:

obtaining (210), by a transmitter, traffic flows;

characterized by selecting (220) either a contention-based access MAC communication scheme or a scheduling-based access scheme to communicate a given one of the traffic flows based on a characteristic of the given traffic flow, wherein the scheduling-based access MAC communication scheme is selected to communicate a first traffic flow and the contention-based access MAC communication scheme is selected to communicate a second traffic flow; and

communicating (230) the first traffic flow using a first spreading code associated with the scheduling-based MAC communication scheme and the second traffic flow using a second spreading code associated with the contention-based access MAC communication scheme, the first traffic flow and the second traffic flow being communicated over the same network during the same time period, and the first spreading code being different than the second spreading code such that scheduling-based transmissions are separated from contention-based transmissions in the code domain.

2. The method of claim 1, wherein communicating the first traffic flow and the second flow over the same network during the same time period comprises:

transmitting at least a portion of the second traffic flow at the same time as at least a portion of the first traffic flow.

3. The method of claim 1, wherein selecting either the contention-based access MAC communication scheme or the scheduling-based access scheme to communicate a given one of the traffic flows based on a characteristic of the given traffic flow comprises:

selecting the contention-based access MAC communication scheme to communicate a given one of the traffic flows when a percentage of overhead in the given traffic flow required to communicate the given traffic flow using the scheduling-based access scheme exceeds a threshold.

4. The method of claim 1, wherein the first traffic flow and the second traffic flow are communicated over the same time-frequency resources (700, 800).

5. An apparatus (900) for communicating data using multiple media access control, MAC, access techniques, the apparatus comprising:

a processor (904); and

a computer readable storage medium (906) storing programming for execution by the processor, the programming including instructions to:

obtain (210), by a transmitter, traffic flows;

characterized bv including further instruction to select (220) either a contention-based access MAC communication scheme or a scheduling-based access scheme to communicate a given one of the traffic flows based on a characteristic of the given traffic flow, wherein the scheduling-based access MAC communication scheme is selected to communicate a first traffic flow and the contention-based access MAC communication scheme is selected to communicate a second traffic flow; and

communicate (230) the first traffic flow using a first spreading code associated with the scheduling-based MAC communication scheme and the second traffic flow using a second spreading code associated with the contention-based access MAC communication scheme, the first traffic flow and the second traffic flow being communicated over the same network during the same time period, and the first spreading code being different than the second spreading code such that scheduling-based transmissions are separated from contention-based transmissions in the code domain.

6. The apparatus of claim 5, wherein the instructions to select either the contention-based access MAC communication scheme or the scheduling-based access scheme to communicate a given one of the traffic flows based on a characteristic of the given traffic flow includes instructions to:

select the contention-based access MAC communication scheme to communicate a given one of the traffic flows when a percentage of overhead in the given traffic flow required to communicate the given traffic flow using the scheduling-based access scheme exceeds a threshold.

7. The apparatus of claim 5, wherein the first traffic flow and the second traffic flow are communicated over the same time-frequency resources.

8. A method (300) comprising:

determining (310) media access control, MAC, selection criteria in accordance with conditions of a network; and

communicating (320), by a communications controller, the MAC selection criteria to one or more mobile devices in the network, characterized in that the MAC selection criteria requires the mobile devices to communicate a given traffic flow during a time period using either a first spreading code associated with a contention-based access MAC communication scheme or a second spreading code associated with a scheduling-based access MAC communication scheme based on a characteristic of the given traffic flow, the first spreading code being different than the second spreading code such that scheduling-based transmissions are separated from contention-based transmissions in the code domain.

9. The method of claim 8, wherein communicating the MAC selection criteria to the one or more mobile devices comprises:

transmitting a unicast message to at least one mobile device in the network.

10. The method of claim 8, wherein communicating the MAC selection criteria to the one or more mobile devices comprises:

transmitting a multicast message to at least one mobile device in the network.

11. The method of claim 8, wherein communicating the MAC selection criteria to the one or more mobile devices comprises:

broadcasting a message to all mobile devices in the network.

12. The method of claim 8, wherein the MAC selection criteria requires the mobile devices to communicate a given traffic flow using the contention-based access MAC communication scheme when a percentage of overhead in the given traffic flow required to communicate the given traffic flow using the scheduling-based access MAC communication scheme exceeds a threshold.

13. A controller (900) comprising:

a processor (904); and

a computer readable storage medium (906) storing programming for execution by the

processor, the programming including instructions to:

determine media access control, MAC, selection criteria in accordance with conditions of a network; and

characterized by including further instruction to communicate the MAC selection criteria to one or more mobile devices in the network, wherein the MAC selection criteria requires the mobile devices to communicate a given traffic flow during a time period using either a first spreading code associated with a contention-based access MAC communication scheme or a second spreading code associated with a scheduling-based access MAC communication scheme based on a characteristic of the given traffic flow, the first spreading code being different than the second spreading code such that scheduling-based transmissions are separated from contention-based transmissions in the code domain.

14. The controller of claim 13, wherein the MAC selection criteria requires the mobile devices to communicate a given traffic flow using the contention-based access MAC communication scheme when a percentage of overhead in the given traffic flow required to communicate the given traffic flow using the scheduling-based access MAC communication scheme exceeds a threshold.