Claims

What is claimed is:

1. A method for determining information about a communication parameter, the method comprising:

providing information about the communication parameter in at least one of an add block acknowledgement request signal, an acknowledgement signal for an add block acknowledgement request signal, an add block acknowledgement response signal, or an acknowledgement signal for an add block acknowledgement response signal;~~.~~ and

determining a duration for virtual carrier sensing mechanism based on the information about the communication parameter.

2. The method of claim 1,

wherein the communication parameter comprises at least one parameter selected from a list of parameters consisting of:

a modulation and coding scheme;

a data rate;

an uplink modulation and coding scheme;

an uplink data rate;

a downlink modulation and coding scheme;

a downlink data rate;

an index of a modulation and coding scheme;

an index of an uplink modulation and coding scheme;

an index of a downlink modulation and coding scheme;

an index of a data rate;

an index of an uplink data rate;

an index of a downlink data rate;

a difference between an uplink data rate and a downlink data rate;

a difference in indices between a downlink modulation and coding scheme and an uplink modulation and coding scheme; and

a difference in the indices between a downlink data rate and an uplink data rate.

3. The method of claim 1, further comprising:

providing the information about the communication parameter in an indicator in the add block acknowledgement response frame.

4. The method of claim 1, further comprising:

providing the information about the communication parameter in a status code in the add block acknowledgement response frame.

5. The method of claim 1, further comprising:

providing the information about the communication parameter using a dialog token field.

6. The method of claim 1,

wherein the information about the communication parameter comprises at least one of:

an absolute value of at least one communication parameter; or

a change of at least one communication parameter compared to a presently used communication parameter.

~~7. The method of claim 1, further comprising:~~

~~determining a duration for virtual carrier sensing mechanism based on the information about the communication parameter.~~

7~~8~~. The method of claim 1~~7~~, further comprising:

reserving channel time for a block acknowledgement frame based on the determined duration.

8~~9~~. The method of claim 1, further comprising:

sending or receiving a block acknowledgement signal with dynamic block acknowledgement bitmap size.

9~~10~~. The method of claim 1, further comprising:

sending or receiving a signal indicating that sending of a block acknowledgement signal is finished.

10~~1~~. A communication device comprising:

a communication circuit configured to at least one of send or receive information about the communication parameter in at least one of an add block acknowledgement request signal, an acknowledgement signal for an add block acknowledgement request signal, an add block acknowledgement response signal, or an acknowledgement signal for an add block acknowledgement response signal;~~.~~

wherein the communication circuit is further configured to determine a duration for virtual carrier sensing mechanism based on the information about the communication parameter.

11~~2~~. The communication device of claim 10~~1~~,

wherein the communication parameter comprises at least one parameter selected from a list of parameters consisting of:

a modulation and coding scheme;

a data rate;

an uplink modulation and coding scheme;

an uplink data rate;

a downlink modulation and coding scheme;

a downlink data rate;

an index of a modulation and coding scheme;

an index of an uplink modulation and coding scheme;

an index of a downlink modulation and coding scheme;

an index of a data rate;

an index of an uplink data rate;

an index of a downlink data rate;

a difference between an uplink data rate and a downlink data rate;

a difference in indices between a downlink modulation and coding scheme and an uplink modulation and coding scheme; and

a difference in indices between a downlink data rate and an uplink data rate.

123. The communication device of claim 101,

wherein the communication circuit is further configured to at least one of send or receive the information about the communication parameter in an indicator in the add block acknowledgement response frame.

134. The communication device of claim 101,

wherein the communication circuit is further configured to at least one of send or receive the information about the communication parameter in a status code in the add block acknowledgement response frame.

145. The communication device of claim 10,

wherein the communication circuit is further configured to at least one of send or receive the information about the communication parameter using a dialog token field.

15~~6~~. The communication device of claim 1~~0~~,

wherein the information about the communication parameter comprises at least one of:

an absolute value of at least one communication parameter; or

a change of at least one communication parameter compared to a presently used communication parameter.

~~17. The communication device of claim 11,~~

~~wherein the communication circuit is further configured to determine a duration for virtual carrier sensing mechanism based on the information about the communication parameter.~~

16~~8~~. The communication device of claim 10~~7~~,

wherein the communication circuit is further configured to reserve channel time for a block acknowledgement frame based on the determined duration.

17~~9~~. The communication device of claim 10~~1~~,

wherein the communication circuit is further configured to send or receive a block acknowledgement signal with dynamic block acknowledgement bitmap size.

18~~20~~. The communication device of claim 10~~1~~,

wherein the communication circuit is further configured to send or receive a signal indicating that sending of a block acknowledgement signal is finished.