~~CLAIMS~~

~~**What is claimed is:**~~

CLAIMS

1. A method for wireless communications at a user equipment (UE), comprising:

receiving, ~~from a base station, a control signal indicating a~~via radio resource ~~allocation for either an~~control signaling, multiple autonomous uplink transmission ~~or a downlink transmission;~~

~~identifying that repetitions of either the uplink transmission or the downlink transmission will span more than one slot;~~

~~identifying configuration information regarding a future slot to be spanned by the uplink transmission or the downlink transmission;~~

~~identifying, based on the configuration information, one or more mini-slots to be used in the future slot for the uplink transmission or the downlink transmission; and~~

~~communicating with the base station by either transmitting the uplink transmission or receiving the downlink transmission in accordance with the resource allocation and based at least in part on the configuration information.~~

~~2. The method of claim 1, wherein identifying the configuration information comprises:~~

~~receiving the configuration information regarding the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~3. The method of claim 1, wherein identifying the configuration information comprises:~~

~~decoding a slot format and control region size of the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~4. A method for wireless communications at a user equipment (UE), comprising:~~

~~identifying multiple~~ configurations available to the UE for autonomous uplink transmissions, each of the multiple autonomous uplink transmission configurations being associated with an aggregation factor;

selecting ~~one~~ an autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations for the autonomous uplink transmissions; and

transmitting the autonomous uplink transmissions in accordance with the selected ~~configuration~~autonomous uplink transmission configuration, wherein each of the autonomous uplink transmissions are transmitted to avoid use of an orphan symbol, wherein the orphan symbol is a single and only symbol of a multi-symbol transport block assigned to a slot.

~~5~~2. The method of claim ~~4~~1, wherein selecting the ~~one of the multiple configurations~~autonomous uplink transmission configuration comprises:

selecting the ~~one~~autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations based at least in part on a transport block size, a modulation and coding scheme, a starting symbol for the autonomous uplink transmissions, or combinations thereof.

~~6~~3. A method for wireless communications at a ~~user equipment (UE), comprising:~~

~~receiving, from a~~ base station, ~~a control signal indicating a~~comprising:

transmitting, via radio resource ~~allocation for either an~~control signaling, multiple autonomous uplink transmission ~~or a downlink transmission;~~

~~identifying, based at least in part on a modulation and coding scheme indicated in the control signal, an aggregation factor of the uplink transmission or the downlink transmission; and~~

~~communicating with the base station by either transmitting the uplink transmission or receiving the downlink transmission in accordance with the resource allocation and the aggregation factor.~~

~~7. The method of claim 6, further comprising:~~

~~measuring channel quality;~~

~~determining, based at least on the measured channel quality, a channel quality indicator that is associated with a quality threshold and a requested aggregation factor,~~

wherein transmissions to the UE using the requested aggregation factor are expected by the UE to satisfy the quality threshold; and

transmitting the channel quality indicator to the base station, wherein the modulation and coding scheme indicated in the control signal is based at least in part on the requested aggregation factor associated with the channel quality indicator.

8. The method of claim 7, wherein determining the channel quality indicator comprises:

selecting the channel quality indicator from a table or from a portion of a table whose entries are each associated with respective aggregation factors.

9. The method of claim 6, wherein the aggregation factor is dynamically indicated via the control signal.

10. The method of claim 6, further comprising:

monitoring for the control signal at predefined symbol locations within a slot or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots in the slot.

11. The method of claim 6, wherein communicating with the base station comprises:

transmitting the uplink transmission or receiving the downlink transmission such that a first symbol of the uplink transmission or downlink transmission is transmitted or received only at predefined symbol locations within a slot or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots in the slot.

12. The method of claim 11, further comprising:

comparing the resource allocation with the predefined symbol locations; and

determining to communicate with the base station and in accordance with the resource allocation based on the comparing.

13. The method of claim 11, further comprising:

receiving multiple control signals from the base station, each control signal indicating different resource allocations for communications with the base station;

determining that the resource allocations from the multiple control signals overlap; and

communicating with the base station using the resource allocation from a last of the multiple control signals.

14. The method of claim 6, further comprising:

identifying a demodulation reference signal configuration to be used in association with the communicating, wherein the demodulation reference signal configuration is associated with the aggregation factor.

15. The method of claim 14, wherein identifying the demodulation reference signal configuration comprises:

receiving an indication of the demodulation reference signal configuration in the control signal.

16. The method of claim 14, wherein identifying the demodulation reference signal configuration comprises:

determining the demodulation reference signal configuration based at least in part on the aggregation factor.

17. A method for wireless communications at a base station, comprising:

transmitting a control signal identifying a resource allocation for either an uplink transmission received from a user equipment (UE) or a downlink transmission to the UE;

determining that repetitions of either the uplink transmission or the downlink transmission will span more than one slot;

conveying configuration information regarding a future slot to be spanned by the uplink transmission or the downlink transmission; and

communicating with the UE by either transmitting the uplink transmission or receiving the downlink transmission in accordance with the resource allocation and based at least in part on the configuration information.

18. The method of claim 17, wherein conveying the configuration information comprises:

transmitting the configuration information regarding the future slot to be spanned by the uplink transmission or the downlink transmission.

~~19. The method of claim 17, wherein conveying the configuration information comprises:~~

~~encoding a slot format and control region size of the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~20. A method for wireless communications at a base station, comprising:~~

~~identifying multiple~~ configurations available to a user equipment (UE) for autonomous uplink transmissions, each of the multiple autonomous uplink transmission configurations being associated with an aggregation factor; and

receiving the autonomous uplink transmissions in accordance with ~~a~~ an autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations selected by the UE~~.~~

~~21. A method for wireless communications at a base station, comprising:~~

~~identifying an aggregation factor associated with either an uplink transmission to be received from a user equipment (UE) or a downlink transmission to be transmitted to the UE;~~

~~transmitting, to the UE, a control signal indicating a resource allocation for either the uplink transmission or the downlink transmission~~, wherein ~~the control signal indicates a modulation and coding scheme associated with the aggregation factor; and~~

~~communicating with the UE by either receiving the uplink transmission or transmitting the downlink transmission in accordance with the resource allocation and the aggregation factor.~~

~~22. The method of claim 21, wherein identifying the aggregation factor comprises:~~

~~receiving a channel quality indicator from the UE, wherein the channel quality indicator is associated with a requested aggregation factor such that transmissions to the UE using the requested aggregation factor are expected by the UE to satisfy a quality threshold associated with the channel quality indicator; and~~

~~setting the aggregation factor to be equal to the requested aggregation factor.~~

~~23. The method of claim 22, wherein the channel quality indicator is from a table or from a portion of a table whose entries are~~ each ~~associated with respective aggregation factors.~~

~~24. The method~~ of ~~claim 21~~the autonomous uplink transmissions avoids use of an orphan symbol, wherein the ~~aggregation factor~~ orphan symbol is ~~dynamically indicated to the UE via the control signal.~~

~~25. The method of claim 21, wherein communicating with the UE comprises:~~

~~receiving the uplink transmission or transmitting the downlink transmission such that~~ a ~~first symbol of the uplink transmission or downlink transmission is received or transmitted~~single and only ~~at predefined~~ symbol ~~locations within~~of a multi-symbol transport block assigned to a slot ~~or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots in the slot.~~

~~26. The method of claim 21, further comprising:~~

~~identifying a demodulation reference signal configuration to be used in association with the communicating, wherein the demodulation reference signal configuration is associated with the aggregation factor.~~

~~27. The method of claim 26, further comprising:~~

~~transmitting to the UE an indication of the demodulation reference signal configuration in the control signal~~.

~~28~~4. An apparatus for wireless communications at a user equipment (UE), comprising:

~~means for receiving, from a base station, a control signal indicating a resource allocation for either an uplink transmission or a downlink transmission;~~

~~means for identifying that repetitions of either the uplink transmission or the downlink transmission will span more than one slot;~~

~~means for identifying configuration information regarding a future slot to be spanned by the uplink transmission or the downlink transmission;~~

~~means for identifying, based on the configuration information, one or more mini-slots to be used in the future slot for the uplink transmission or the downlink transmission; and~~

~~means for communicating with the base station by either transmitting the uplink transmission or receiving the downlink transmission in accordance with the resource allocation and based at least in part on the configuration information.~~

~~29. The~~ a processor, memory coupled with the processor; and instructions stored in the memory and executable by the processor to cause the apparatus ~~of claim 28, wherein the means for identifying the configuration information further comprise~~to:

~~means for receiving the configuration information regarding the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~30. The apparatus of claim 28, wherein the means for identifying the configuration information further comprise:~~

~~means for decoding a slot format and control region size of the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~31. An apparatus for wireless communications at a user equipment (UE), comprising:~~

~~means for identifying~~receive, via radio resource control signaling, multiple autonomous uplink transmission configurations available to the UE for autonomous uplink transmissions, each of the multiple autonomous uplink transmission configurations being associated with an aggregation factor;

~~means for selecting one~~ select an autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations ~~for~~; and

transmit the autonomous uplink transmissions~~; and~~ in accordance with the autonomous uplink transmission configuration, wherein each of the autonomous uplink transmissions are transmitted to avoid use of an orphan symbol, wherein the orphan symbol is a single and only symbol of a multi-symbol transport block assigned to a slot.

~~means for transmitting the autonomous uplink transmissions in accordance with the selected configuration.~~

~~32~~5. The apparatus of claim ~~31~~4, wherein the ~~means for selecting~~instructions to select the autonomous uplink transmission configuration are executable by the processor to cause the ~~one of~~apparatus to:

select the ~~multiple configurations further comprise:~~

~~means for selecting the one of the multiple configurations~~autonomous uplink transmission configuration based at least in part on a transport block size, a modulation and coding scheme, a starting symbol for the autonomous uplink transmissions, or combinations thereof.

~~33~~6. An apparatus for wireless communications at a base station, comprising:

~~means for transmitting~~ a ~~control signal identifying a resource allocation for either an uplink transmission received from a user equipment (UE) or a downlink transmission to the UE;~~

~~means for determining that repetitions of either the uplink transmission or the downlink transmission will span more than one slot;~~

~~means for conveying configuration information regarding a future slot to be spanned by the uplink transmission or the downlink transmission; and~~

~~means for communicating~~processor, memory coupled with the ~~UE by either transmitting the uplink transmission or receiving the downlink transmission~~processor; and instructions stored in ~~accordance with the resource allocation~~the memory and ~~based at least in part on the configuration information.~~

~~34. The~~ executable by the processor to cause the apparatus ~~of claim 33, wherein the means for conveying the configuration information further comprise~~to:

~~means for transmitting the configuration information regarding the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~35. The apparatus of claim 33, wherein the means for conveying the configuration information further comprise:~~

~~means for encoding a slot format and control region size of the future slot to be spanned by the uplink transmission or the downlink transmission.~~

~~36. An apparatus for wireless communications at a base station, comprising:~~

~~means for identifying multiple~~transmit via radio resource control signaling, multiple autonomous uplink transmission configurations available to a user equipment (UE) for autonomous uplink transmissions, each of the multiple autonomous uplink transmission configurations being associated with an aggregation factor; and

~~means for~~receive the autonomous uplink transmissions in accordance with an autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations selected by the UE, wherein each of the autonomous uplink transmissions avoid use of an orphan symbol, wherein the orphan symbol is a single and only symbol of a multi-symbol transport block assigned to a slot.

7. The method of claim 1, wherein transmitting the autonomous uplink transmissions in accordance with the selected autonomous uplink transmission configuration comprises:

transmitting the autonomous uplink transmissions such that a first symbol of each autonomous uplink transmission is transmitted only at predefined symbol locations within a slot or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots.

8. The method of claim 1, further comprising:

identifying a demodulation reference signal configuration to be used in association with transmitting the autonomous uplink transmissions, wherein the demodulation reference signal configuration is associated with the aggregation factor of the autonomous uplink transmission configuration.

9. The method of claim 8, wherein identifying the demodulation reference signal configuration comprises:

determining the demodulation reference signal configuration based at least in part on the aggregation factor.

10. The method of claim 3, wherein receiving the autonomous uplink transmissions in accordance with ~~a~~the autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations selected by the UE~~.~~ comprises:

receiving the autonomous uplink transmissions such that a first symbol of each autonomous uplink transmission is received only at predefined symbol locations within a slot

or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots.

11. The method of claim 3, further comprising:

identifying a demodulation reference signal configuration to be used in association with receiving the autonomous uplink transmissions, wherein the demodulation reference signal configuration is associated with the aggregation factor of the autonomous uplink transmission configuration.

12. The method of claim 11, wherein identifying the demodulation reference signal configuration comprises:

determining the demodulation reference signal configuration based at least in part on the aggregation factor.

13. The apparatus of claim 4, wherein the instructions to transmit the autonomous uplink transmissions in accordance with the autonomous uplink transmission configuration are executable by the processor to cause the apparatus to:

transmit the autonomous uplink transmissions such that a first symbol of each autonomous uplink transmission is transmitted only at predefined symbol locations within a slot or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots.

14. The apparatus of claim 4, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a demodulation reference signal configuration to be used in association with transmitting the autonomous uplink transmissions, wherein the demodulation reference signal configuration is associated with the aggregation factor of the autonomous uplink transmission configuration.

15. The apparatus of claim 14, wherein the instructions to identify the demodulation reference signal configuration are further executable by the processor to cause the apparatus to:

determine the demodulation reference signal configuration based at least in part on the aggregation factor.

16. The apparatus of claim 6, wherein the instructions to receive the autonomous uplink transmissions in accordance with the autonomous uplink transmission configuration of the multiple autonomous uplink transmission configurations selected by the UE are further executable by the processor to cause the apparatus to:

receive the autonomous uplink transmissions such that a first symbol of each autonomous uplink transmission is received only at predefined symbol locations within a slot or mini-slot, wherein the predefined symbol locations are associated with a length of one or more mini-slots in the slot.

17. The apparatus of claim 6, wherein the instructions are further executable by the processor to cause the apparatus to:

identify a demodulation reference signal configuration to be used in association with receiving the autonomous uplink transmissions, wherein the demodulation reference signal configuration is associated with the aggregation factor of the autonomous uplink transmission configuration.

18. The apparatus of claim 17, wherein the instructions to identify the demodulation reference signal configuration are further executable by the processor to cause the apparatus to:

determine the demodulation reference signal configuration based at least in part on the aggregation factor.

19. The method of claim 1, wherein each autonomous uplink transmission comprises multiple symbols.

20. The method of claim 3, wherein each autonomous uplink transmission comprises multiple symbols.

21. The apparatus of claim 4, wherein each autonomous uplink transmission comprises multiple symbols.

22. The apparatus of claim 6, wherein each autonomous uplink transmission comprises multiple symbols.

23. The method of claim 1, wherein transmitting the autonomous uplink transmissions includes:

transmitting the autonomous uplink transmissions in accordance with the selected configuration to indicate that the aggregation factor associated with the selected configuration is to be used for the autonomous uplink transmissions.

24. The method of claim 3, wherein receiving the autonomous uplink transmissions includes:

receiving the autonomous uplink transmissions in accordance with the selected configuration to determine that the aggregation factor associated with the selected configuration is to be used for the autonomous uplink transmissions.

25. The apparatus of claim 4, wherein the instructions to transmit the autonomous uplink transmissions are executable by the processor to cause the apparatus to:

transmit the autonomous uplink transmissions in accordance with the selected configuration to indicate that the aggregation factor associated with the selected configuration is to be used for the autonomous uplink transmissions.

26. The apparatus of claim 6, wherein the instructions to receive the autonomous uplink transmissions are executable by the processor to cause the apparatus to:

receive the autonomous uplink transmissions in accordance with the selected configuration to determine that the aggregation factor associated with the selected configuration is to be used for the autonomous uplink transmissions.