

CLAIMS

~~WHAT IS CLAIMED IS:~~

1. A method for wireless communication, comprising:
receiving a slot format indicator indicating a first slot format for communications of a first cyclic prefix (CP) type in a slot, wherein the first slot format indicates, for each of a first set of multiple symbols in the slot, a communication direction as being one of uplink, downlink, or flexible;
determining, according to the first slot format, a second slot format for communications of a second CP type in the slot, wherein the second slot format indicates, for each of a second set of one or more symbols in the slot, a communication direction as being one of uplink, downlink, or flexible, and wherein the second CP type is associated with having a less number of symbols in the slot than the first CP type;
receiving, in one or more of the first set of multiple symbols in the slot indicated in the first slot format as a downlink symbol, a first communication according to a first timeline, wherein the first timeline is based on a associated with the first cyclic prefix (CP) type;
~~receiving~~receiving, in the second set of one or more symbols in the slot determined to be a downlink symbol, a second communication according to a second timeline, wherein the second timeline is based on a associated with the second CP type, and wherein the second communication is multiplexed with the first communication in the same slot;
~~decoding the first communication based on~~according to a first length of the first CP type;
and
~~decoding the second communication based on~~according to a second length of the second CP type.
2. The method of claim 1, ~~further comprising~~wherein receiving a first the slot format indicator from which a first includes receiving the slot format is derived, wherein receiving the first communication according to the first timeline is further based on the first slot formatindicator in radio resource control signaling from a base station.
3. The method of claim 2, ~~further comprising 1, wherein determining, based on the~~

~~first~~second slot format is further based on receiving, from a base station, a second slot format, wherein receiving the second communication according to the second timeline is further based on the second slot format indicator.

4. The method of claim ~~3~~1, wherein determining the second slot format comprises determining the second slot format to comply with the first slot format such that:

one or more first slot format downlink symbols assigned for receiving downlink communications in the first slot format at least partially overlap in a time domain with one or more second slot format downlink symbols in the second slot format; and

one or more first slot format uplink symbols assigned for transmitting uplink communications in the first slot format at least partially overlap in the time domain with one or more second slot format uplink symbols in the second slot format.

5. The method of claim 4, wherein determining the second slot format comprises interpolating the second slot format from the first slot format based on the second timeline.

6. The method of claim 5, wherein interpolating the second slot format comprises determining ~~one or more symbols~~a symbol in the second slot format as the one or more second slot format downlink symbols based on determining the overlap in the time domain with multiple first slot format downlink symbols of the one or more first slot format downlink symbols in the first timeline.

7. The method of claim 5, wherein interpolating the second slot format comprises determining ~~one or more symbols~~a symbol in the second slot format as the one or more second slot format uplink symbols based on determining the overlap in the time domain with multiple first slot format uplink symbols of the one or more first slot format uplink symbols in the first timeline.

8. The method of claim 5, wherein interpolating the second slot format comprises determining ~~one or more symbols~~a symbol in the second slot format as ~~one or more~~a second slot format flexible ~~symbols~~symbol based on determining an overlap in the time domain with ~~one or~~

~~more~~multiple first format flexible symbols in the first timeline.

9. The method of claim 5, wherein interpolating the second slot format comprises determining one or more symbols in the second slot format as one or more second slot format reserved symbols based on determining an overlap in the time domain with both a first format downlink symbol and a first format uplink symbol in the first timeline.

10. The method of claim ~~3~~1, further comprising receiving a configuration comprising one or more rules for interpolating the second slot format, wherein determining the second slot format is based at least in part on the one or more rules.

11. The method of claim ~~3~~1, wherein~~the~~ at least one of the first slot format or the second slot format include one or more guard periods between a first symbol in the first timeline and a second symbol in the second timeline during which communications are prohibited according to the at least one of the first slot format or the second slot format.

12. The method of claim 2, further comprising receiving a second slot format indicator from which a second slot format is derived, wherein receiving the second communication according to the second timeline is further based on the second slot format.

13. The method of claim 1, further comprising multiplexing, within the slot, a third communication based on the first CP type and a fourth communication based on the second CP type; and

transmitting, within the slot, the third communication based on the first timeline and the fourth communication based on the second timeline.

14. The method of claim 1, further comprising:
decoding the first communication based on a first subcarrier spacing associated with the first CP type; and

decoding the second communication based on a second subcarrier spacing associated with the second CP type, wherein the first subcarrier spacing is different than the second

subcarrier spacing.

15. A method for wireless communication, comprising:

transmitting a slot format indicator indicating a first slot format for communications of a first cyclic prefix (CP) type in a slot, wherein the first slot format indicates, for each of a first set of multiple symbols in the slot, a communication direction as being one of uplink, downlink, or flexible;

determining, according to the first slot format, a second slot format for communications of a second CP type in the slot, wherein the second slot format indicates, for each of a second set of one or more symbols in the slot, a communication direction as being one of uplink, downlink, or flexible, and wherein the second CP type is associated with having a less number of symbols in the slot than the first CP type;

multiplexing, within a slot, a first communication based on a, associated with the first cyclic prefix (CP) type and a second communication based on a second CP type; and a second communication associated with the second CP type; and

transmitting, within the slot, the first communication based on, according to a first timeline corresponding to the first CP type and the first slot format, and the second communication based on according to a second timeline corresponding to the second CP type and the second slot format.

16. The method of claim 15, wherein ~~transmitting~~determining the first ~~communication is based on a first~~second slot format ~~defined according to the first timeline and is further based on~~ transmitting the second communication is based on a second slot format ~~defined according to the second timeline~~indicator.

17. The method of claim 16, ~~further comprising determining, based on the first slot format, the second slot format.~~

~~18. The method of claim 17~~15, wherein determining the second slot format comprises determining the second slot format to comply with the first slot format such that:

one or more first slot format downlink symbols assigned for receiving downlink

communications in the first slot format at least partially overlap in a time domain with one or more second slot format downlink symbols in the second slot format; and

one or more first slot format uplink symbols assigned for transmitting uplink communications in the first slot format at least partially overlap in the time domain with one or more second slot format uplink symbols in the second slot format.

~~19~~18. The method of claim ~~18~~17, wherein determining the second slot format comprises interpolating the second slot format from the first slot format based on the second timeline.

~~20~~19. The method of claim ~~19~~18, wherein interpolating the second slot format comprises determining ~~one or more symbols~~ a symbol in the second slot format as the one or more second slot format downlink symbols based on determining the overlap in the time domain with multiple first slot format downlink symbols of the one or more first slot format downlink symbols in the first timeline.

~~21~~20. The method of claim ~~19~~18, wherein interpolating the second slot format comprises determining ~~one or more symbols~~ a symbol in the second slot format as the one or more second slot format uplink symbols based on determining the overlap in the time domain with multiple first slot format uplink symbols of the one or more first slot format uplink symbols in the first timeline.

~~22~~21. The method of claim ~~19~~18, wherein interpolating the second slot format comprises determining ~~one or more symbols~~ a symbol in the second slot format as ~~one or more~~ a second slot format flexible ~~symbols~~ symbol based on determining an overlap in the time domain with ~~one or more~~ multiple first format flexible symbols in the first timeline.

~~23~~22. The method of claim ~~19~~18, wherein interpolating the second slot format comprises determining one or more symbols in the second slot format as one or more second slot format reserved symbols based on determining an overlap in the time domain with both a first format downlink symbol and a first format uplink symbol in the first timeline.

~~24~~23. The method of claim ~~17~~15, wherein determining the second slot format comprises determining a second slot format indicator indicated as compatible with the first slot format.

~~25~~24. The method of claim ~~16~~15, further comprising transmitting an indication of the second slot format.

~~26~~25. The method of claim ~~16~~15, further comprising transmitting a configuration comprising one or more rules for interpolating the second slot format based on the first slot format.

~~27~~26. The method of claim ~~16~~15, wherein transmitting the first communication and the second communication comprises defining one or more guard periods between a first symbol in the first timeline and a second symbol in the second timeline during which communications are prohibited according to ~~the~~ at least one of the first slot format or the second slot format.

~~28~~27. The method of claim 15, wherein transmitting the first communication is based on a first subcarrier spacing associated with the first CP type, and transmitting the second communication is based on a second subcarrier spacing associated with the second CP type, wherein the first subcarrier spacing is different than the second subcarrier spacing.

28. 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:

receive a slot format indicator indicating a first slot format for communications of
a first cyclic prefix (CP) type in a slot, wherein the first slot format indicates, for each of
a first set of multiple symbols in the slot, a communication direction as being one of
uplink, downlink, or flexible;

determine, according to the first slot format, a second slot format for
communications of a second CP type in the slot, wherein the second slot format indicates,

for each of a second set of one or more symbols in the slot, a communication direction as being one of uplink, downlink, or flexible, and wherein the second CP type is associated with having a less number of symbols in the slot than the first CP type;

receive, in one or more of the first set of multiple symbols in the slot indicated in the first slot format as a downlink symbol, a first communication according to a first timeline, wherein the first timeline is associated with the first CP type;

receive, in the second set of one or more symbols in the slot determined to be a downlink symbol, a second communication according to a second timeline, wherein the second timeline is associated with the second CP type, and wherein the second communication is multiplexed with the first communication in the slot;

decode the first communication according to a first length of the first CP type; and

decode the second communication according to a second length of the second CP type.

29. 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:

~~receive a first communication according to a first timeline, wherein the first timeline is based on a first cyclic prefix (CP) type;~~

~~receive~~transmit a slot format indicator indicating a first slot format for communications of a first cyclic prefix (CP) type in a slot, wherein the first slot format indicates, for each of a first set of multiple symbols in the slot, a communication direction as being one of uplink, downlink, or flexible;

~~determine, according to the first slot format, a second communication according to a slot format for communications of a second timelineCP type in the slot, wherein the second timeline is based on a second CP type~~slot format indicates, for each of a second set of one or more symbols in the slot, a communication direction as being one of uplink, downlink, or flexible, and wherein the second communicationCP type is multiplexedassociated with the first communicationhaving a less number of symbols in the same slot;

~~decode than the first communication based on a first length of the first CP type;~~
~~and~~

~~decode the second communication based on a second length of the second CP type;~~

30. — ~~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:~~

~~multiplex, within a slot, a first communication based on a associated with the first cyclic prefix (CP) type and a second communication based on a associated with the second CP type; and~~

~~transmit, within the slot, the first communication based on, according to a first timeline corresponding to the first CP type and the first slot format, and the second communication based on according to a second timeline corresponding to the second CP type and the second slot format.~~