CLAIMS

1. A method for wireless communication, comprising:

identifying a set of mini-slots to be used for transmission of one or more reference signals and at least one data payload, the set of mini-slots having a first reference signal configuration for transmission of the one or more reference signals;

aggregating the set of mini-slots to form an aggregated mini-slot for transmission of the one or more reference signals;

determining a second reference signal configuration for transmission of the one or more reference signals within the aggregated mini-slot, the second reference signal configuration being different from the first reference signal configuration based at least in part on at least one of the one or more reference signals being removed or repositioned relative to the first reference signal configuration for transmission of the one or more reference signals;

allocating the at least one data payload to resources associated with the aggregated mini-slot; and

transmitting, within the aggregated mini-slot, the one or more reference signals and the at least one data payload based at least in part on the second reference signal configuration and the allocation of the at least one data payload.

2. The method of claim 1, wherein allocating the at least one data payload comprises:

allocating the at least one data payload across the set of mini-slots of the aggregated mini-slot.

3. The method of claim 1, wherein allocating the at least one data payload comprises:

allocating each data payload of the at least one data payload to respective mini-slots of the aggregated mini-slot.

4. The method of claim 1, wherein determining the second reference signal configuration comprises:

determining a reference signal pattern across the set of mini-slots of the aggregated mini-slot.

5. The method of claim 1, wherein allocating the at least one data payload comprises:

allocating the at least one data payload across the set of mini-slots of the aggregated mini-slot; and

determining the second reference signal configuration comprises determining a reference signal pattern for each mini-slot of the aggregated mini-slot.

6. The method of claim 1, further comprising:

determining a degree of puncturing for at least one mini-slot of the aggregated mini-slot, wherein divisions of the at least one mini-slot are based at least in part on the determined degree of puncturing.

7. The method of claim 1, wherein allocating the at least one data payload comprises:

allocating each data payload of the at least one data payload to respective mini-slots of the aggregated mini-slot; and

determining the second reference signal configuration comprises determining a reference signal pattern across the set of mini slots of the aggregated mini-slot, wherein the reference signal pattern is shared between multiple mini-slots of the aggregated mini-slot.

8. The method of claim 7, wherein a reference signal waveform for a first mini-slot of the aggregated mini-slot is different than the reference signal waveform for a second mini-slot of the aggregated mini-slot.

9. The method of claim 7, further comprising:

identifying at least one grant that comprises information common to multiple mini-slots of the aggregated mini-slot, wherein downlink control information (DCI) corresponding to the multiple mini-slots is based at least in part on the information common to the multiple mini-slots.

10. The method of claim 9, further comprising:

identifying the at least one grant is based at least in part on identification of an indicator that points to the at least one grant.

11. The method of claim 10, wherein the indicator that points to the at least one grant is included in the DCI corresponding to the multiple mini-slots.

12. The method of claim 9, wherein the information common to the multiple mini-slots comprises a waveform characteristic, a resource block allocation, a rank, or a combination thereof.

13. The method of claim 9, wherein the DCI comprises one or more shortened fields corresponding to the information common to the multiple mini-slots.

14. The method of claim 9, wherein the at least one grant consists of a single grant.

15. The method of claim 9, wherein the second reference signal configuration for the multiple mini-slots is determined based at least in part on the DCI corresponding to the multiple mini-slots.

16. The method of claim 7, further comprising:

determining one or more scheduling parameters for each mini-slot of the aggregated mini-slot and a separation between at least two mini-slots of the aggregated mini-slot, wherein the second reference signal configuration is determined based at least in part on the one or more scheduling parameters and the separation.

17. The method of claim 7, further comprising:

determining whether to share the reference signal pattern between two mini-slots of the aggregated mini-slot based at least in part on one or both of a time separation and a frequency separation between the two mini-slots.

18. The method of claim 7, wherein a plurality of mini-slots of the aggregated mini-slot are contiguous and have the same resource allocation.

19. The method of claim 1, wherein allocating the at least one data payload comprises:

allocating the at least one data payload across the aggregated mini-slot and based at least in part on a single grant message; and

determining the reference signal configuration comprises determining a reference signal pattern across the aggregated mini-slot, wherein the reference signal pattern is shared between multiple mini-slots of the aggregated mini-slot.

20. The method of claim 19, further comprising:

determining, based at least in part on the single grant message, one or more scheduling parameters common to multiple mini-slots of the aggregated mini-slot wherein the reference signal pattern is based at least in part on the one or more scheduling parameters.

21. The method of claim 19, wherein the allocation of the at least one data payload or the determination of the reference signal configuration is based at least in part on a modulation and coding scheme (MCS) for each mini-slot of the aggregated mini-slot, and wherein the MCS for a first mini-slot is different than the MCS for a second mini-slot.

22. The method of claim 1, further comprising:

encoding the aggregated mini-slot based at least in part on a frequency-first mapping scheme or a time-first mapping scheme, wherein transmission of the one or more reference signals and the at least one data payload is based at least in part on the encoding.

23. The method of claim 1, further comprising:

scheduling each mini-slot of the aggregated mini-slot via respective grant messages or via a single grant message.

24. The method of claim 1, wherein a first mini-slot of the aggregated mini-slot has a bandwidth different from a second mini-slot of the aggregated mini-slot.

25. The method of claim 1, wherein the reference signal configuration is determined based at least in part on a spectral efficiency, a number of resource elements (REs), a transport block size (TBS), a ratio of TBS and number of REs, or any combination thereof of one or more mini-slots of the aggregated mini-slot.

26. The method of claim 1, wherein the reference signal configuration is determined based at least in part on a modulation and coding scheme (MCS) for each mini-slot of the aggregated mini-slot.

27. The method of claim 1, wherein the allocation of the at least one data payload is based at least in part on a modulation and coding scheme (MCS) for each mini-slot of the aggregated mini-slot, and wherein the MCS for a first mini-slot of the aggregated mini-slot is different than the MCS for a second mini-slot of the aggregated mini-slot.

28. An apparatus for wireless communication, comprising:

a processor,

memory in electronic communication with the processor; and

instructions stored in the memory and executable by the processor to cause the apparatus to:

identify a set of mini-slots to be used for transmission of one or more reference signals and at least one data payload, the set of mini-slots having a first reference signal configuration for transmission of the one or more reference signals;

aggregate the set of mini-slots to form an aggregated mini-slot for transmission of the one or more reference signals

determine a second reference signal configuration for transmission of the one or more reference signals within the aggregated mini-slot, the second reference signal configuration being different from the first reference signal configuration based at least in part on at least one of the one or more reference signals being removed or repositioned relative to the first reference signal configuration for transmission of the one or more reference signals;

allocate the at least one data payload to resources associated with the aggregated mini-slot; and

transmit, within the aggregated mini-slot, the one or more reference signals and the at least one data payload based at least in part on the second reference signal configuration and the allocation of the at least one data payload.

29. An apparatus for wireless communication, comprising:

means for identifying a set of mini-slots to be used for transmission of one or more reference signals and at least one data payload, the set of mini-slots having a first reference signal configuration for transmission of the one or more reference signals;

means for aggregating the set of mini-slots to form an aggregated mini-slot for

transmission of the one or more reference signals;

means for determining a second reference signal configuration for transmission of the one or more reference signals within the aggregated mini-slot, the second reference signal configuration being different from the first reference signal configuration based at least in part on at least one of the one or more reference signals being removed or repositioned relative to the first reference signal configuration for transmission of the one or more reference signals;

means for allocating the at least one data payload to resources associated with the aggregated mini-slot; and

means for transmitting, within the aggregated mini-slot, the one or more reference signals and the at least one data payload based at least in part on the second reference signal configuration and the allocation of the at least one data payload.

30. A non-transitory computer-readable medium storing code for wireless communication, the code comprising instructions executable by a processor to:

identify a set of mini-slots to be used for transmission of one or more reference signals and at least one data payload, the set of mini-slots having a first reference signal configuration for transmission of the one or more reference signals;

aggregate the set of mini-slots to form an aggregated mini-slot for transmission of the one or more reference signals;

determine a second reference signal configuration for transmission of the one or more reference signals within the aggregated mini-slot, the second reference signal configuration being different from the first reference signal configuration based at least in part on at least one of the one or more reference signals being removed or repositioned relative to the first reference signal configuration for transmission of the one or more reference signals;

allocate the at least one data payload to resources associated with the aggregated mini-slot; and

transmit, within the aggregated mini-slot, the one or more reference signals and the at least one data payload based at least in part on the second reference signal configuration and the allocation of the at least one data payload.