

CLAIMS

1. A method of wireless communication by a User Equipment (UE), comprising:
receiving downlink control information (DCI) scheduling a plurality of physical uplink shared channel (PUSCH) transmissions for corresponding transport blocks (TBs), wherein time domain resources are allocated for the plurality of PUSCH transmissions according to a Time Domain Resource Allocation (TDRA) pattern selected from a TDRA table designed for multi-PUSCH grants and the DCI comprises an indication of the TDRA pattern, and each TDRA pattern comprises a slot offset only for the first scheduled PUSCH transmission of the plurality of PUSCH transmissions;
determining, based on the indication, the TDRA pattern from the TDRA table;
and
determining, based on the determined TDRA pattern, the allocation of the time domain resources for the plurality of PUSCH transmissions.
2. The method of claim 1, wherein:
each row of the TDRA table corresponds to a different TDRA pattern;
each TDRA pattern is defined by allocation information in a plurality of columns of the corresponding row of the TDRA table; and
each TDRA pattern defines a different pattern for allocating time domain resources for the plurality of PUSCH transmissions.
3. The method of claim 2, wherein the allocation information for each TDRA pattern from the TDRA table comprises:
for at least a first scheduled PUSCH transmission of the plurality of PUSCH transmissions, information relating to a slot offset, a starting symbol, an allocation symbol length and a mapping type.
4. The method of claim 2, wherein the allocation information for each TDRA pattern from the TDRA table further comprises:
for each subsequent PUSCH transmission of the plurality of PUSCH transmissions, information relating to at least one of an allocation symbol length or a mapping type.

5. The method of claim 4, wherein the time domain resources allocated to each PUSCH transmission according to the allocation information in the TDRA table are contained within a slot of a subframe.
6. The method of claim 1, further comprising receiving an indication of a maximum number of transmissions that can be scheduled by the DCI via Radio Resource Control (RRC) signaling.
7. The method of claim 1, further comprising receiving a configuration of the TDRA table via Radio Resource Control (RRC) signaling.
8. A method of wireless communication by a base station (BS), comprising:
allocating time domain resources for a plurality of physical uplink shared channel (PUSCH) transmissions for corresponding transport blocks (TBs), according to a Time Domain Resource Allocation (TDRA) pattern selected from a TDRA table designed for multi-PUSCH grants and each TDRA pattern comprises a slot offset only for the first scheduled PUSCH transmission of the plurality of PUSCH transmissions; and
transmitting downlink control information (DCI) scheduling the plurality of PUSCH transmissions, wherein the DCI comprises an indication of the TDRA pattern selected from the TDRA table.
9. The method of claim 8, wherein:
each row of the TDRA table corresponds to a different TDRA pattern;
each TDRA pattern is defined by allocation information in a plurality of columns of the corresponding row of the TDRA table; and
each TDRA pattern defines a different pattern for allocating time domain resources for the plurality of PUSCH transmissions.
10. The method of claim 9, wherein the allocation information for each TDRA pattern from the TDRA table comprises:

for at least a first scheduled PUSCH transmission of the plurality of PUSCH transmissions, information relating to a slot offset, a starting symbol, an allocation symbol length and a mapping type.

11. The method of claim 10, wherein the allocation information for each TDRA pattern from the TDRA table further comprises:

for each subsequent PUSCH transmission of the plurality of PUSCH transmissions, information relating to at least one of an allocation symbol length or a mapping type.

12. The method of claim 10, wherein the time domain resources allocated to each transmission according to the allocation information in the TDRA table are contained within a slot of a subframe.

13. The method of claim 9, further comprising indicating a maximum number of transmissions that can be scheduled by the DCI via Radio Resource Control (RRC) signaling.

14. The method of claim 8, further comprising transmitting a configuration of the TDRA table via Radio Resource Control (RRC) signaling.

15. An apparatus for wireless communication by a User Equipment (UE), comprising:

A receiver configured to receive downlink control information (DCI) scheduling a plurality of physical uplink shared channel (PUSCH) transmissions, wherein time domain resources are allocated for the plurality of PUSCH transmissions according to a Time Domain Resource Allocation (TDRA) pattern selected from a TDRA table designed for multi-PUSCH grants and the DCI comprises an indication of the TDRA pattern and each TDRA pattern comprises a slot offset only for the first scheduled PUSCH transmission of the plurality of PUSCH transmissions; and

at least one processor configured to determine, based on the indication, the TDRA pattern from the TDRA table and to determine, based on the determined TDRA

pattern, the allocation of the time domain resources for the plurality of PUSCH transmissions.

16. The apparatus of claim 15, wherein:
 - each row of the TDRA table corresponds to a different TDRA pattern;
 - each TDRA pattern is defined by allocation information in a plurality of columns of the corresponding row of the TDRA table; and
 - each TDRA pattern defines a different pattern for allocating time domain resources for the plurality of PUSCH transmissions.
17. The apparatus of claim 16, wherein the allocation information for each TDRA pattern from the TDRA table comprises:
 - for at least a first scheduled PUSCH transmission of the plurality of PUSCH transmissions, information relating to a slot offset, a starting symbol, an allocation symbol length and a mapping type.
18. The apparatus of claim 16, wherein the allocation information for each TDRA pattern from the TDRA table further comprises:
 - for each subsequent PUSCH transmission of the plurality of PUSCH transmissions, information relating to at least one of an allocation symbol length or a mapping type.
19. The apparatus of claim 18, wherein the time domain resources allocated to each PUSCH transmission according to the allocation information in the TDRA table are contained within a slot of a subframe.
20. The apparatus of claim 15, further comprising receiving an indication of a maximum number of transmissions that can be scheduled by the DCI via Radio Resource Control (RRC) signaling.
21. The apparatus of claim 15, further comprising receiving a configuration of the TDRA table via Radio Resource Control (RRC) signaling.

22. An apparatus for wireless communication by a base station (BS), comprising:
at least one processor configured to allocate time domain resources for a plurality of physical uplink shared channel (PUSCH) transmissions, according to a Time Domain Resource Allocation (TDRA) pattern selected from a TDRA table designed for multi-PUSCH grants and each TDRA pattern comprises a slot offset only for the first scheduled PUSCH transmission of the plurality of PUSCH transmissions; and
a transmitter configured to transmit downlink control information (DCI) scheduling the plurality of PUSCH transmissions, wherein the DCI comprises an indication of the TDRA pattern selected from the TDRA table.
23. The apparatus of claim 22, wherein:
each row of the TDRA table corresponds to a different TDRA pattern;
each TDRA pattern is defined by allocation information in a plurality of columns of the corresponding row of the TDRA table; and
each TDRA pattern defines a different pattern for allocating time domain resources for the plurality of PUSCH transmissions.
24. The apparatus of claim 23, wherein the allocation information for each TDRA pattern from the TDRA table comprises:
for at least a first scheduled PUSCH transmission of the plurality of PUSCH transmissions, information relating to a slot offset, a starting symbol, an allocation symbol length and a mapping type.
25. The apparatus of claim 24, wherein the allocation information for each TDRA pattern from the TDRA table further comprises:
for each subsequent PUSCH transmission of the plurality of PUSCH transmissions, information relating to at least one of an allocation symbol length or a mapping type.
26. The apparatus of claim 24, wherein the time domain resources allocated to each transmission according to the allocation information in the TDRA table are contained within a slot of a subframe.

27. The apparatus of claim 23, further comprising indicating a maximum number of transmissions that can be scheduled by the DCI via Radio Resource Control (RRC) signaling.

28. The apparatus of claim 22, further comprising transmitting a configuration of the TDRA table via Radio Resource Control (RRC) signaling.