

CLAIMS

1. A method of transmitting an uplink signal, by a user equipment (UE), in a wireless communication system, the method comprising:

reporting, to a base station (BS), capability information, wherein the capability information comprises information related to the simultaneous transmission capability for the uplink signal of different transmission time interval (TTI) lengths;

receiving a downlink data channel in at least one serving cell based on the capability information; and

transmitting a first uplink control channel for the downlink data channel,

wherein the cell to carry the first uplink control channel is a primary cell of an uplink control channel group to which the at least one serving cell belongs, and

wherein the primary cell to carry the first uplink control channel is configured to support a short TTI (sTTI)-based operation based on the sTTI-based operation configured to the at least one serving cell .

2. The method according to claim 1, wherein the at least one serving cell is a secondary cell (Scell) of the uplink control channel group.

3. The method according to claim 1, wherein the first uplink control channel is an sTTI-based channel.

4. The method according to claim 1, wherein the capability information is provided per band combination.

5. The method according to claim 3, further comprising:

receiving scheduling information related to a simultaneous transmission configuration and a simultaneous transmission time of a second uplink control channel and an uplink data channel based on the capability information;

wherein a transmission time of the first uplink control channel overlaps with the simultaneous transmission time, and

wherein a TTI length of the first uplink control channel and a TTI length of the uplink data channel are different from each other,

wherein the first uplink control channel and the uplink data channel are simultaneously transmitted.

6. The method according to claim 5, wherein based on that the transmission time of the first uplink control channel overlaps with the simultaneous transmission time, dropping the second uplink control channel and transmitting the first uplink control channel and the uplink data channel simultaneously, and

wherein control information of the second uplink control channel is transmitted by being merged with the first uplink control channel.

7. A user equipment (UE) for transmitting an uplink signal in a wireless communication system, the UE comprising:

a receiver and a transmitter; and

a processor configured to control the receiver and the transmitter,

wherein the processor is configured to:

report, to a base station (BS), capability information, wherein the capability information comprises information related to the simultaneous transmission capability for the uplink signal of different transmission time interval (TTI) lengths,

receive a downlink data channel in at least one serving cell based on the capability information, and

transmit a first uplink control channel for the downlink data channel, and

wherein the cell to carry the first uplink control channel is a primary cell of an uplink control channel group to which the at least one serving cell belongs, and

wherein the primary cell to carry the first uplink control channel is configured to support a short TTI (sTTI)-based operation based on the sTTI-based operation configured to the at least one serving cell.

8. The UE according to claim 7, wherein the at least one serving cell is a secondary cell (Scell) of the uplink control channel group.

9. The UE according to claim 7, wherein the first uplink control channel is an sTTI-based channel.

10. The UE according to claim 7, wherein the capability information is provided per band combination.

11. The UE according to claim 9, wherein the processor is further configured to receive scheduling information related to a simultaneous transmission configuration and a simultaneous transmission time of a second uplink control channel and an uplink data channel based on the capability information, and

wherein a transmission time of the first uplink control channel overlaps with the simultaneous transmission time, and

wherein a TTI length of the first uplink control channel and a TTI length of the uplink data channel are different from each other,

wherein the first uplink control channel and the uplink data channel are simultaneously transmitted.

12. The UE according to claim 11, wherein based on that the transmission time of the first uplink control channel overlaps with the simultaneous transmission time, the processor is configured to drop the second uplink control channel and simultaneously transmit the first uplink control channel and the uplink data channel, and

wherein control information of the second uplink control channel is transmitted by being merged with the first uplink control channel.