

CLAIMS

1. A method performed by a wireless device configured to operate in a wireless communication system, the method comprising:

receiving, from a network, a configuration of a plurality of data subbands, wherein the configuration includes information on a numerology for each of the plurality of data subbands, and wherein one data subband among the plurality of data subbands consists of contiguous physical resource blocks (PRBs);

activating a first data subband among the plurality of data subbands;

communicating with the network in the first data subband;

receiving, from the network, downlink control information (DCI) including information on a second data subband among the plurality of data subbands;

activating the second data subband by performing a bandwidth adaptation from the first data subband to the second data subband based on the information on the second data subband; and

communicating with the network via resources scheduled by the DCI in the second data subband.

2. The method of claim 1, wherein at least one of a numerology used for data transmission, a slot length, a mini-slot length, a radio access technology (RAT) or a maximum transport block size (TBS) is defined per data subband among the plurality of data subbands.

3. The method of claim 1 or 2, wherein at least one of the first data subband or the second data subband is configured in a user equipment (UE)-specific carrier.

4. The method of claim 3, wherein the UE-specific carrier is configured per radio frequency (RF).

5. The method of claim 1 or 2, wherein at least one of the first data subband or the second data subband is configured across multiple UE-specific carriers.

6. The method of any one of claims 1 to 5, wherein at least one of the first data

subband or the second data subband includes a common data subband for a common data.

7. The method of claim 6, wherein at most one common data subband is configured for the common data.

8. The method of any one of claims 1 to 7, wherein at least one of the first data subband or the second data subband is scheduled by a control subband.

9. The method of claim 8, wherein at least one of a numerology used for control transmission, a monitoring interval or a resource element group (REG) or control channel element (CCE) index within the control subband is defined per control subband.

10. The method of claim 8 or 9, wherein the control subband is configured in an anchor subband.

11. The method of any one of claims 1 to 10, further comprising performing channel state information (CSI) measurement within at least one of the first data subband or the second data subband.

12. The method of any one of claims 1 to 11, further comprising transmitting a sounding reference signal (SRS) within at least one of the first data subband or the second data subband.

13. The method of any one of claims 1 to 12, further comprising performing measurement on a frequency which is configured independently from the first data subband and the second data subband.

14. The method of claim 13, wherein the frequency carries a synchronization signal (SS) block.

15. A wireless device configured to operate in a wireless communication system, the wireless device comprising:

a memory;

a transceiver; and

a processor, operably coupled to the memory and the transceiver, wherein the wireless device is configured to:

receive, via the transceiver from a network, a configuration of a plurality of data subbands, wherein the configuration includes information on a numerology for each of the plurality of data subbands, and wherein one data subband among the plurality of data subbands consists of contiguous physical resource blocks (PRBs);

activate a first data subband among the plurality of data subbands;

communicate, via the transceiver, with the network in the first data subband;

receive, via the transceiver from the network, downlink control information (DCI) including information on a second data subband among the plurality of data subbands;

activate the second data subband by performing a bandwidth adaptation from the first data subband to the second data subband based on the information on the second data subband; and

communicate, via the transceiver, with the network via resources scheduled by the DCI in the second data subband.