[Claim 1]

A user equipment (UE), comprising:

higher layer circuitry configured to receive first information to configure a sidelink bandwidth part (BWP) and second information to configure one or more resource pools for sidelink transmission and/or reception; and

transmitting circuitry configured to transmit a physical sidelink control channel (PSCCH) and a physical sidelink shared channel (PSSCH), wherein

the first information configures a subcarrier spacing ~~is associated with the sidelink BWP,~~ and

the second information configures, for each of the one or more resource pools, a demodulation reference signal configuration for the PSCCH and PSSCH is configured for each of the one or more resource pools.

[Claim 2]

A base station (gNB), comprising:

higher layer circuitry configured to transmit first information to configure a sidelink bandwidth part (BWP) and second information to configure one or more resource pools for sidelink communication; wherein

the first information configures a subcarrier spacing ~~is associated with the sidelink BWP~~, and

the second information configures, for each of the one or more resource pools, a demodulation reference signal configuration for ~~the~~ a physical sidelink control channel (PSCCH) and a physical sidelink shared channel (PSSCH) is configured for each of the one or more resource pools.

[Claim 3]

A communication method by a user equipment (UE), comprising:

receiving first information to configure a sidelink bandwidth part (BWP) and second information to configure one or more resource pools for sidelink transmission and/or reception; and

transmitting a physical sidelink control channel (PSCCH) and a physical sidelink shared channel (PSSCH), wherein

the first information configures a subcarrier spacing ~~is associated with the sidelink BWP~~, and

the second information configures, for each of the one or more resource pools, a demodulation reference signal configuration for ~~the~~ a physical sidelink control channel (PSCCH) and a physical sidelink shared channel (PSSCH) is configured for each of the one or more resource pools.

~~[Claim 4]~~

~~A communication method by a base station (gNB), comprising:~~

~~transmitting information to configure a sidelink bandwidth part (BWP) and second information to configure one or more resource pool for sidelink communication; wherein subcarrier spacing is associated with the sidelink BWP, and a demodulation reference signal configuration for the PSCCH and PSSCH is configured for each of the one or more resource pools.~~