

CLAIMS

1. A method performed by a user equipment (UE) in a wireless communication system, the method comprising:

receiving, in a first control resource set (CORESET) of a first downlink (DL) Bandwidth Part (BWP), Downlink Control Information (DCI) for scheduling a Physical Downlink Shared Channel (PDSCH), the DCI comprising (i) BWP switching information that indicates switching an active DL BWP from the first DL BWP to a second DL BWP, and (ii) Transport Block (TB) information for a TB#1 including a first Modulation and Coding Scheme (MCS) field for the TB#1, a first New Data Indicator (NDI) field for the TB#1, and a first Redundancy Version (RV) field for the TB#1 that is related to a TB for a Physical Downlink Shared Channel (PDSCH); and

~~based on the UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP; processing the TB information in the DCI as relating to only one TB among the 2 TBs configured for the PDSCH in the second DL BWP; and~~

receiving the TB#1 through the scheduled PDSCH in the second DL BWP based on the BWP switching information and the TB information.

wherein, based on that a maximum number of TBs to receive is configured as 1 for the first DL BWP and 2 for the second DL BWP, the UE assumes zero padding for a second MCS field for a TB#2, a second NDI field for the TB#2 and a second RV field for the TB#2, which are not included in the DCI received in the first CORESET of the first DL BWP and ignores the second MCS field for the TB#2, the second NDI field for the TB#2 and the second RV field for the TB#2.

wherein the UE obtains transmission configuration information (TCI) for the scheduled PDSCH in the second DL BWP, based on a TCI configuration assumption, and

wherein the TCI configuration assumption is defined for a second CORESET in the UE to receive the scheduled PDSCH in the switched second DL BWP after switching the active DL BWP as indicated by the DCI.

2. The method of claim 1, ~~wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~

~~processing first TB information which is related to the one TB among the 2 TBs; and~~

~~determining that second TB information, which is related to another TB among the 2 TBs, consists of zero padding.~~

~~3. The method of claim 1, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~

~~processing first TB information which is related to the one TB among the 2 TBs; and
ignoring second TB information which is related to another TB among the 2 TBs.~~

~~4. The method of claim 3, wherein ignoring the second TB information comprises:—~~

~~processing the TB information in the DCI by ignoring bit fields for a Modulation and Coding Scheme (MCS), a New Data Indicator (NDI), and a Redundancy Version (RV) for the another TB among the 2 TBs.—~~

~~5. The method of claim 1, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~

~~processing first TB information which is related to the one TB among the 2 TBs; and
determining that second TB information, which is related to another TB among the 2 TBs, is disabled.~~

~~62. The method of claim 1, wherein the maximum number of TBs to receive is configured as 1 for the first DL BWP and 2 for the second DL BWP UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP is based on:~~

~~receiving, by the UE through a first RRC-layer signaling, a first maxNrofCodeWordsScheduledByDCI parameter for the first DL BWP that is equal to 1, and~~

~~receiving, by the UE through a second RRC-layer signaling, a second maxNrofCodeWordsScheduledByDCI parameter for the second DL BWP that is equal to 2.~~

~~7. The method of claim 1, wherein transmission configuration information (TCI) for the second DL BWP is same as TCI information related to the DCI.~~

~~8. The method of claim 7, wherein the TCI information related to the DCI comprises: TCI information for a Control Resource Set (CORESET) that is related to the DCI.~~

~~93~~. The method of claim 1, wherein the first DL BWP consists of a first plurality of physical resource blocks (PRBs) that are contiguous in frequency, and

wherein the second DL BWP consists of a second plurality of PRBs that are contiguous in frequency.

~~104~~. The method of claim 1, wherein the active DL BWP consists of a plurality of physical resource blocks (PRBs) that are contiguous in frequency, and in which the UE is configured to receive the PDSCH.

~~115~~. An apparatus ~~for wireless communication~~~~configured to control a user equipment (UE) to operate in a wireless communication system~~, the apparatus comprising:

at least one processor; and

at least one memory operably connectable to the at least one processor and storing instructions that, when executed by the at least one processor, perform operations comprising:

receiving, in a first downlink (DL) Bandwidth Part (BWP), Downlink Control Information (DCI) ~~for scheduling a Physical Downlink Shared Channel (PDSCH), the DCI~~ comprising (i) BWP switching information that indicates switching an active DL BWP from the first DL BWP to a second DL BWP, and (ii) Transport Block (TB) information ~~for a TB#1 including a first Modulation and Coding Scheme (MCS) field for the TB#1, a first New Data Indicator (NDI) field for the TB#1, and a first Redundancy Version (RV) field for the TB#1 that is related to a TB for a Physical Downlink Shared Channel (PDSCH); and~~

~~based on the UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP; processing the TB information in the DCI as relating to only one TB among the 2 TBs configured for the PDSCH in the second DL BWP; and~~

receiving ~~the TB#1 through~~ the ~~scheduled~~ PDSCH in the second DL BWP based on the BWP switching information and the TB information.

~~wherein, based on that a maximum number of TBs to receive is configured as 1 for the first DL BWP and 2 for the second DL BWP, the at least one processor assumes zero padding for a second MCS field for a TB#2, a second NDI field for the TB#2 and a second RV field for the TB#2, which are not included in the DCI received in the first CORESET of the first DL BWP and ignores the second MCS field for the TB#2, the second NDI field for the TB#2 and the second RV field for the TB#2,~~

~~wherein the at least one processor obtains transmission configuration information (TCI) for the scheduled PDSCH in the second DL BWP, based on a TCI configuration assumption, and~~

wherein the TCI configuration assumption is defined for a second CORESET in the apparatus to receive the scheduled PDSCH in the switched second DL BWP after switching the active DL BWP as indicated by the DCI.

~~12. The apparatus of claim 11, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~
~~processing first TB information which is related to the one TB among the 2 TBs; and~~
~~determining that second TB information, which is related to another TB among the 2 TBs, consists of zero-padding.~~

~~13. The apparatus of claim 11, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~
~~processing first TB information which is related to the one TB among the 2 TBs; and~~
~~ignoring second TB information which is related to another TB among the 2 TBs.~~

~~14. The apparatus of claim 13, wherein ignoring the second TB information comprises:~~
~~processing the TB information in the DCI by ignoring bit fields for a Modulation and Coding Scheme (MCS), a New Data Indicator (NDI), and a Redundancy Version (RV) for the another TB among the 2 TBs.~~

~~15. The apparatus of claim 11, wherein the UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP is based on:~~
~~receiving, by the UE through a first RRC-layer signaling, a first maxNrofCodeWordsScheduledByDCI parameter for the first DL BWP that is equal to 1, and~~
~~receiving, by the UE through a second RRC-layer signaling, a second maxNrofCodeWordsScheduledByDCI parameter for the second DL BWP that is equal to 2.~~

~~16. A user equipment (UE) configured to operate in a wireless communication system, the UE comprising:~~
~~a transceiver;~~
~~at least one processor; and~~

~~at least one memory operably connectable to the at least one processor and storing instructions that, when executed by the at least one processor, perform operations comprising:—~~

~~receiving, in a first downlink (DL) Bandwidth Part (BWP), Downlink Control Information (DCI) comprising (i) BWP switching information that indicates switching an active DL BWP from the first DL BWP to a second DL BWP, and (ii) Transport Block (TB) information that is related to a TB for a Physical Downlink Shared Channel (PDSCH);—~~

~~based on the UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP; processing the TB information in the DCI as relating to only one TB among the 2 TBs configured for the PDSCH in the second DL BWP; and~~

~~receiving the PDSCH in the second DL BWP based on the BWP switching information and the TB information.~~

~~17. The UE of claim 16, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~

~~processing first TB information which is related to the one TB among the 2 TBs; and~~

~~determining that second TB information, which is related to another TB among the 2 TBs, consists of zero-padding.~~

~~18. The UE of claim 16, wherein processing the TB information in the DCI as relating to only the one TB among the 2 TBs configured for the PDSCH in the second DL BWP comprises:~~

~~processing first TB information which is related to the one TB among the 2 TBs; and~~

~~ignoring second TB information which is related to another TB among the 2 TBs.~~

~~19. The UE of claim 18, wherein ignoring the second TB information comprises:—~~

~~processing the TB information in the DCI by ignoring bit fields for a Modulation and Coding Scheme (MCS), a New Data Indicator (NDI), and a Redundancy Version (RV) for the another TB among the 2 TBs.—~~

~~20. The UE of claim 16, wherein the UE being configured to receive at most 1 TB for the PDSCH in the first DL BWP and at most 2 TBs for the PDSCH in the second DL BWP is based on:~~

~~receiving, by the UE through a first RRC layer signaling, a first maxNrofCodeWordsScheduledByDCI parameter for the first DL BWP that is equal to 1, and—
receiving, by the UE through a second RRC layer signaling, a second maxNrofCodeWordsScheduledByDCI parameter for the second DL BWP that is equal to 2.~~

6. The apparatus of claim 5, further comprising:

a transceiver,

wherein the apparatus is a user equipment (UE) configured to operate in a wireless communication system.

7. The apparatus of claim 5, wherein the apparatus is configured to control a user equipment (UE) in a wireless communication system.

8. A computer-readable medium storing instructions for performing the method of claim 1.

9. A method performed by a wireless communication system including a base station (BS) and a user equipment (UE), the method comprising:

transmitting, by the BS to the UE in a first downlink (DL) Bandwidth Part (BWP), Downlink Control Information (DCI) for scheduling a Physical Downlink Shared Channel (PDSCH), the DCI comprising (i) BWP switching information that indicates switching an active DL BWP from the first DL BWP to a second DL BWP, and (ii) Transport Block (TB) information for a TB#1 including a first Modulation and Coding Scheme (MCS) field for the TB#1, a first New Data Indicator (NDI) field for the TB#1, and a first Redundancy Version (RV) field for the TB#1; and

transmitting, by the BS to the UE, the TB#1 through the scheduled PDSCH in the second DL BWP based on the BWP switching information and the TB information,

wherein, based on that a maximum number of TBs to receive is configured as 1 for the first DL BWP and 2 for the second DL BWP, the UE assumes zero padding for a second MCS field for a TB#2, a second NDI field for the TB#2 and a second RV field for the TB#2, which are not included in the DCI received in the first CORESET of the first DL BWP and ignores the second MCS field for the TB#2, the second NDI field for the TB#2 and the second RV field for the TB#2,

wherein the UE obtains transmission configuration information (TCI) for the scheduled PDSCH in the second DL BWP, based on a TCI configuration assumption, and

wherein the TCI configuration assumption is defined for a second CORESET in the UE to receive the scheduled PDSCH in the switched second DL BWP after switching the active DL BWP as indicated by the DCI.

10. A wireless communication system comprising:

a base station (BS) configured to transmit a downlink (DL) signal and to receive an uplink (UL) signal; and

a user equipment (UE) configured to receive the DL signal and to transmit the UL signal,

wherein the BS is configured to transmit, to the UE in a first downlink (DL) Bandwidth Part (BWP), Downlink Control Information (DCI) for scheduling a Physical Downlink Shared Channel (PDSCH), the DCI comprising (i) BWP switching information that indicates switching an active DL BWP from the first DL BWP to a second DL BWP, and (ii) Transport Block (TB) information for a TB#1 including a first Modulation and Coding Scheme (MCS) field for the TB#1, a first New Data Indicator (NDI) field for the TB#1, and a first Redundancy Version (RV) field for the TB#1, and to transmit to the UE, the TB#1 through the scheduled PDSCH in the second DL BWP based on the BWP switching information and the TB information,

wherein, based on that a maximum number of TBs to receive is configured as 1 for the first DL BWP and 2 for the second DL BWP, the UE assumes zero padding for a second MCS field for a TB#2, a second NDI field for the TB#2 and a second RV field for the TB#2, which are not included in the DCI received in the first CORESET of the first DL BWP and ignores the second MCS field for the TB#2, the second NDI field for the TB#2 and the second RV field for the TB#2,

wherein the UE obtains transmission configuration information (TCI) for the scheduled PDSCH in the second DL BWP, based on a TCI configuration assumption, and

wherein the TCI configuration assumption is defined for a second CORESET in the UE to receive the scheduled PDSCH in the switched second DL BWP after switching the active DL BWP as indicated by the DCI.