

CLAIMS

1. A method for configuring a carrier for a user equipment in a wireless network, the user equipment supporting multiple carriers, the method comprising:
 - a. receiving, by the user equipment, signaling via radio resource signaling, said signaling providing information for the carrier, wherein the information includes a logical index for the carrier;
 - b. configuring, by the user equipment, the carrier according to the received information.
2. The method of claim 1, wherein the information comprises at least one of:
 - a. frequency of the carrier;
 - b. bandwidth of the carrier;
 - c. discontinuous reception parameters of the carrier; or
 - d. control channel support.
3. The method of claim 1, further comprising receiving additional signaling to enable or disable reception of the carrier.
4. The method of claim 3, wherein the additional signaling includes information relating to the logical index of the carrier.

5. The method of claim 2, further comprising enabling or disabling reception of the carrier based on discontinuous reception parameters configured for the carrier.
6. The method of claim 2, wherein the control channel support indicates whether control channel reception should be enabled for the carrier.
7. The method of claim 2, wherein the control channel support indicates a second carrier, the second carrier contains control information corresponding to the carrier.
8. The method of claim 7, further comprising disabling, by the user equipment, reception of the control information corresponding to the carrier when reception of the carrier is disabled.
9. The method of claim 8, wherein the control information corresponding to the carrier is transmitted on a different carrier to the carrier transmitting the packet data.
10. A user equipment comprising:
 - a communications subsystem,
 - wherein the communications subsystem is configured to perform the method of any one of claims 1 to 9.
11. A method of transmitting control information corresponding to a carrier among a plurality of carriers, the method comprising:

determining an activation time of the carrier; and
transmitting control information corresponding to the carrier prior to the activation time.

12. The method of claim 11, wherein the control information comprises at least one of:
- a. Channel Quality Indicator (CQI);
 - b. Precoding Matrix Indicator (PMI);
 - c. Rank Indicator (RI); or
 - d. Sounding Reference Symbol (SRS).

13. The method of claim 11, wherein the determination of an activation time of the carrier comprises at least one of:
- a. receiving a signaling message to enable reception of the carrier; and
 - b. a time corresponding to the start of the Active time of the carrier.

14. The method of claim 11, wherein the plurality of carriers are determined based on receiving at least one allocation signaling message.

15. A network element comprising:
a communications subsystem,
wherein the communications subsystem is configured to perform the method of any one of claims 11 to 14.

16. A method of operating a user equipment in a wireless network, the user equipment supporting multiple carriers, the method comprising:

receiving, by the user equipment, a disable command control element for a carrier;
and

discontinuing, by the user equipment, transmission of the control information corresponding to the carrier after receiving the disable command control element.

17. The method of claim 16, wherein the reception of the carrier is disabled based on receiving a signaling message.

18. The method of claim 16, wherein the reception of the carrier is disabled based on the discontinuous reception operation configured for the carrier.

19. The method of claim 16, wherein the plurality of carriers are determined based on receiving an allocation signaling message.

20. A user equipment comprising:

a communications subsystem,

wherein the communications subsystem is configured to perform the method of any one of claims 16 to 19.

21. The method of claim 8, wherein disabling, by the user equipment, reception of the control information comprises stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier.

22. The method of claim 16, further comprising stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier when the PDCCH is transmitted on the carrier after receiving the disable command control element.

23. The method of claim 16, further comprising stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier when the PDCCH is transmitted on another carrier different from the carrier after receiving the disable command control element.

CLAIMS:

1. A method for configuring a carrier for a user equipment in a wireless network, the user equipment supporting multiple carriers, the method comprising:
 - a. receiving, by the user equipment, signaling via radio resource signaling, said signaling providing information for the carrier, wherein the information includes a logical index for the carrier;
 - b. configuring, by the user equipment, the carrier according to the received information.
2. The method of claim 1, wherein the information comprises at least one of:
 - a. frequency of the carrier;
 - b. bandwidth of the carrier;
 - c. discontinuous reception parameters of the carrier; or
 - d. control channel support.
3. The method of claim 1, further comprising receiving additional signaling to enable or disable reception of the carrier.
4. The method of claim 3, wherein the additional signaling includes information relating to the logical index of the carrier.
5. The method of claim 2, further comprising enabling or disabling reception of the carrier based on discontinuous reception parameters configured for the carrier.
6. The method of claim 2, wherein the control channel support indicates whether control channel reception should be enabled for the carrier.
7. The method of claim 2, wherein the control channel support indicates a second carrier, the second carrier contains control information corresponding to the carrier.
8. The method of claim 7, further comprising disabling, by the user equipment, reception of the control information corresponding to the carrier when reception of the carrier is disabled.

9. The method of claim 8, wherein the control information corresponding to the carrier is transmitted on a different carrier to the carrier transmitting the packet data.
10. A user equipment comprising:
a communications subsystem,
wherein the communications subsystem is configured to perform the method of any one of claims 1 to 9.
11. A method of transmitting control information corresponding to a carrier among a plurality of carriers, the method comprising:
determining an activation time of the carrier; and
transmitting control information corresponding to the carrier prior to the activation time.
12. The method of claim 11, wherein the control information comprises at least one of:
- Channel Quality Indicator (CQI);
 - Precoding Matrix Indicator (PMI);
 - Rank Indicator (RI); or
 - Sounding Reference Symbol (SRS).
13. The method of claim 11, wherein the determination of an activation time of the carrier comprises at least one of:
- receiving a signaling message to enable reception of the carrier; and
 - a time corresponding to the start of the Active time of the carrier.
14. The method of claim 11, wherein the plurality of carriers are determined based on receiving at least one allocation signaling message.
15. A network element comprising:
a communications subsystem,
wherein the communications subsystem is configured to perform the method of any one of claims 11 to 14.
16. A method of operating a user equipment in a wireless network, the user equipment supporting multiple carriers, the method comprising:

receiving, by the user equipment, a disable command control element for a carrier; and

discontinuing, by the user equipment, transmission of the control information corresponding to the carrier after receiving the disable command control element.

17. The method of claim 16, wherein the reception of the carrier is disabled based on receiving a signaling message.

18. The method of claim 16, wherein the reception of the carrier is disabled based on the discontinuous reception operation configured for the carrier.

19. The method of claim 16, wherein the plurality of carriers are determined based on receiving an allocation signaling message.

20. A user equipment comprising:

a communications subsystem,

wherein the communications subsystem is configured to perform the method of any one of claims 16 to 19.

21. The method of claim 8, wherein disabling, by the user equipment, reception of the control information comprises stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier.

22. The method of claim 16, further comprising stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier when the PDCCH is transmitted on the carrier after receiving the disable command control element.

23. The method of claim 16, further comprising stopping, by the user equipment, monitoring a physical downlink control channel (PDCCH) associated with the carrier when the PDCCH is transmitted on another carrier different from the carrier after receiving the disable command control element.