

CLAIMS

61. A method for wireless communication, comprising:
identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;
sending a data transmission on the second CC to the UE; and
receiving uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a UCI transmission timeline for the first CC.
62. The method of claim 1, wherein the first CC is a primary CC (PCC) and the second CC is a secondary CC (SCC) for the UE.
63. The method of claim 1, wherein the first CC is associated with a first uplink-downlink configuration and the second CC is associated with a second uplink-downlink configuration, and wherein the UCI transmission timeline for the first CC is determined based on the first uplink-downlink configuration for the first CC.
64. The method of claim 1, wherein the first CC is associated with more downlink subframes than the second CC.
65. The method of claim 1, wherein the UCI comprises acknowledgement/negative acknowledgement (ACK/NACK) for the data transmission sent on the second CC to the UE.
66. A method for wireless communication, comprising:
identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;
sending a data transmission on the second CC to the UE; and
receiving uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a UCI transmission timeline for the first CC, wherein the UCI comprises

acknowledgement/negative acknowledgement (ACK/NACK) for the data transmission sent on the second CC to the UE, and wherein the ACK/NACK is sent by the UE based on Physical Uplink Control Channel (PUCCH) format 1b with channel selection, and wherein a mapping table for the ACK/NACK is determined based on a largest number of downlink subframes associated with a single uplink subframe for all CCs configured for the UE.

67. The method of claim 1, wherein the UCI comprises channel state information (CSI) sent by the UE based on a CSI configuration for the UE.

68. The method of claim 1, further comprising:
periodically receiving channel state information (CSI) for the second CC from the UE, the CSI being sent by the UE at a periodicity determined based on an uplink-downlink configuration for the first CC.

69. The method of claim 1, further comprising:
sending a downlink grant on the first CC to schedule the UE for the data transmission on the second CC, the downlink grant being for the second CC and being sent based on a downlink grant transmission timeline for the first CC.

70. The method of claim 1, further comprising:
sending an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.

71. The method of claim 1, further comprising:
sending an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.

72. The method of claim 1, further comprising:
receiving uplink data transmission on the second CC from the UE;
determining acknowledgement/negative acknowledgement (ACK/NACK) for

the uplink data transmission on the second CC; and

sending the ACK/NACK on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.

73. An apparatus for wireless communication, comprising:

means for identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;

means for sending a data transmission on the second CC to the UE; and

means for receiving uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a UCI transmission timeline for the first CC.

74. The apparatus of claim 13, further comprising:

means for sending an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.

75. The apparatus of claim 13, further comprising:

means for sending an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.

76. The apparatus of claim 13, further comprising:

means for receiving uplink data transmission on the second CC from the UE;

means for determining acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC; and

means for sending the ACK/NACK on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.

77. An apparatus for wireless communication, comprising:

at least one processor configured to:

identify a first component carrier (CC) and a second CC configured for a

user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;

send a data transmission on the second CC to the UE; and

receive uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a UCI transmission timeline for the first CC.

78. The apparatus of claim 17, wherein the at least one processor is further configured to send an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.

79. The apparatus of claim 17, wherein the at least one processor is further configured to send an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.

80. The apparatus of claim 17, wherein the at least one processor is further configured to:

receive uplink data transmission on the second CC from the UE;

determine acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC; and

send the ACK/NACK on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.

81. A computer program product, comprising:

a non-transitory computer-readable medium comprising:

code for causing at least one processor to identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;

code for causing the at least one processor to send a data transmission on the second CC to the UE; and

code for causing the at least one processor to receive uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a UCI transmission timeline for the first CC.

82. A method for wireless communication, comprising:
determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;
receiving a data transmission on the second CC; and
sending uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC based on a UCI transmission timeline for the first CC.
83. The method of claim 22, wherein the UCI comprises acknowledgement/negative acknowledgement (ACK/NAK) for the data transmission sent on the second CC to the UE.
84. The method of claim 22, further comprising:
receiving a downlink grant sent on the first CC to schedule the UE for the data transmission on the second CC, the downlink grant being for the second CC and being sent based on a downlink grant transmission timeline for the first CC.
85. The method of claim 22, further comprising:
receiving an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.
86. The method of claim 22, further comprising:
receiving an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.

87. The method of claim 22, further comprising:
sending uplink data transmission on the second CC by the UE; and
receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.
88. An apparatus for wireless communication, comprising:
means for determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;
means for receiving a data transmission on the second CC; and
means for sending uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC based on a UCI transmission timeline for the first CC.
89. The apparatus of claim 28, further comprising:
means for receiving an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.
90. The apparatus of claim 28, further comprising:
means for receiving an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.
91. The apparatus of claim 28, further comprising:
means for sending uplink data transmission on the second CC by the UE; and
means for receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.

92. An apparatus for wireless communication, comprising:
at least one processor configured to:
determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations;
receive a data transmission on the second CC; and
send uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC based on a UCI transmission timeline for the first CC.
93. The apparatus of claim 32, wherein the at least one processor is further configured to receive an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the first CC.
94. The apparatus of claim 32, wherein the at least one processor is further configured to receive an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline for the second CC or on a third CC based on an uplink grant transmission timeline for the third CC.
95. The apparatus of claim 32, wherein the at least one processor is further configured to:
send uplink data transmission on the second CC by the UE; and
receive acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline for the first CC.
96. A computer program product, comprising:
a non-transitory computer-readable medium comprising:
code for causing at least one processor to determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system

configurations;

code for causing the at least one processor to receive a data transmission on the second CC; and

code for causing the at least one processor to send uplink control information (UCI) for the data transmission on the second CC, the UCI being for the second CC and being sent on the first CC based on a UCI transmission timeline for the first CC.

97. A method for wireless communication, comprising:

identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

sending an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

98. The method of claim 37, wherein the first CC is a primary CC for the UE and the second CC is a secondary CC for the UE.

99. The method of claim 37, wherein the first CC is associated with a first uplink-downlink configuration and the second CC is associated with a second uplink-downlink configuration, and wherein the uplink grant transmission timeline for the first CC is determined based on the first uplink-downlink configuration for the first CC.

100. The method of claim 37, wherein the first CC is associated with more uplink subframes than the second CC.

101. The method of claim 37, further comprising:

receiving uplink data transmission sent on the second CC by the UE based on the uplink grant;

determining acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission; and

sending the ACK/NACK on the first CC in a subframe determined based on an

ACK/NACK transmission timeline for the first CC.

102. The method of claim 41, wherein the determined subframe is a subframe in which ACK/NACK can be sent on the first CC based on an uplink-downlink configuration for the first CC.

103. The method of claim 37, further comprising:

sending a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

104. An apparatus for wireless communication, comprising:

means for identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

means for sending an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

45. The apparatus of claim 44, further comprising:

means for receiving uplink data transmission sent on the second CC by the UE based on the uplink grant;

means for determining acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission; and

means for sending the ACK/NACK on the first CC in a subframe determined based on an ACK/NACK transmission timeline for the first CC.

105. The apparatus of claim 44, further comprising:

means for sending a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

106. An apparatus for wireless communication, comprising:

at least one processor configured to:

identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with

different system configurations; and

send an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

107. The apparatus of claim 47, wherein the at least one processor is further configured to:

receive uplink data transmission sent on the second CC by the UE based on the uplink grant;

determine acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission; and

send the ACK/NACK on the first CC in a subframe determined based on an ACK/NACK transmission timeline for the first CC.

108. The apparatus of claim 47, wherein the at least one processor is further configured to send a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

109. A computer program product, comprising:

a non-transitory computer-readable medium comprising:

code for causing at least one processor to identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

code for causing the at least one processor to send an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

110. A method for wireless communication, comprising:

determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

receiving an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

111. The method of claim 51, further comprising:

sending uplink data transmission on the second CC based on the uplink grant;

and

receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the first CC in a subframe determined based on an ACK/NACK transmission timeline for the first CC.

112. The method of claim 51, further comprising:

receiving a second uplink grant sent on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

113. An apparatus for wireless communication, comprising:

means for determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

means for receiving an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

114. The apparatus of claim 54, further comprising:

means for sending uplink data transmission on the second CC based on the uplink grant; and

means for receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the first CC in a subframe determined based on an ACK/NACK transmission timeline for the first CC.

115. The apparatus of claim 54, further comprising:

means for receiving a second uplink grant sent on the first CC to schedule the

UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

116. An apparatus for wireless communication, comprising:

at least one processor configured to:

determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

receive an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline for the first CC.

117. The apparatus of claim 57, wherein the at least one processor is further configured to:

send uplink data transmission on the second CC based on the uplink grant; and receive acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the first CC in a subframe determined based on an ACK/NACK transmission timeline for the first CC.

118. The apparatus of claim 57, wherein the at least one processor is further configured to receive a second uplink grant sent on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline for the first CC.

119. A computer program product, comprising:

a non-transitory computer-readable medium comprising:

code for causing at least one processor to determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first and second CCs being associated with different system configurations; and

code for causing the at least one processor to receive an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC

based on an uplink grant transmission timeline for the first CC.

61. The method of claim 1, wherein the first CC and the second CC are associated with time division duplexing (TDD) system configurations.

62. The method of claim 1, wherein one of the first CC or the second CC are associated with a time division duplexing (TDD) system configuration and the other CC is associated with a frequency division duplexing (FDD) system configuration.

63. The method of claim 22, wherein the first CC and the second CC are associated with time division duplexing (TDD) system configurations.

64. The method of claim 22, wherein one of the first CC or the second CC are associated with a time division duplexing (TDD) system configuration and the other CC is associated with a frequency division duplexing (FDD) system configuration.

65. The method of claim 37, wherein the first CC and the second CC are associated with time division duplexing (TDD) system configurations.

66. The method of claim 37, wherein one of the first CC or the second CC are associated with a time division duplexing (TDD) system configuration and the other CC is associated with a frequency division duplexing (FDD) system configuration.

67. The method of claim 51, wherein the first CC and the second CC are associated with time division duplexing (TDD) system configurations.

68. The method of claim 51, wherein one of the first CC or the second CC are associated with a time division duplexing (TDD) system configuration and the other CC is associated with a frequency division duplexing (FDD) system configuration.

69. The method of claim 6, wherein the first CC and the second CC are associated with time division duplexing (TDD) system configurations.

70. The method of claim 6, wherein one of the first CC or the second CC are

associated with a time division duplexing (TDD) system configuration and the other CC
is associated with a frequency division duplexing (FDD) system configuration.

CLAIMS

1. A method for wireless communication, comprising:
identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;
sending a data transmission on the second CC to the UE; and
receiving uplink control information (UCI) for the data transmission sent on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
2. The method of claim 1, wherein the first CC is a primary CC (PCC) and the second CC is a secondary CC (SCC) for the UE.
3. The method of claim 1, wherein the first CC is associated with a first uplink-downlink configuration and the second CC is associated with a second uplink-downlink configuration, and wherein the HARQ timeline is determined further based on the first uplink-downlink configuration for the first CC or based on the second uplink-downlink configuration for the second CC.
4. The method of claim 1, wherein the first CC is associated with more downlink subframes than the second CC, and wherein the HARQ timeline is further based on a HARQ timeline for the first CC.
5. The method of claim 1, wherein the UCI comprises acknowledgement/ negative acknowledgement (ACK/NACK) for the data transmission sent on the second CC to the UE.
6. The method of claim 5, wherein the ACK/NACK is sent by the UE based on Physical Uplink Control Channel (PUCCH) format 1b with channel selection, and wherein a mapping table for the ACK/NACK is determined based on a largest number of downlink subframes associated with a single uplink subframe for all CCs configured for the UE.

7. The method of claim 1, wherein the UCI comprises channel state information (CSI) sent by the UE based on a CSI configuration for the UE.
8. The method of claim 1, further comprising:
periodically receiving channel state information (CSI) for the second CC from the UE, the CSI being sent by the UE at a periodicity determined based on the uplink-downlink configuration for the first CC.
9. The method of claim 1, further comprising:
sending a downlink grant on the first CC to schedule the UE for the data transmission on the second CC, the downlink grant being for the second CC and being sent based on a downlink grant transmission timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
10. The method of claim 1, further comprising:
sending an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein HARQ timeline is based on the different uplink-downlink configurations.
11. The method of claim 1, further comprising:
sending an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations for the first CC and the second CC and the other uplink-downlink configuration for the third CC.
12. The method of claim 1, further comprising:
receiving uplink data transmission on the second CC from the UE;
determining acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC; and
sending the ACK/NACK on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on

the different uplink-downlink configurations.

13. An apparatus for wireless communication, comprising:
 - means for identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;
 - means for sending a data transmission on the second CC to the UE; and
 - means for receiving uplink control information (UCI) for the data transmission sent on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
14. The apparatus of claim 13, further comprising:
 - means for sending an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
15. The apparatus of claim 13, further comprising:
 - means for sending an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations for the first CC and the second CC and the other uplink-downlink configuration for the third CC.
16. The apparatus of claim 13, further comprising:
 - means for receiving uplink data transmission on the second CC from the UE;
 - means for determining acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC; and
 - means for sending the ACK/NACK on the first CC in a subframe determined based on a

downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on the different uplink-downlink configurations.

17. An apparatus for wireless communication, comprising:
 at least one processor configured to:
 identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and second the CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;
 send a data transmission on the second CC to the UE; and
 receive uplink control information (UCI) for the data transmission sent on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a Hybrid Automatic Repeat Request (HARQ) timeline for the first CC, wherein the HARQ timeline is based on the different uplink-downlink configurations; and
 a memory coupled with the at least one processor.
18. The apparatus of claim 17, wherein the at least one processor is further configured to send an uplink grant to schedule the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations.
19. The apparatus of claim 17, wherein the at least one processor is further configured to send an uplink grant to schedule the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations first the first CC and the second CC and the other uplink-downlink configuration for the third CC.
20. The apparatus of claim 17, wherein the at least one processor is further configured to:
 receive uplink data transmission on the second CC from the UE;
 determine acknowledgement/negative acknowledgement (ACK/NACK) for the uplink

data transmission on the second CC; and

send the ACK/NACK on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on the different uplink-downlink configurations.

21. A non-transitory computer-readable medium comprising:

code for causing at least one processor to identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

code for causing the at least one processor to send a data transmission on the second CC to the UE; and

code for causing the at least one processor to receive uplink control information (UCI) for the data transmission sent on the second CC, the UCI being for the second CC and being sent on the first CC by the UE based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

22. A method for wireless communication, comprising:

determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

receiving a data transmission on the second CC; and

sending uplink control information (UCI) for the data transmission sent on the second CC, the UCI being for the second CC and being sent on the first CC based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

23. The method of claim 22, wherein the UCI comprises acknowledgement/ negative acknowledgement (ACK/NACK) for the data transmission sent on the second CC to the UE.

24. The method of claim 22, further comprising:

receiving a downlink grant sent on the first CC to schedule the UE for the data transmission on the second CC, the downlink grant being for the second CC and being sent based on a downlink grant transmission timeline, wherein the downlink grant transmission timeline is based on the different uplink-downlink configurations.

25. The method of claim 22, further comprising:

receiving an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations.

26. The method of claim 22, further comprising:

receiving an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations first the first CC and the second CC and the other uplink-downlink configuration for the third CC.

27. The method of claim 22, further comprising:

sending uplink data transmission on the second CC by the UE; and
receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on the different uplink-downlink configurations.

28. An apparatus for wireless communication, comprising:

means for determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

means for receiving a data transmission on the second CC; and

means for sending uplink control information (UCI) for the data transmission received on the second CC, the UCI being for the second CC and being sent on the first CC based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

29. The apparatus of claim 28, further comprising:

means for receiving an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations.

30. The apparatus of claim 28, further comprising:

means for receiving an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations for the first CC and the second CC and the other uplink-downlink configuration for the third CC.

31. The apparatus of claim 28, further comprising:

means for sending uplink data transmission on the second CC by the UE; and
means for receiving acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on the different uplink-downlink configurations.

32. An apparatus for wireless communication, comprising:

at least one processor configured to:

determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

receive a data transmission on the second CC; and
 send uplink control information (UCI) for the data transmission received on the second CC, the UCI being for the second CC and being sent on the first CC based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations; and
 a memory coupled with the at least one processor.

33. The apparatus of claim 32, wherein the at least one processor is further configured to receive an uplink grant scheduling the UE for uplink data transmission on the first CC or the second CC, the uplink grant being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations.

34. The apparatus of claim 32, wherein the at least one processor is further configured to receive an uplink grant scheduling the UE for uplink data transmission on the second CC, the uplink grant being sent on the first CC or a third CC based on an uplink grant transmission timeline, wherein the third CC is associated with an uplink-downlink configuration wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations first the first CC and the second CC and the other uplink-downlink configuration for the third CC.

35. The apparatus of claim 32, wherein the at least one processor is further configured to:
 send uplink data transmission on the second CC by the UE; and
 receive acknowledgement/negative acknowledgement (ACK/NACK) for the uplink data transmission on the second CC, the ACK/NACK being sent on the first CC in a subframe determined based on a downlink ACK/NACK transmission timeline, wherein the ACK/NACK transmission timeline is based on the different uplink-downlink configurations.

36. A non-transitory computer-readable medium comprising:
 code for causing at least one processor to determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink

configurations;

code for causing the at least one processor to receive a data transmission on the second CC; and

code for causing the at least one processor to send uplink control information (UCI) for the data transmission received on the second CC, the UCI being for the second CC and being sent on the first CC based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

37. A method for wireless communication, comprising:

identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

sending an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and

sending an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

38. The method of claim 37, wherein the first CC is a primary CC for the UE and the second CC is a secondary CC for the UE.

39. The method of claim 37, wherein the first CC is associated with a first uplink-downlink configuration and the second CC is associated with a second uplink-downlink configuration, and wherein the uplink grant transmission timeline is determined based on the first uplink-downlink configuration for the first CC or based on the second uplink-downlink configuration for the second CC.

40. The method of claim 37, wherein the first CC is associated with more uplink subframes

than the second CC, and wherein the uplink transmission timeline is further based on the uplink grant transmission timeline for the first CC.

41. The method of claim 37, further comprising:
 - receiving uplink data transmission sent on the second CC by the UE based on the uplink grant; and
 - determining the ACK/NACK for the uplink data transmission.
42. The method of claim 41, wherein the determined subframe is a subframe in which the ACK/NACK can be sent on the first CC based on the different uplink-downlink configurations.
43. The method of claim 37, further comprising:
 - sending a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline.
44. An apparatus for wireless communication, comprising:
 - means for identifying a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;
 - means for sending an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and
 - means for sending an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
45. The apparatus of claim 44, further comprising:
 - means for receiving uplink data transmission sent on the second CC by the UE based on

the uplink grant; and

means for determining the ACK/NACK for the uplink data transmission.

46. The apparatus of claim 44, further comprising:

means for sending a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline.

47. An apparatus for wireless communication, comprising:

at least one processor configured to:

identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

send an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and

send an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations; and

a memory coupled with the at least one processor.

48. The apparatus of claim 47, wherein the at least one processor is further configured to:

receive uplink data transmission sent on the second CC by the UE based on the uplink grant; and

determine the ACK/NACK for the uplink data transmission.

49. The apparatus of claim 47, wherein the at least one processor is further configured to send a second uplink grant on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant

transmission timeline.

50. A non-transitory computer-readable medium comprising:

code for causing at least one processor to identify a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

code for causing the at least one processor to send an uplink grant on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based the different uplink-downlink configurations; and

code for causing the at least one processor to send an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

51. A method for wireless communication, comprising:

determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

receiving an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and

receiving an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.

52. The method of claim 51, further comprising:

sending uplink data transmission on the second CC based on the uplink grant.

53. The method of claim 51, further comprising:
receiving a second uplink grant sent on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline.
54. An apparatus for wireless communication, comprising:
means for determining a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;
means for receiving an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and
means for receiving an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations.
55. The apparatus of claim 54, further comprising:
means for sending uplink data transmission on the second CC based on the uplink grant.
56. The apparatus of claim 54, further comprising:
means for receiving a second uplink grant sent on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline.
57. An apparatus for wireless communication, comprising:
at least one processor configured to:
determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations

comprise different uplink-downlink configurations;

receive an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and

receive an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the different uplink-downlink configurations; and

a memory coupled with the at least one processor.

58. The apparatus of claim 57, wherein the at least one processor is further configured to: send uplink data transmission on the second CC based on the uplink grant.

59. The apparatus of claim 57, wherein the at least one processor is further configured to receive a second uplink grant sent on the first CC to schedule the UE for uplink data transmission on the first CC, the second uplink grant being for the first CC and being sent based on the uplink grant transmission timeline.

60. A non-transitory computer-readable medium comprising:

code for causing at least one processor to determine a first component carrier (CC) and a second CC configured for a user equipment (UE) for carrier aggregation, the first CC and the second CC being associated with different system configurations, wherein the different system configurations comprise different uplink-downlink configurations;

code for causing the at least one processor to receive an uplink grant sent on the first CC to schedule the UE for uplink data transmission on the second CC, the uplink grant being for the second CC and being sent on the first CC based on an uplink grant transmission timeline, wherein the uplink grant transmission timeline is based on the different uplink-downlink configurations; and

code for causing the at least one processor to receive an acknowledgement/negative acknowledgement (ACK/NACK) on the first CC in a subframe determined based on a Hybrid Automatic Repeat Request (HARQ) timeline, wherein the HARQ timeline is based on the

different uplink-downlink configurations.

61. The method of claim 1, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

62. The apparatus of claim 13, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

63. The apparatus of claim 17, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

64. The non-transitory computer-readable medium of claim 21, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

65. The method of claim 22, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

66. The apparatus of claim 28, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

67. The apparatus of claim 32, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

68. The non-transitory computer-readable medium of claim 36, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

69. The method of claim 37, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

70. The apparatus of claim 44, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.

71. The apparatus of claim 47, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
72. The non-transitory computer-readable medium of claim 50, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
73. The method of claim 51, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
74. The apparatus of claim 54, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
75. The apparatus of claim 57, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
76. The non-transitory computer-readable medium of claim 60, wherein the different system configurations comprise a time divisional duplexing (TDD) system and a frequency division duplexing (FDD) system.
77. The method of claim 22, wherein the first CC is a primary CC, and the second CC is a secondary CC for the UE.
78. The method of claim 22, wherein the first CC is associated with more downlink subframes than the second CC, and wherein the HARQ timeline is further based on a HARQ timeline for the first CC.