CLAIMS

1. A method for wireless communications by a user equipment (UE), comprising:

generating ~~coded~~information bits of uplink control information (UCI~~)~~);

encoding the information bits using a code to ~~be segmented into at least two segments;~~

generate coded bits; assigning different groups of the coded bits to different segments~~, wherein one or more rules are applied~~ of at least two segments to ensure an integer number of the coded bits are allocated to each of the at least two segments~~; and~~

~~transmitting,~~ the ~~UCI in the segments according to the assignment.~~

~~2. The method of claim 1, wherein the one or more rules are designed to ensure a number of resource elements (REs) or bits is divisible by a least common multiple of a possible number of segments.~~

~~3. The method of claim 1, wherein the one or more rules involve:~~

assigning comprising: excluding one or more of the coded bits from ~~segmentation;~~

~~setting the excluded~~the at least two segments as filler bits ~~to predetermined values; and~~

; allocating ~~remaining~~ the coded bits other than the excluded one or more of the coded bits equally to the at least two segments~~.~~

~~4. The method of claim 3, wherein the predetermined values are zero.~~

~~5. The method of claim 3, wherein~~ ; and setting the excluded one or more of ~~the excluded bits are repeated copies of coded bits.~~

~~6. The method of claim 1, wherein the one or more rules involve:~~

~~allowing different segments to have different numbers of coded bits.~~

~~7. The method of claim 6, wherein~~ the ~~one or more rules further involve ensuring that segments do not share a resource element (RE).~~

~~8. The method of claim 1, wherein the one or more rules involve:~~

coded bits to predetermined values; and transmitting the UCI according to the assignment.

2. The method of claim 1, wherein a number of resource elements (REs) or the coded bits other than the excluded one or more of the coded bits is divisible by a least a common multiple of a possible number of the at least two segments.

3. The method of claim 1, wherein the predetermined values are zero.

4. The method of claim 1, wherein one or more of the excluded one or more of the coded bits are repeated copies of at least one of the coded bits.

5. The method of claim 1, wherein no segments of the at least two segments share a resource element (RE).

6. The method of claim 1, further comprising: receiving signaling, from a network entity, scheduling a number of resource elements (REs) so that a number of ~~available~~the coded bits other than the excluded one or more of the coded bits is divisible by ~~the~~a number of the at least two segments.

~~9.~~ 7. The method of claim 1, ~~wherein the one or more rules involve:~~

further comprising: receiving signaling, from a network entity, scheduling a number of resource elements (REs) such that that the number of REs is divisible by ~~the~~a number of the at least two segments.

~~10.~~ 8. The method of claim 1, wherein the ~~one or more rules involve:~~

assigning further comprises: excluding one or more resource elements (REs) from ~~segmentation;~~

the at least two segments; setting the excluded one or more REs to the predetermined values; and

allocating ~~remaining~~ REs other than the excluded one or more REs equally to the at least two segments.

~~11.~~ 9. The method of claim ~~10~~8, wherein one or more of the excluded one or more REs are repeated copies of ~~other~~at least one of the REs.

~~12.~~ 10. A method for wireless communications by a network entity, comprising:

taking ~~one or more~~ actions to ensure an integer number of coded bits, the coded bits generated by encoding information bits of uplink control information (UCI~~)~~), from a user equipment (UE) are assigned to ~~one or more segments; and~~

~~receiving the UCI in the~~at least two segments ~~according to~~, the ~~assignment.~~

~~13. The method of claim 12, wherein the one or more~~taking actions ~~include:~~

comprising: excluding one or more of the coded bits from ~~segmentation;~~

~~setting the excluded bits~~the at least two segments as filler bits; allocating the coded bits other than the excluded one or more of the coded bits equally to the at least two segments; and setting the excluded one or more of the coded bits to predetermined values; and

~~allocating remaining coded bits, which correspond~~ receiving the UCI according to the ~~integer number of coded bits of UCI, equally to the segments.~~assignment.

~~14.~~ 11. The method of claim ~~13~~10, wherein the predetermined values are zero.

~~15.~~ 12. The method of claim ~~12~~10, wherein ~~the one or more actions are designed to ensure~~ a number of resource elements (REs) or the coded bits other than the excluded one or more of the coded bits is divisible by a least a common multiple of a possible number of ~~segments.~~

~~16. The method of claim 12, wherein the one or more actions involve:~~

~~allowing different~~the at least two segments ~~to have different numbers of coded bits~~.

~~17.~~ 13. The method of claim ~~16~~10, wherein ~~the one or more actions further involve ensuring that~~no segments ~~do not~~of the at least two segments share a resource element (RE).

~~18.~~ 14. The method of claim ~~17, wherein the one or more actions involve:~~ 10, further comprising: scheduling the UE with a number of resource elements (REs) so that a number of ~~available~~the coded bits other than the excluded one or more of the coded bits is divisible by ~~the~~a number of the at least two segments.

~~19.~~ 15. The method of claim ~~12, wherein the one or more rules involve:~~ 10, further comprising: scheduling the UE with a number of resource elements (REs) such that that the number of REs is divisible by ~~the~~a number of the at least two segments.

~~20.~~ 16. An apparatus for wireless communications by a user equipment (UE), comprising:

means for generating ~~coded~~information bits of uplink control information (UCI~~) to be segmented into at least two segments;~~); means for encoding the information bits using a code to generate coded bits; means for assigning different groups of the coded bits to different segments~~, wherein one or more rules are applied~~ of at least two segments to ensure an integer number of the coded bits are allocated to each of the ~~segments; and~~

~~means for transmitting the UCI in the~~at least two segments ~~according to~~, the ~~assignment.~~

~~21. The apparatus of claim 20, wherein the one or more rules are designed to ensure a number of resource elements (REs) or bits is divisible by a least common multiple of a possible number of segments.~~

~~22. The apparatus of claim 20, further~~assigning comprising:

~~means for~~ excluding one or more of the coded bits from ~~segmentation;~~

~~means for setting the excluded~~the at least two segments as filler bits ~~to zero; or~~

~~means for;~~ allocating ~~remaining~~the coded bits other than the excluded one or more of the coded bits equally to the at least two segments~~,~~

~~wherein~~ ; and setting the excluded one or more of the ~~excluded bits are repeated copies of~~ coded bits~~.~~ to predetermined values; and means for transmitting the UCI

according to the assignment.

~~23.~~ 17. The apparatus of claim ~~20~~16, wherein a number of resource elements (REs) or the coded bits other than the excluded one or more of the coded bits is divisible by a least a common multiple of a possible number of the at least two segments.

18. The apparatus of claim 16, further comprising:

~~means for allowing different segments to have different numbers of coded bits, means for ensuring that segments do not share a resource element (RE), or~~

means for receiving signaling, from a network entity, scheduling a number of resource elements (REs) so that a number of ~~available~~the coded bits other than the excluded one or more of the coded bits is divisible by ~~the~~a number of the at least two segments.

~~25.~~ 19. The apparatus of claim ~~20~~16, further comprising:

means for receiving signaling, from a network entity, ~~or means for~~ scheduling a number of resource elements (REs) such that that the number of REs is divisible by ~~the~~a number of the at least two segments.

~~26.~~ 20. The apparatus of claim ~~20,~~16, wherein the assigning further ~~comprising:~~

~~means for~~comprises: excluding one or more resource elements (REs) from ~~segmentation;~~

~~means for~~the at least two segments; setting the excluded one or more REs to the predetermined values; ~~or~~

~~means for~~and allocating ~~remaining~~ REs other than the excluded one or more REs equally to the at least two segments~~,~~

~~wherein one or more of the excluded REs are repeated copies of other REs~~.

~~27.~~ ~~A~~21. An apparatus for wireless communications by a network entity, comprising:

means for taking ~~one or more~~ actions to ensure an integer number of coded bits, the coded bits generated by encoding information bits of uplink control information

(UCI~~)~~), from a user equipment (UE) are assigned to ~~one or more~~at least two segments~~;~~ ~~or~~

~~means for receiving the UCI in the~~, the taking actions comprising: excluding one or more of the coded bits from the at least two segments ~~according to the assignment.~~

~~28. The apparatus of claim 27, further comprising:~~

~~means for excluding one or more bits from segmentation;~~

~~means for setting the excluded bits to zero; or~~

~~means for~~as filler bits; allocating ~~remaining~~the coded bits~~, which correspond to the integer number~~ other than the excluded one or more of the coded bits ~~of UCI,~~ equally to the at least two segments~~.~~; and setting the excluded one or more of the coded bits to predetermined values; and means for receiving the UCI according to the assignment.

~~29.~~ 22. The apparatus of claim ~~27~~21, wherein ~~the one or more actions are designed to ensure~~ a number of resource elements (REs) or the coded bits other than the excluded one or more of the coded bits is divisible by a least a common multiple of a possible number of the at least two segments.

~~30.~~ 23. The apparatus of claim ~~27~~21, further comprising:

means for ~~allowing different~~ensuring that no segments ~~to have different numbers of coded bits,~~

~~means for ensuring that~~of the at least two segments ~~do not~~ share a resource element (RE),

means for scheduling the UE with a number of ~~resource elements (~~REs~~)~~ so that a number of ~~available~~the coded bits other than the excluded one or more of the coded bits is divisible by ~~the~~a number of the at least two segments, or

means for scheduling the UE with ~~a~~the number of ~~resource elements (~~REs~~)~~ such that that the number of REs is divisible by the number of the at least two segments.