

CLAIMS

1. A method (400) for wireless communications by an apparatus (302), comprising:

generating (402) a first frame having a header portion recognizable by first and second types of devices and having another portion;

selecting (404) a first value of a scrambler field of the header portion of the frame to indicate at least one of:

whether said another portion of the frame is encoded using an enhanced modulation scheme supported by the second type of devices but not supported by the first type of devices or

a length of said another portion of the frame encoded using the enhanced modulation scheme; and

outputting (406) the frame for transmission.

2. The method (400) of claim 1, wherein the first value provides an indication of both:

whether said another portion of the frame is encoded using the enhanced modulation scheme; and the length of said another portion of the frame encoded using the enhanced modulation scheme.

3. The method (400) of claim 1, further comprising selecting the first value such that a modulus function applied to the first value indicates the length of said another portion of the frame encoded using the enhanced modulation scheme.

4. The method (400) of claim 1, further comprising:

indicating, via at least one bit in the header portion, whether said another portion of the frame is encoded using the enhanced modulation scheme.

5. A method (500) for wireless communications by an apparatus (302), comprising:

obtaining (502) a frame having a header portion with a scrambler field and another portion;

determining (504), based on a first value of the scrambler field, at least one of: whether said another portion of the frame is encoded using an enhanced modulation

scheme or a length of said another portion of the frame encoded using the enhanced modulation scheme, and

decoding (506) said another portion of the frame based on the determination.

6. The method of claim 5, further comprising determining, from the first value, whether said another portion of the frame is encoded using the enhanced modulation scheme and the length of said another portion of the frame encoded using the enhanced modulation scheme.

7. The method of claim 5, further comprising calculating the length by applying a modulus function to the first value.

8. The method of claim 5, further comprising:
determining, via at least one bit in the header portion, whether said another portion of the frame is encoded using the enhanced modulation scheme.

9. An apparatus (302) for wireless communications, comprising:
means configured for generating (402A) a first frame having a header portion recognizable by first and second types of devices and having another portion;
means configured for selecting (404A) a first value of a scrambler field of the header portion of the frame to indicate at least one of:
whether said another portion of the frame is encoded using an enhanced modulation scheme supported by the second type of devices but not supported by the first type of devices or
a length of said another portion of the frame encoded using the enhanced modulation scheme; and
means for outputting (406A) the frame for transmission.

10 The apparatus of claim 9, wherein the first value provides an indication of both:

whether said another portion of the frame is encoded using the enhanced modulation scheme; and the length of said another portion of the frame encoded using the enhanced modulation scheme.

11. The apparatus of claim 9, further comprising means configured for selecting the first value such that a modulus function applied to the first value indicates the length of said another portion of the frame encoded using the enhanced modulation scheme.

12. An apparatus (302) for wireless communications, comprising:
means configured for obtaining (502A) a frame having a header portion with a scrambler field and another portion;
means configured for determining (504A), based on a first value of the scrambler field, at least one of: whether said another portion of the frame is encoded using an enhanced modulation scheme or a length of said another portion of the frame encoded using the enhanced modulation scheme, and
means configured for decoding (506A) said another portion of the frame based on the determination.

13. The apparatus of claim 12, further comprising means configured for determining, from the first value, whether said another portion of the frame is encoded using the enhanced modulation scheme and the length of said another portion of the frame encoded using the enhanced modulation scheme.

14. The apparatus of claim 12, further comprising means configured for calculating the length by applying a modulus function to the first value.

15. A computer program product comprising instructions which, when the program is executed by a computer, cause the computer to carry out the method of one of claims 1 – 4 or 5 – 8.