

[6] Non-limiting and exemplary embodiments facilitate providing communication apparatuses and communication methods for identifying the format of a post-HE (post High Efficiency) PPDU in an efficient manner.

5 [7] According to a first aspect of the present disclosure, there is provided a communication apparatus comprising: circuitry which, in operation, generates a Physical Layer Protocol Data Unit (PPDU) that contains a first signal field, a second signal field and a third signal field, and wherein the second signal field is used to determine whether a physical layer (PHY) version of the generated PPDU is not
10 older than a defined PHY version, and the third signal field is used to indicate the PHY version of the generated PPDU; and a transmitter which, in operation, transmits the generated PPDU.

[7a] According to a second aspect of the present disclosure, there is provided a
15 communication method comprising: generating a Physical Layer Protocol Data Unit (PPDU) that contains a first signal field, a second signal field and a third signal field, and wherein the second signal field is used to determine whether a physical layer (PHY) version of the generated PPDU is not older than a defined PHY version, and the third signal field is used to indicate the PHY version of the generated PPDU; and
20 transmitting the generated PPDU.

[8] It should be noted that general or specific embodiments may be implemented as a system, a method, an integrated circuit, a computer program, a storage medium, or any selective combination thereof.

25 [9] Additional benefits and advantages of the disclosed embodiments will become apparent from the specification and drawings. The benefits and/or advantages may be individually obtained by the various embodiments and features of the specification and drawings, which need not all be provided in order to obtain
30 one or more of such benefits and/or advantages.

BRIEF DESCRIPTION OF THE DRAWINGS

[10] Embodiments of the disclosure will be better understood and readily apparent to one of ordinary skilled in the art from the following written description, by way of example only, and in conjunction with the drawings, in which:

5 [11] Fig. 1A depicts a schematic diagram of uplink and downlink single-user multiple input multiple output (MIMO) communications between an access point (AP) and a station (STA) in a MIMO wireless network.

[12] Fig. 1B depicts a schematic diagram of downlink multiuser MIMO
10 communications between an AP and multiple STAs in a MIMO wireless network.