CLAIMS

1. An apparatus for wireless communications, comprising: a transceiver; a memory configured to store instructions; and a processor communicatively coupled with the memory, the processor configured to execute the instructions to: identify, within a channel width, one or more bandwidth regions associated with incumbent technologies; and broadcast, to a basic service set (BSS) initiated by the apparatus, a preamble puncture pattern in one or more management frames, the preamble puncture pattern being based on the one or more bandwidth regions associated with incumbent technologies.

2. The apparatus of claim 1, wherein the processor is further configured to execute the instructions to: set, for a packet to be transmitted, a bandwidth in a SIG-A field of a preamble of the packet.

3. The apparatus of claim 2, wherein the processor is further configured to execute the instructions to: zero out one or more channels for transmission of the packet based on the preamble puncture pattern.

4. The apparatus of claim 1, wherein the one or more management frames include a beacon, an association response frame, or a management action frame.

5. The apparatus of claim 1, wherein the one or more management frames include a bitmap indicating the preamble puncture pattern.

6. The apparatus of claim 5, wherein the bitmap is included in an information element.

7. The apparatus of claim 1, wherein the processor is further configured to execute the instructions to: transmit a packet based on the preamble puncture pattern, the packet having a single user (SU) Physical Layer Convergence Procedure Protocol Data Unit (PPDU) format or a multi-user (MU) PPDU format.

8. The apparatus of claim 1, wherein the one or more management frames indicate an operating bandwidth of the BSS.

9. The apparatus of claim 1, wherein the processor is further configured to execute the instructions to: identify a change in the one or more bandwidth regions associated with incumbent technologies; and broadcast, to the BSS initiated by the apparatus, a different preamble puncture pattern in one or more additional management frames, the different preamble puncture pattern being based on the change in the one or more bandwidth regions associated with incumbent technologies.

10. The apparatus of claim 1, wherein the processor is further configured to execute the instructions to: periodically broadcast the one or more management frames.

11. The apparatus of claim 1, wherein the processor is further configured to execute the instructions to: enable downlink single user (SU) preamble puncturing for a particular client of the apparatus based at least in part on the advertising of the preamble puncture pattern in the one or more management frames, wherein the particular client of the apparatus has allocated more than one resource unit.

12. An apparatus for wireless communications, comprising: a transceiver; a memory configured to store instructions; and a processor communicatively coupled with the memory, the processor configured to execute the instructions to: receive a preamble puncture pattern in one or more management frames, the preamble puncture pattern being based on one or more bandwidth regions associated with incumbent technologies; receive a packet; and decode the packet based on the preamble puncture pattern.