CLAIMS

1. A method for wireless communication, comprising: identifying a beam-specific parameter indicating a maximum transmit power for a directional uplink beam of a user equipment (UE); identifying a trigger event associated with the directional uplink beam, wherein the trigger event comprises a determination that a beam-specific timer for the directional uplink beam has expired; generating a beam-specific report that includes the beam-specific parameter indicating the maximum transmit power for the directional uplink beam based at least in part on identifying the trigger event; and transmitting the beam-specific report using the directional uplink beam.

2. The method of claim 1, further comprising: identifying a second beam-specific parameter for a second directional uplink beam of the UE; and transmitting the beam-specific report with the second beam-specific parameter and the beam-specific parameter using the directional uplink beam.

3. The method of claim 2, further comprising: identifying a maximum transmit power for the second directional uplink beam, wherein the second beam-specific parameter indicates the identified maximum transmit power for the second directional uplink beam.

4. The method of claim 2, further comprising: identifying a difference between a maximum transmit power for the second directional uplink beam and an estimated transmit power for the second directional uplink beam, wherein the second beam-specific parameter indicates the identified difference.

5. The method of claim 2, further comprising: generating a bit-map that associates a first set of data elements of the beam-specific report with the beam-specific parameter and a second set of data elements of the beam-specific report with the second beam-specific parameter.

6. The method of claim 2, further comprising: estimating an amount of traffic for the second directional uplink beam, wherein the second beam-specific parameter indicates a power need of the second directional uplink beam based at least in part on the estimated amount of traffic.

7. The method of claim 1, further comprising: generating a second beam-specific report that includes a second beam-specific parameter for a second directional uplink beam; and transmitting the second beam-specific report using the directional uplink beam or the second directional uplink beam.

8. The method of claim 7, wherein the second beam-specific report is transmitted using a medium access control (MAC) control element (CE) carried on a physical uplink shared channel (PUSCH) or uplink control information (UCI) carried on a physical uplink control channel (PUCCH) or a combination thereof.

9. The method of claim 1, wherein the beam-specific report is transmitted using a medium access control (MAC) control element (CE) carried on a physical uplink shared channel (PUSCH) on the first directional uplink beam or uplink control information (UCI) carried on a physical uplink control channel (PUCCH) on the first direction uplink beam or a combination thereof.

10. The method of claim 1, wherein the trigger event further comprises at least one of an establishment of a second directional uplink beam with a base station, or a determination that a signal quality parameter associated with the directional uplink beam satisfies a threshold, or a combination thereof.

11. The method of claim 1, further comprising: identifying a second beam-specific parameter for the directional uplink beam, the second beam-specific parameter indicating a difference between the maximum transmit power and an estimated transmit power for the directional uplink beam, wherein the beam-specific report includes the second beam-specific parameter.

12. The method of claim 11, wherein: the beam-specific parameter is a PCMAX parameter; and the second beam-specific parameter is a power headroom parameter.

13. The method of claim 1, wherein the beam-specific report is a power headroom report that includes power information for a plurality of directional uplink beams associated with the UE.

14. The method of claim 1, wherein the beam-specific report further includes one or more additional power parameters for each additional directional uplink transmission beam of the UE.

15. The method of claim 1, wherein the trigger event further comprises receipt of a message requesting receipt of the beam-specific report.

16. An apparatus for wireless communication, comprising: a processor; memory coupled to the processor; and instructions stored in the memory and executable by the processor to cause the apparatus to: identify a beam-specific parameter indicating a maximum transmit power for a directional uplink beam of a user equipment (UE); identify a trigger event associated with the directional uplink beam, wherein the trigger event comprises a determination that a beam-specific timer for the directional uplink beam has expired; generate a beam-specific report that includes the beam-specific parameter indicating the maximum transmit power for the directional uplink beam based at least in part on identifying the trigger event; and transmit the beam-specific report using the directional uplink beam.

17. The apparatus of claim 16, wherein the instructions are further executable by the processor to cause the apparatus to: identify a second beam-specific parameter for a second directional uplink beam of the UE; and transmit the beam-specific report with the second beam-specific parameter and the beam-specific parameter using the directional uplink beam.

18. The apparatus of claim 17, further comprising: estimating an amount of traffic for the second directional uplink beam, wherein the second beam-specific parameter indicates a power need of the second directional uplink beam based at least in part on the estimated amount of traffic.

19. The apparatus of claim 16, wherein the beam-specific report further includes one or more additional power parameters for each additional directional uplink transmission beam of the UE.

20. The apparatus of claim 16, wherein the trigger event further comprises receipt of a message requesting receipt of the beam-specific report.

21. The apparatus of claim 20, wherein: the beam-specific parameter is a PCMAX parameter; and the second beam-specific parameter is a power headroom parameter.

22. The apparatus of claim 16, wherein the trigger event further comprises at least one of an establishment of a second directional uplink beam with a base station, or a determination that a signal quality parameter associated with the directional uplink beam satisfies a threshold, or a combination thereof.

23. The apparatus of claim 16, wherein the instructions are further executable by the processor to cause the apparatus to: identify a second beam-specific parameter for the directional uplink beam, the second beam-specific parameter indicating a difference between the maximum transmit power and an estimated transmit power for the directional uplink beam, wherein the beam-specific report includes the second beam-specific parameter.

24. The apparatus of claim 16, wherein the beam-specific report is a power headroom report that includes power information for a plurality of directional uplink beams associated with the UE.