CLAIMS

~~What is claimed is:~~

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

establishing a first communication link and a second communication link with a base station;

detecting a beam failure of a first beam associated with the second communication link;

transmitting, to the base station via the first communication link, an indication of the beam failure of the first beam associated with the second communication link;

transmitting, to the base station via the first communication link, a report indicating a second beam for communicating via the second communication link; and

communicating with the base station via the second communication link using the second beam.

2. The method of claim 1, further comprising:

transmitting the indication of the beam failure of the first beam in a dedicated scheduling request (SR) message via the first communication link, the dedicated SR message configured for indications of beam failures; and

transmitting the report via ~~the~~ a Physical Uplink Control Channel (PUCCH) after transmission of the indication of the beam failure.

3. The method of claim 1, further comprising:

receiving, from the base station, a request for the report via a downlink control channel; and

transmitting the report in response to the request.

4. The method of claim 3, further comprising:

receiving the request via a physical downlink control channel (PDCCH) or a dedicated PDCCH, wherein the request comprises a grant for uplink shared channel resources for the UE; and

transmitting the report via the uplink shared channel resources for the UE indicated by the grant.

5. The method of claim 3, further comprising:

receiving the request within a time window after transmission of the indication of the beam failure.

6. The method of claim 3, wherein the request is associated with a downlink control information (DCI) format for the downlink control channel.

7. The method of claim 1, further comprising:

transmitting the indication of the beam failure of the first beam via a physical uplink control channel (PUCCH);

receiving a request for the report from the base station in response to the indication; and

transmitting the report via the PUCCH in response to the request.

8. The method of claim 7, further comprising:

transmitting the indication of the beam failure of the first beam in a scheduling request (SR) message via the PUCCH;

receiving a grant for uplink shared channel resources from the base station in response to the SR message; and

transmitting the report using the uplink shared channel resources indicated by the grant.

9. The method of claim 7, further comprising:

monitoring for a response from the base station based at least in part on the SR message; and

transmitting one or more additional SR messages based at least in part on an absence of a response to the SR message from the base station, the one or more additional SR messages transmitted according to an SR count limit or a time duration associated with SR messages.

10. The method of claim 7, further comprising:

transmitting the report via the PUCCH after transmission of the indication of the beam failure.

11. The method of claim 1, further comprising:

transmitting the report after expiration of a time duration following transmission of the indication of the beam failure, the time duration associated with a number of symbols or a fixed time interval.

12. The method of claim 11, wherein the report is transmitted in an absence of receiving a request for the report.

13. The method of claim 1, further comprising:

monitoring a downlink reference signal from the base station via the second communication link using the first beam; and

measuring a parameter of the downlink reference signal based at least in part on the monitoring, wherein the beam failure of the first beam is detected based at least in part on determining that the measured parameter crosses a threshold.

14. The method of claim 1, further comprising:

monitoring a downlink reference signal from the base station via the second communication link using the second beam of a set of beams; and

determining that the second beam is preferred over the first beam for communicating via the second communication link based at least in part on the monitoring.

15. The method of claim 1, further comprising:

updating a receive beam for a downlink transmission beam for the second communication link according to the second beam; and

updating an uplink beam for an uplink transmission for the second communication link for the UE after expiration of a time interval following the update of the downlink transmission beam.

16. A method for wireless communications at a base station, comprising:

establishing a first communication link and a second communication link with a user equipment (UE);

receiving, from the UE via the first communication link, an indication of a beam failure of a first beam associated with the second communication link;

receiving, from the UE via the first communication link, a report indicating a second beam for communicating with the UE via the second communication link; and

communicating with the UE via the second communication link using the second beam.

17. The method of claim 16, further comprising:

receiving the indication of the beam failure of the first beam in a dedicated scheduling request (SR) message via the first communication link, the dedicated SR message configured for indications of beam failures.

18. The method of claim 17, further comprising:

receiving the report via ~~the~~ a Physical Uplink Control Channel (PUCCH) after transmission of the indication of the beam failure.

19. The method of claim 16, further comprising:

receiving the indication of the beam failure of the first beam in a scheduling request (SR) message via a physical uplink control channel (PUCCH).

20. The method of claim 19, further comprising:

transmitting a grant for uplink shared channel resources to the UE in response to the SR message; and

receiving the report via the uplink shared channel resources indicated by the grant.

21. The method of claim 19, further comprising:

receiving the report via the PUCCH after transmission of the indication of the beam failure.

22. The method of claim 16, further comprising:

receiving the report after expiration of a time duration following receipt of the indication of the beam failure, the time duration associated with a number of symbols or a fixed time interval.

23. The method of claim 16, further comprising:

transmitting, to the UE, a request for the report via a downlink control channel, wherein the report is received in response to the request.

24. The method of claim 23, further comprising:

transmitting the request via a physical downlink control channel (PDCCH) or a dedicated PDCCH, wherein the request comprises a grant for uplink shared channel resources for the UE; and

receiving the report via the uplink shared channel resources for the UE indicated by the grant.

25. The method of claim 23, further comprising:

receiving the indication of the beam failure of the first beam in a dedicated scheduling request (SR) message;

transmitting the request for the report to the UE in response to the dedicated SR message; and

receiving the report via a physical uplink control channel (PUCCH) in response to the request.

26. The method of claim 23, further comprising:

transmitting the request within a time window after receipt of the indication of the beam failure.

27. The method of claim 23, wherein the request is associated with a downlink control information (DCI) format for the downlink control channel.

28. The method of claim 16, further comprising:

modifying a transmission configuration for a downlink beam for the second communication link according to the second beam, wherein the modified transmission configuration comprises an autonomously activated transmission configuration indicator (TCI) state.

29. An apparatus for wireless communications at a user equipment (UE), comprising:

means for establishing a first communication link and a second communication link with a base station;

means for detecting a beam failure of a first beam associated with the second communication link;

means for transmitting, to the base station via the first communication link, an indication of the beam failure of the first beam associated with the second communication link;

means for transmitting, to the base station via the first communication link, a report indicating a second beam for communicating via the second communication link; and

means for communicating with the base station via the second communication link using the second beam.

30. An apparatus for wireless communications at a base station, comprising:

means for establishing a first communication link and a second communication link with a user equipment (UE);

means for receiving, from the UE via the first communication link, an indication of a beam failure of a first beam associated with the second communication link;

means for receiving, from the UE via the first communication link, a report indicating a second beam for communicating with the UE via the second communication link; and

means for communicating with the UE via the second communication link using the second beam.