CLAIMS

1. A wireless transmitter station (110; 120) for communication with at least one wireless receiver station (120; 110) over a wireless communication channel (130) in a wireless communication network (100), wherein the wireless transmitter station (110; 120) is configured to:

transmit a sounding signal to the at least one wireless receiver station (120; 110), wherein the at least one wireless receiver station (120; 110) is configured to determine, based on the sounding signal, a channel quality metric according to a plurality of determination modes; and

transmit an indication to the at least one wireless receiver station (120; 110), wherein the indication is indicative of one of the plurality of determination modes of the at least one wireless receiver station (120; 110).

2. The wireless transmitter station (110; 120) of claim 1, wherein according to a first determination mode of the plurality of determination modes the at least one wireless receiver station (120; 110) is configured to determine the channel quality metric without using interference mitigation and wherein according to a second determination mode of the plurality of determination modes the at least one wireless receiver station (120; 110) is configured to determine the channel quality metric using interference mitigation, wherein the indication is indicative of the first determination mode or the second determination mode.

3. The wireless transmitter station (110; 120) of claim 1 or 2, wherein the channel quality metric is a Signal to Noise Ratio, SNR, or a Signal to Interference and Noise Ratio, SINR.

4. The wireless transmitter station (110; 120) of any one of the preceding claims, wherein the wireless transmitter station (110; 120) is configured to transmit a Sounding null data PPDU, NDP, and an NDP announcement, NDPA, frame to the at least one wireless receiver station (120; 110), wherein the Sounding NDP comprises the sounding signal and wherein the NDPA frame comprises the indication.

5. The wireless transmitter station (110; 120) of any one of the preceding claims, wherein the wireless transmitter station (110; 120) is configured to receive a sounding feedback report frame from each of the at least one wireless receiver station (120; 110), wherein the sounding feedback report frame received from a specific wireless receiver station (120; 110) comprises a

further indication indicative of the determination mode used by the at least one wireless receiver station (120; 110) for determining the channel quality metric.

6. A method (200) of operating a wireless transmitter station (110; 120) for communication with at least one wireless receiver station (120; 110) over a wireless communication channel (130) in a wireless communication network (100), wherein the method (200) comprises:

transmitting (201) an indication to the at least one wireless receiver station (120; 110), wherein the indication is indicative of one of a plurality of determination modes of the at least one wireless receiver station (120; 110); and

transmitting (203) a sounding signal to the at least one wireless receiver station (120; 110), wherein the at least one wireless receiver station (120; 110) is configured to determine, based on the sounding signal, a channel quality metric according to the indicated determination mode of the plurality of determination modes.

7. A wireless receiver station (120; 110) for communication with a wireless transmitter station (110; 120) over a wireless communication channel (130) in a wireless communication network (100), wherein the wireless receiver station (120; 110) is configured to:

receive a sounding signal from the wireless transmitter station (110; 120), wherein the wireless receiver station (120; 110) is configured to determine, based on the sounding signal, a channel quality metric according to a plurality of determination modes; and

receive an indication from the wireless transmitter station (110; 120), wherein the indication is indicative of one of the plurality of determination modes.

8. The wireless receiver station (120; 110) of claim 7, wherein according to a first determination mode of the plurality of determination modes the wireless receiver station (120; 110) is configured to determine the channel quality metric without using interference mitigation and wherein according to a second determination mode of the plurality of determination modes the wireless receiver station (120; 110) is configured to determine the channel quality metric using interference mitigation, wherein the indication is indicative of the first determination mode or the second determination mode.

9. The wireless receiver station (120; 110) of claim 8, wherein according to the first determination mode the wireless receiver station (120; 110) is configured to determine the channel quality metric without using interference mitigation by using a maximal ratio combining, MRC, detector.

10. The wireless receiver station (120; 110) of claim 8, wherein according to the second determination mode the wireless receiver station (120; 110) is configured to determine the channel quality metric using interference mitigation by using a minimum variance distortionless response, MVDR, detector.

11. The wireless receiver station (120; 110) of claim 8, wherein the wireless receiver station (120; 110) comprises a plurality of receiving antennas and wherein according to the second determination mode the wireless receiver station (120; 110) is configured to determine the channel quality metric using interference mitigation by using a reduced number of the plurality of receiving antennas.

12. The wireless receiver station (120; 110) of any one of claims 7 to 11, wherein the channel quality metric is a Signal to Noise Ratio, SNR, or a Signal to Interference and Noise Ratio, SINR.

13. The wireless receiver station (120; 110) of any one of claims 7 to 12, wherein the wireless receiver station (120; 110) is configured to receive an NDP announcement, NDPA, frame and a Sounding null data PPDU, NDP, from the wireless transmitter station (110; 120), wherein the Sounding NDP comprises the sounding signal and wherein the NDPA frame comprises the indication.

14. A method (300) of operating a wireless receiver station (120; 110) for communication with a wireless transmitter station (110; 120) over a wireless communication channel (130) in a wireless communication network (100), wherein the method (300) comprises:

receiving (301) an indication from the wireless transmitter station (110; 120), wherein the indication is indicative of one of a plurality of determination modes; and

receiving (303) a sounding signal from the wireless transmitter station (110; 120), wherein the wireless receiver station (120; 110) is configured to determine, based on the sounding signal, a

channel quality metric according to the indicated determination mode of the plurality of determination modes.

15. A computer program product comprising a computer-readable storage medium for storing program code which causes a computer or a processor to perform the method (200) of claim 13 or the method (300) of claim 14 when the program code is executed by the computer or the processor.