ratio of its quality of service requirement to a minimum quality of service requirement; and

each population share is proportional to the population of that type of wireless device multiplied by the ratio of its quality of service requirement to a minimum quality of service requirement.

11. A wireless device comprising

a receiving antenna to receive a data signal transmitted from a base station for prioritizing access to the base station, the receiving antenna producing an output signal on an output;

a transmitting antenna having an input;

a bandpass filter having an input and an output, the input connected to the output of the receiving antenna;

a demodulator having an input and an output, the input connected to the output of the bandpass filter; and

a processor having an input connected to the output of the demodulator and an output connected to the input of the transmitting antenna, the processor

receiving a control signal from the demodulator, said control signal derived from the data signal transmitted from the base station for prioritizing access;

determining a probability of transmission value from the control signal; and

using the probability of transmission value to determine whether data signals are transmitted from the transmitting antenna to the base station.

12. A wireless device comprising

a receiving antenna having an output;

a transmitting antenna having an input;

a bandpass filter having an input and an output, the input connected to the output of the receiving antenna;

a demodulator having an input and an output, the input connected to the output of the bandpass filter; and

a processor having an input connected to the output of the demodulator and an output connected to the input of the transmitting antenna, the processor

receiving a control signal from the demodulator, the control signal containing an equivalent load value and an equivalent population value for the base station;

determining a probability of transmission value form the control signal based on the equivalent current load value and the equivalent population value; and

using the probability of transmission value to determine whether data signals are transmitted from the transmitting antenna to a base station.

13. The wireless device of claim 12 wherein the processor further comprises a random number generator, the random number generator using the probability of transmission value to determine if the wireless device transmits data signals to the base station.

14. A wireless device comprising

a receiving antenna having an output;

a transmitting antenna having an input;

a bandpass filter having an input and an output, the input connected to the output of the receiving antenna;

a demodulator having an input and an output, the input connected to the output of the bandpass filter; and

a processor having an input connected to the output of the demodulator and an output connected to the input of the transmitting antenna, the processor

receiving a control signal from the demodulator; and

determining a probability of transmission value from the control signal by extracting the probability of transmission value from the control signal.

15. The wireless device of claim 14 wherein the processor further comprises a random number generator, the random number generator using the probability of transmission value to determine if the wireless device transmits data signals to the base station.

* * * * *