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1. **Dmax**

In order to observe the effect we arranged Dmax to take values of 5ms, 10ms, 20ms.

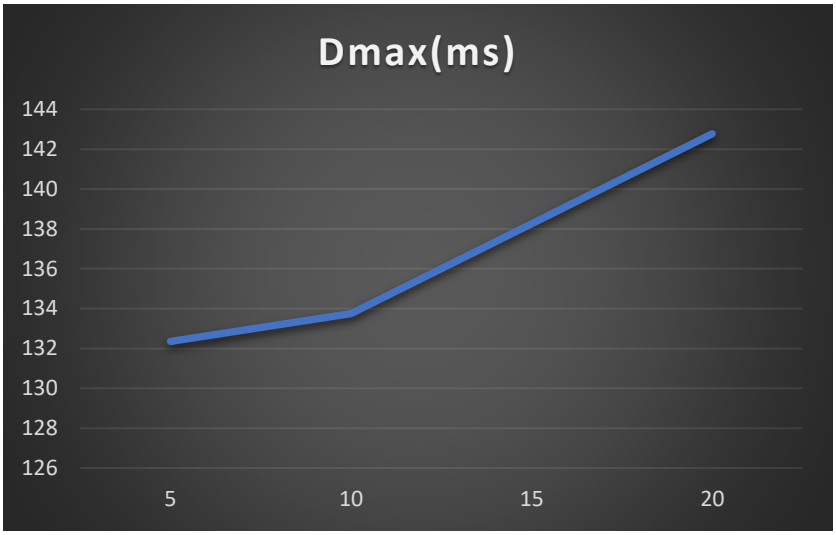

Figure 1 - Effect of Dmax

As it can be seen from Figure 1, transmission time increases linearly with respect to Dmax. The reason for this is that Dmax affects the time between windows and lower Dmax results in smaller waiting period when the window.

2. **Probability of Error**

In order to observe the effect of probability we arranged it to take values of 0, 0.01, 0.1 and 0.2.

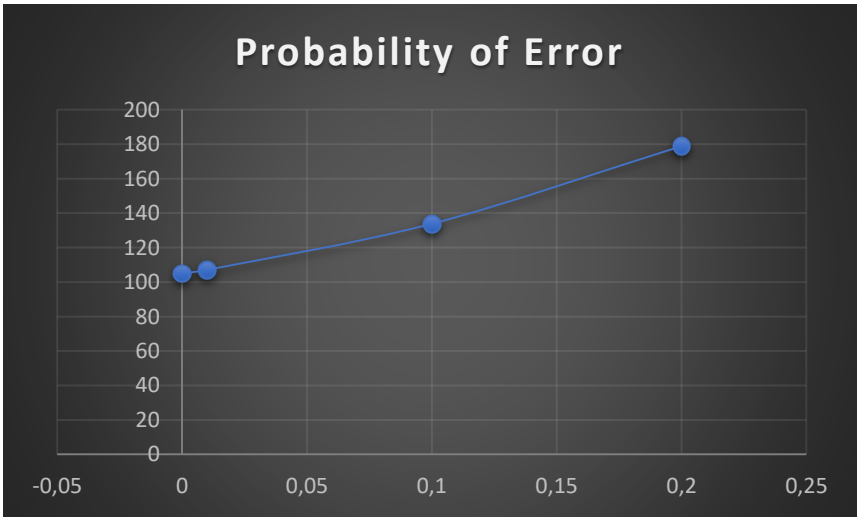

Figure 2-Effect of error rate

The probability of error and transmission time can be seen on Figure 2. Transmission time in theory should be multiplicatively inverse with the rate of success since faulty packets require retransmission of a whole window and it is directly influenced by error rate.

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3. Timeout

In order to observe the effect of probability we arranged it to take values of 150ms, 300ms and 600ms.

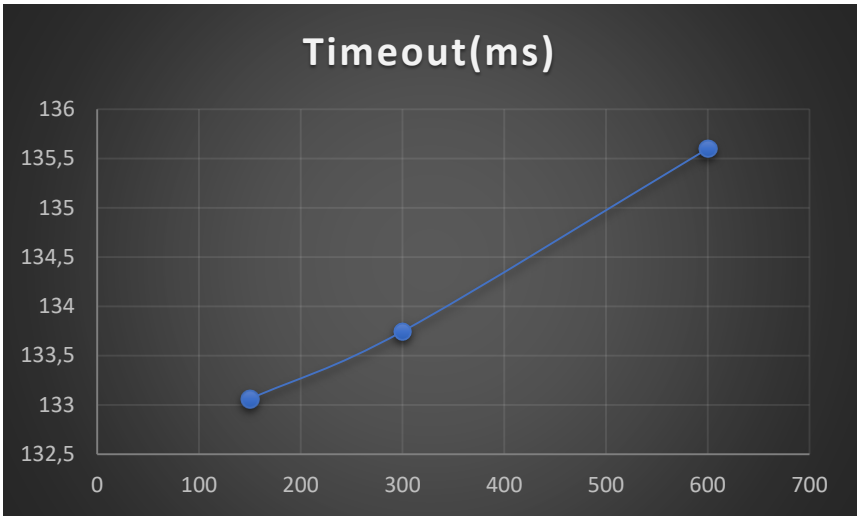

Figure 3 - Effect of timout

Because the propagation delay is small and error rate is not large(0.1), timeout does not have a big impact as long as it is in the range hundreds of milliseconds. Since it is large enough, lowering timeout duration will decrease transmission time. The reason is that errors will be detected more quickly and retransmission will be started earlier.

4. Number of windows

In order to observe the effect of number of windows, we arranged it to take values of 1, 5 ,10, 15, 20, 25.

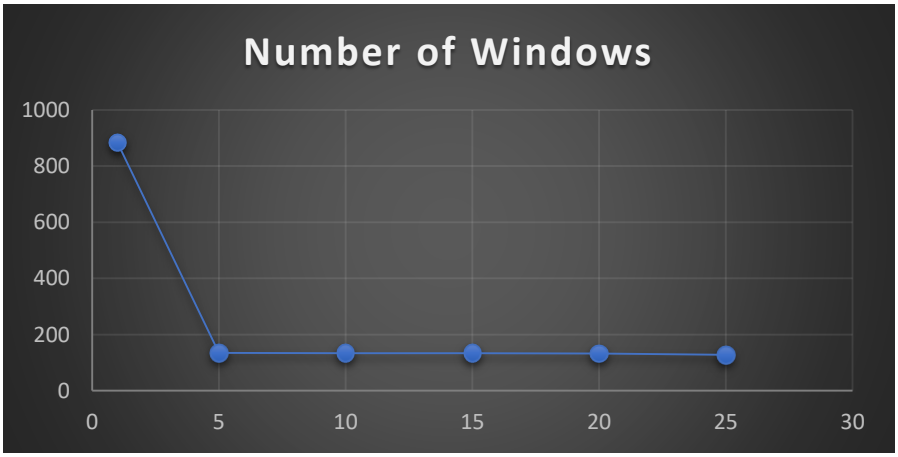

Figure 4 - Effect of number of windows

ssmultiple windows is very helpful for utilizing the hardware. Propagation delay will be compensated by transmission delay and transmission time will be significantly dropped. After 5, there is not much change in transmission time since it is thought to be fully utilized.