**Assignment 5**

**PSS Synchronization**

Please verify step-by-step that PSS can be synchronized via the lowest sampling rate (1.92MHz), no matter what the actual signal bandwidth is. You need to:

1. Generate OFDM symbols with PSS via different sampling rates (bandwidths).
2. Show that the same sampled signal can be obtained from the above OFDM symbols via lowpass filter and sampling rate 1.92MHz.
3. Show the detection procedure of from the above sampled signal.