INSTRUCTIONS FOR 2.4 GHz HIGH RATE EXTENSION PROPOSALS AND LIST OF EVALUATION AREAS

AREAS OF EVALUATION:

- Data Rate (after channel coding).
- Channel BW.
- Adjacent Channel Rejection.
- Rx Sensitivity (@ 10% PER based on 64 and 1000 byte packets, include probability of acquisition)
- Multipath performance.
    - With equalization (if proposed)
    - Without equalization.
    - With diversity no equalization.
    - Without diversity no equalization.
    - With and without diversity and equalization (if equalization is proposed).
- System/Network analysis .
    - System capacity / cell planing.
    - System throughput.(for 64 and 1000 byte packets based on 802.11 protocol short IFS no backoff with ack.)
    - Slot time (90% detection @ Rx sensitivity probability with a signal starting in the middle of a slot time , no multipath, single antenna).
- 802.11 coexistence / CCA
- Interoperability with 1,2 MBPS (Yes/No)
- MAC changes
- Implementation.
    - RF/IF complexity.
    - Baseband processing complexity.
    - Equalizer complexity
    - Diversity implementation.

Notes

1. As part of the multipath performance analysis describe in the paper :
   - Equalizer implementation (if proposed).
   -use of acquisition and training to combat multipath
   -discussion of noise, fading models and antenna assumptions used I in the analysis
   - discussion of your antenna diversity methods as well as recommendations .

2. Elaborate in the paper on the recommended PHY acquisition scheme including preamble parameters , and the system slot timing as a result of the proposed CCA and PHY acquisition strategy.

3. Address in detail any recommended changes to the 802.11 MAC and the MAC/PHY interface as it exists on its current form.