Summary of time encoding issues

The D1.2 draft uses 4 units for time encoding

- nanoseconds (beacon interval and slot time in MIB)
- hundreds of nanoseconds (PHY MIB time parameters)
- microseconds (durations, NAV, TSF)
- milliseconds (beacon interval, dwell time)

The standard would be simpler to read and easier to implement if the number of of units were reduced to three and the relationships were binary rather than decimal. This submission proposes the following:

- use microseconds wherever practical
- encode short–duration intervals in units of 62.5 microseconds
- encode long–duration intervals in units of 1024 microseconds

• Note that none of 802.11's long–duration intervals are synchronized with external ("wall clock") time.

Motions on time encoding

Motion #1 (r1)

• That long–duration intervals in the 802.11 standard be encoded in units of 1024 microseconds, and the text changes related thereto from document 95/149r1 be incorporated into the draft standard.

Motion #2 (r1)

• That intervals in section 8 of the D1.2 draft that currently have no units specified be updated to specify units of microseconds, and the text changes related thereto from document 95/149r1 be incorporated into the draft standard.

Motions, continued

Motion #3 (r1)

- **That intervals in section 8 of the D1.2 draft that currently specify units of nanoseconds be updated to specify units of microseconds, and the text changes related thereto from document 95/149r1 be incorporated into the draft standard.**

Yet another motion

Motion #4 (r1)

- **That short–duration (less than 1 microsecond) intervals necessary in the 802.11 standard be encoded in units of 62.5 nanoseconds.**