

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)	
)	
Modification of Parts 2 and 15 of the)	ET Docket No. 03-201
Commission's Rules for Unlicensed)	
Devices and Equipment Approval)	

COMMENTS OF UBISENSE LTD

Ubisense Ltd files these comments in response to the above-captioned Further Notice of Proposed Rule Making.¹

A. ABOUT UBISENSE

Ubisense designs and manufactures a range of products for accurate location of objects within buildings. Its technology is used in the logistics, manufacturing, healthcare, entertainment, and military sectors in the United States and abroad.

Ubisense's products use unlicensed radios. A typical installation consists of a set of active tags (attached to the objects to be located) that transmit low-power, ultra-wideband positioning signals to base stations in the environment. Also connecting the tag and base station, for command and control, are low-power, low-duty cycle links in the 2400-2483.5MHz band. These typically operate at -1.3dBm with a -20dB bandwidth of 925kHz and a maximum duty cycle of 36%.²

¹ *Modification of Parts 2 and 15 of the Commission's Rules for Unlicensed Devices and Equipment Approval*, 22 FCC Rcd 11383 (2007) ("Notice").

² Ubisense holds FCC certifications for these radios.

B. THE COMMISSION SHOULD CAREFULLY LIMIT THE APPLICABILITY OF A SPECTRUM ETIQUETTE.

Ubisense takes no position on whether a spectrum etiquette is necessary to prevent interference in the ISM bands.

But if the Commission decides to adopt an etiquette, Ubisense -- like other parties to the proceeding -- urges that it do so as narrowly as possible, being careful to exclude devices that are not part of the problem to be solved. The Commission should, further, draw the boundary between etiquette and non-etiquette devices so as to minimize the marginal cases. Where reasonable questions arise at the margin, the Commission should resolve them against imposing the etiquette.

As one possible boundary, the Commission could impose an etiquette only as to devices:

- operating in the 902-928MHz band; and
- certified pursuant to Section 15.247; and
- capable of operation at data speeds in excess of 1Mbps.

We emphasize that an etiquette may be unnecessary even for many of the devices that meet these criteria. In particular, the Commission proposes duty cycle limitations on all transmitters operating at over 0dBm.³ We note, however, that consumer and industrial devices with powers 10 to 20 dB higher have been operating in vast numbers with no systematic interference problems.

CONCLUSION

The Part 15 rules have been a fruitful basis for innovation. Unless it is designed and administered with the greatest care, a spectrum etiquette threatens to shut off this source of

³ Notice at para. 22.

economic growth. The Commission should identify the categories of device that need additional controls (if indeed any do) as narrowly as possible, and should set up an etiquette that entails a minimum of restraint on those devices. The scope of the solution should not exceed that of the problem.

Respectfully submitted,

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October 15, 2007

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