



Squire Sanders (US) LLP
1200 19th Street, NW
Suite 300
Washington, D.C. 20036

O +1 202 626 6600
F +1 202 626 6780
squiresanders.com

Bruce A. Olcott
T +1 202 626 6615
bruce.olcott@squiresanders.com

May 9, 2012

VIA ELECTRONIC FILING

Marlene Dortch
Secretary
Federal Communications Commission
445 12th St. S.W.
Washington, D.C. 20554

**Re: Permitted Written Ex Parte Presentation in
ET Docket No. 10-4**

Dear Ms. Dortch:

Cellphone-Mate, Inc. ("Cellphone-Mate") is pleased with the cooperative tenor of recent filings in this proceeding, and is encouraged by the willingness of the parties to develop rules that will enable the continued and beneficial use by consumers of properly designed signal boosters. In particular, Cellphone-Mate files this ex parte presentation in response to the recent proposal by AT&T.¹ AT&T's proposal appears to make significant strides toward establishing technical requirements that promote access to boosters while minimizing the potential for harmful interference.

Most important, AT&T's proposal appears to acknowledge that, as long as the Commission imposes certain basic technical requirements on signal boosters, no need exists for signal boosters to be coordinated, authorized, or individually registered with wireless carriers. The removal of such a burdensome impediment provides an opportunity for the Commission and all stakeholders in this proceeding to identify a compromise that can benefit consumers, while adequately protecting the integrity of wireless networks.

Cellphone-Mate generally supports AT&T's proposal with some modifications and, in anticipation of developing rules that promote innovation, broadband access, and more efficient

¹ *Written Ex Parte Presentation of AT&T Inc.*, WT Docket No. 10-4, April 3, 2012 ("*AT&T Ex Parte*").

spectrum use while preventing harmful interference, Cellphone-Mate provides the following responses to AT&T's proposal.

Output power

Cellphone-Mate disagrees with AT&T's proposal that the output power of boosters be limited to 23 dBm. A limit of 23 dBm means that rural and other users who may be far from a cell tower will not receive the benefit of a signal booster because such a limit in effect defeats the purpose of employing a booster. Indeed, AT&T's 23 dBm proposed power limit is more stringent than those proposed by Verizon Wireless, Wilson, and T-Mobile.²

Further, there is no need to impose exceptional power limits on signal boosters because the interference risk that could result from the use of higher power levels can be fully resolved by requiring signal boosters to reduce power or shutdown when they come close to the base station of a wireless network operating within the frequency range of a signal booster. Such a requirement would provide adequate protection for cellular network base stations without imposing additional and unnecessary burdens on booster manufacturers and ultimately on end users. Therefore, no reason exists to require signal boosters to operate below the existing power limits for wireless devices that are already specified in the Commission's rules.

Automatic level control

Cellphone-Mate generally agrees with the proposal endorsed by AT&T and Sprint that boosters should employ techniques to regulate booster output. Automatic Level Control ("ALC"), recommended by AT&T and Sprint, is one approach to limiting booster transmit power to no more than the maximum permitted under the rules. Automatic Gain Control ("AGC") is another approach that is equally effective and also should be permitted as a means to regulate booster output. In either case, the Commission's rules establish permissible power levels and Cellphone-Mate agrees that boosters should abide by the established power levels.

Oscillation control

Cellphone-Mate also agrees with the principle that boosters should employ methods to detect and mitigate oscillations, and finds AT&T's proposal to be representative of the type of solution that would be reasonable to all parties.

Uplink shutdown

Cellphone-Mate has no objection to the proposal that signal boosters that do not receive mobile device transmissions at their uplink input port for some time should shut down or reduce the power of the uplink transmitter.

² *Written Ex Parte Presentation of Sprint Nextel*, WT Docket No. 10-4, March 8, 2012 ("*Sprint Ex Parte*").

Intermodulation

AT&T's proposal for managing intermodulation is needlessly strict and would make signal boosters cost prohibitive for consumers. For example, AT&T is proposing an intermodulation requirement for signal boosters employing GSM modulation that is identical to the existing requirement for GSM base stations. Any such approach would be entirely unnecessary for consumer signal boosters, which do not normally serve large numbers of simultaneous users. This is evidenced by the fact that intermodulation from consumer signal boosters has never been reported by carriers to the Commission as an appreciable source of interference to their networks.

E911 Location Accuracy Labeling

Cellphone-Mate notes that the use of boosters will only affect location accuracy for carriers that rely strictly on network-based location methods like UTDOA. Even in those limited cases, the effect will be slight and TDOA system operators can address it through the design of their base stations' location system.³ As Cellphone-Mate has explained to the Commission in previous filings on this topic, operators of UTDOA position location services can employ techniques to identify handset transmissions that are emanating from signal boosters and incorporate them in their signal processing calculations to produce even more accurate location determinations than would have been possible without the assistance of a signal booster.⁴

Furthermore, the approaching ubiquity of GPS location technologies in consumer handsets means that increasingly few cell phones are affected by this issue. Thus, labeling should not be required, or, if it is, it should include all of the relevant details.

Enforcement

Cellphone-Mate agrees generally with AT&T's proposal regarding enforcement, but cautions the Commission against adopting any rules or enforcement plan that would abruptly change the permissible devices in a way that would disrupt the manufacturer's pipeline or the consumer's expectations. In particular, Cellphone-Mate urges the Commission not to adopt a prescribed sunset period for existing signal boosters operating under the current requirements. The practical reality is that the Commission needs to do very little to manage the existing generation of wireless signal boosters because the rapid adoption of 4G capabilities ensures that the vast majority of wireless amplifiers in circulation today will be obsolete within a few years. As long as the rules adopted by the Commission are reasonable and not exceedingly burdensome, consumers can be expected to purchase this new generation of fully compliant booster devices and rapidly employ them as a replacement to the equipment currently in circulation.

Similarly, AT&T proposes that newly marketed devices must comply "once the rules become effective."⁵ Cellphone-Mate urges the Commission to instead adopt the proposal in the

³ *Ex Parte Presentation of Cellphone-Mate Inc.*, WT Docket No. 10-04, February 17, 2012.

⁴ *Id.*

⁵ *AT&T Ex Parte* at 2.

NPRM providing six months after the effective date of the rules for manufacturers and retailers to ensure that all signal boosters to be marketed and sold meet the adopted guidelines.⁶ A six month transition period would ensure the continued availability of the devices, would prevent unnecessary hardship to manufacturers and retailers as a result of unmarketable products due to an abrupt rule change, and would promote a smooth transition to new devices

Other Proposals

Cellphone-Mate notes with approval that AT&T's proposal appears to acknowledge that coordination and product location registration are unnecessary to effective booster regulation. Further, manufactures would not be required to submit new booster models to wireless carriers for type acceptance or other authorization. Avoidance of such burdensome requirements is essential to ensuring that a vibrant market for signal boosters remains available for consumers.

Requiring carrier authorization, coordination or registration would give wireless carriers the ability to effectively prevent the use of signal boosters on their networks, or authorize only those boosters that are sold through their own retail outlets (as is currently the case for most handsets). Further, requiring consumers to register and reregister their signal boosters every time they are moved would impose a significant burden on consumer, and is likely to promote widespread non-compliance. The significant difficulties that the Commission has already encountered enforcing rules governing CB radios, radar detectors, police scanners, GPS re-radiation equipment, and E911 location registration requirements for VoIP handsets have made it clear that the Commission's regulation of such consumer devices is focused most effectively on the manufacture and design of such equipment and should not rely on compliance by individual consumers with burdensome regulations.

Cell phone signal boosters are an effective and proven tool for providing reliable 3G and 4G wireless broadband in rural areas and into the homes and offices of consumers. Although some major wireless carriers claim penetration rates reaching as high as 99 percent, these percentages represent outdoor coverage only. Indoors, where an increasing majority of wireless calls are made and data is consumed, coverage remains inconsistent and effective data rates can be significantly degraded. As Cellphone-Mate's 4G products have already demonstrated, boosters have the ability to dramatically improve availability and effective data rates for 4G devices.

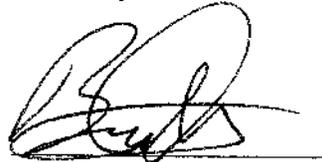
A 4G capable signal booster not only increases the geographic range of broadband networks, but also the effective data throughput for consumers that are linked to the network through a booster. The use by consumers of properly designed signal boosters can therefore significantly increase the availability of broadband wireless networks and the efficiency of their use of scarce spectrum resources. Cellphone-Mate therefore encourages the Commission to adopt the proposals advocated herein for technically neutral requirements that provide adequate safeguards against harmful interference while ensuring that booster manufacturers can continue

⁶ *Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, Docket No. 10-4, Notice of Proposed Rulemaking, FCC 11-53, ¶ 63.* (rel. Apr. 6, 2011) ("NPRM").

to innovate and play their important role in bringing the benefits of reliable and faster mobile internet connectivity to consumers especially those in underserved and rural areas.

Please contact the undersigned if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce A. Olcott", written over a horizontal line.

Bruce A. Olcott
Counsel to Cellphone-Mate, Inc.