Brian M. Beck

Research Engineer

Georgia Tech Research Institute

250 14th St. Rm. 585

Atlanta GA 30318

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Federal Communications Commission  
445 12th Street SW, Washington, DC 20554

Re: ET Docket 18-284, Metrom Rail Request for Waiver

Dear Office of Engineering and Technology,

I am writing in response to Metrom Rail LLC (Metrom) request for a waiver of certain Part 15 rules as part of the Public Comment period. As an academic, I understand the importance of FCC waivers for research purposes. I also understand that there are potential commercial and industrial applications where a waiver is required from the FCC, but if granted will ultimately be a net positive for the public. I believe this to be one of those cases. Metrom’s request is focused on improving safety in rail systems using UWB technology. I have substantial experience using UWB radios in a laboratory environment, and I find Metrom’s use case convincing in terms of the waiver request. I further believe that data gained from any experiments performed on the rail lines is likely to push our knowledge of UWB technologies and its applications forward in the future.

Metrom is asking for certain rule parts to be waived, and has offered a reasonable rationale for their requests:

* This waiver request is limited to the rail operators, such as municipals, thus the overall number of units deployed is relatively small and under operational controls.
* The system is limited to rail tracks and equipment along rail tracks, thus the location is specially known and can be monitored.
* The fixed outdoor infrastructure proposed is under the control of the system operators, is part of the rail system, and uses the strictest of the UWB spectrum masks.
* The additional gain for the directional antennas requested by Metrom will be directed along the track and have commented that the out-of-band emissions will not be any greater than the current Part 15 UWB rules allow.
* Surveillance systems are allowed to operate outdoors under the UWB rule parts by similar parties (Part 90 users) but with less strict emissions masks.
* The argument for handheld equivalence is logical and effectively has already been made by other companies in their use of UWB today.

We continue to support the FCC’s issuance and allowance of the Special Temporary Authority (STA) and Waiver process. Requesting and granting waivers is a very important process that allows for the FCC and other concerned government bodies as well as the public and private industry to gather real world data and proof points about technology, specifically UWB, while being on a limited scale. This real-world data is extremely helpful in evaluating how UWB technology can be safely deployed in the future.

Overall, we are in support of this waiver request and see both the public value and the efforts made to address potential concerns.

Sincerely,

Brian M. Beck, Ph.D.