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Informal Objection of Sirius XM Radio Inc. to 3G Wireless Request for Experimental Special Temporary Authority, File No. 1577-EX-ST-2020

Sirius XM Radio Inc. ("Sirius XM"), the licensed provider of Satellite Digital Audio Radio Service ("SDARS") in the 2320-2345 MHz frequencies, submits this informal objection to the above-referenced request of 3G Wireless, LLC ("3G Wireless" or "3G") for experimental Special Temporary Authority ("STA").

Sirius XM has analyzed the STA request, and the operations planned by 3G Wireless in two Wireless Communications Service ("WCS") frequency bands – the 2312-2320 MHz band and the 2352-2360 MHz band – are expected to cause harmful interference to Sirius XM's satellite radio service. 3G Wireless seeks to use this spectrum to support remote video coverage of a motorsports racing event in Salinas, CA scheduled to occur the weekend of October 30, pursuant to a commercial agreement between 3G Wireless and NASCAR Media Group – operations that do not qualify for treatment as experimental under Section 5.5 of the Commission's rules. The event during which 3G plans to use WCS spectrum is expected to attract significant numbers of Sirius XM subscribers whose service could be disrupted by these transmissions.

Sirius XM's past practice has been to contact 3G Wireless directly in an attempt to reach a mutually acceptable resolution, an approach that the Commission encourages and that has been successful in helping Sirius XM avoid disputes with other experimental applicants. However, 3G has consistently ignored or failed to timely respond to such outreach and has been dismissive of Sirius XM's concerns, as discussed in Sirius XM's pleadings involving another recent 3G experimental STA request, File No. 1254-EX-ST-2020. Sirius XM incorporates those pleadings by reference herein. Given 3G's repeated actions, Sirius XM has concluded that it must put its interference concerns on the record with the Commission, rather than rely on cooperation from 3G, in order to ensure service to SDARS customers is protected.¹

Sirius XM remains open to discussing the instant STA request with 3G Wireless but would need additional information regarding the planned operations in the WCS spectrum to better assess the interference threat:

1. Please provide laboratory measurements demonstrating that the 3G Wireless transmission equipment meets the specifications required of all WCS licensees under Part 27, including the emissions limits in Section 27.53 of the rules.
2. Please supply the following information regarding the transmitted waveforms:
 - a. Peak to average power ratios.

¹ For similar reasons, Sirius XM expects it may need to file similar objections against other STA applications filed by 3G Wireless.

- b. Out-of-band emission masks showing how much power would be in-band to the SDARS spectrum at 2320-2345 MHz.
 - c. Explain how the waveforms vary with time:
 - i. Are they on continuously or do they operate in pulsed or TDM mode?
 - ii. If they are not continuous, what are the duty cycles, pulse rates, and other waveform characteristics?
3. Please provide more specific planned locations of mobile video transmitters:
- a. Will any video transmitters be located on top of any buildings, grandstands, or other structures?
 - b. Will any airborne platforms (helicopters, drones, balloons, kites, aerial "high-wires", etc.) be used to transmit any video signals?

To ensure that Sirius XM subscribers are protected from interference, Sirius XM asks that the Commission decline to authorize 3G's proposed use of the 2312-2320 MHz and 2352-2360 MHz bands or any other WCS spectrum unless and until Sirius XM's concerns are resolved. At the very least, the Commission should include in any grant of authority for WCS spectrum a requirement that 3G's operations must comply with the emission limits in Section 27.53 of the rules, consistent with past Commission practice in experimental authorizations for these frequencies.²

Any questions regarding this submission can be addressed to Karis Hastings, outside counsel for Sirius XM, at 202-599-0975, karis@satcomlaw.com.

² See, e.g., 3G Wireless, LLC, Call Sign WP9XSC, File No. 2258-EX-ST-2019, Grant at 16, Special Condition 5 ("Operations in the WCS bands (2305-2320 MHz and 2345-2360 MHz) must comply with the emission limits applicable to those bands. See 47 C.F.R. § 27.53(a).").