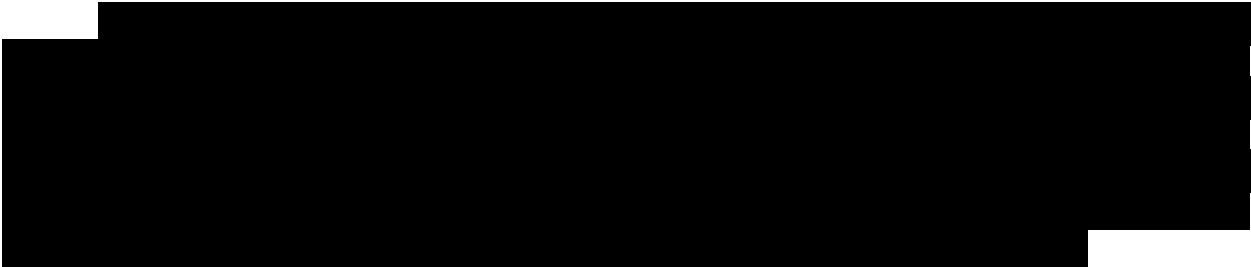


EXHIBIT A – NARRATIVE DISCUSSION AND STA JUSTIFICATION

Pursuant to Section 5.61(a)(1) of the Commission’s Rules, Deere & Company (“Deere”) provides this narrative statement in support of its request for Special Temporary Authorization (“STA”) to conduct operational testing using 3550-3700 MHz Citizens Broadband Radio Service (“CBRS”) spectrum from discrete sites near Deere facilities in Moline, Illinois and two experimental farms nearby in close proximity in Iowa.¹ Deere seeks STA for a period of six (6) months beginning as soon as possible but not later than May 15, 2019.²

Consistent with Commission Rules, “good cause” exists to support grant of the requested STA.³



¹ 47 CFR § 5.61(a)(1).

² *Id.*

³ 47 CFR § 5.61(a)(2).

⁴ Commercial deployment of CBRS devices cannot occur prior to certification of at least one SAS administrator given the need to enable geolocation capabilities to protect incumbent coastal radar systems.



The proposed locations in Illinois and Iowa represent optimal STA test site for CBRS 3550-3700 MHz spectrum. Among other characteristics, these test sites enjoys flat topographies that facilitate line-of-sight transmission with minimal links. Moreover, Deere has an extensive presence in the region, which will facilitate the installation and maintenance of equipment under test.

Deere's proposed test does not represent an interference threat to incumbent operations. The test sites are located hundreds of miles from coastal radar operations, far outside Part 96 exclusion zones. No international ground stations requiring protection in the 3650-3700 MHz band operate in Illinois or Iowa.⁵ Deere will coordinate with Wireless Broadband Services ("WBS") operated under Subpart Z of the Commission's Part 90 Rules.⁶ Deere will also comply with the power levels in Section 96.41. As described in Exhibit B, Deere will also provide a 24/7 point of contact with "kill switch" capability in the unlikely event of harmful interference with incumbent users.

Exhibit B provides the unit volume and technical characteristics for the STA station sites proposed by Deere for the instant application. Deere requests authority for the minimal number of devices needed to evaluate the viability of the 3550-3700 MHz to support next generation IoT applications. Moreover, all equipment proposed to be used by Deere pursuant to this STA complies with adopted CBRS rules.

For the foregoing reasons, Deere respectfully requests that the Commission expeditiously grant the requested STA.

⁵ See <https://transition.fcc.gov/bureaus/ib/sd/3650/grandftr.pdf> (last visited 4/27/2019).

⁶ See 47 C.F.R. §§ 90.1301, *et seq.*