

NARRATIVE IN SUPPORT OF RENEWAL

3DB Communication Inc. (“3DB”) respectfully requests that the FCC renew its current experimental license, Call Sign WI2XXG, pursuant to Section 5.3(k) of the FCC’s rules,¹ for an additional two years so that 3DB may test different variations of and improve its technology as well as conduct market trials with 15 or fewer users.

3DB’s affiliate, DPA Mac LLC (“DPA Mac”), has sought a permit to construct an international high-frequency radio service pursuant to Part 73(f) of the Commission’s rules.² Consistent with 3DB’s prior statements to the Commission,³ renewal of 3DB’s experimental authorization will refine and support the equipment, technologies, and operating procedures that DPA Mac will use in its Part 73 commercial service offering.

3DB is a technology innovation company whose mission is to expand access to information and accelerate its distribution. 3DB and its affiliates do not trade in securities, equities, bonds, or derivatives.

3DB needs renewed experimental authority to refine its technologies and continue work toward the following objectives:

- *Improving weather resilience.* Extreme winter weather conditions in Illinois have caused 3DB’s industrial-grade equipment to malfunction and, at times, suffer from electricity outages. To combat these conditions and increase service reliability, 3DB seeks to deploy and test a weather antenna kit that can sufficiently protect the antenna against winter storms as well as install high-power generators to ensure continuous service.
- *Testing next-generation modem.* 3DB has been unable to incorporate its next-generation modem due to COVID-19, which has negatively impacted 3DB’s ability to obtain necessary resources. 3DB anticipates completing this stage of the testing by March 2022.
- *Improving resistance to local radiofrequency (RF) noise.* Local RF noise caused by solar farms, flickering, and Compressed High-Intensity Radiated Pulse (CHIRP) radars has reduced the efficiency and efficacy of 3DB’s transmissions. Additional time is necessary for 3DB to improve system resilience to these sources of RF noise.
- *Successfully transmitting longer distances (10,000 km).* 3DB successfully transmitted signals using the Digital Radio Mondiale (DRM) standard from Chicago to London. 3DB intends to test transmissions to Frankfurt and Tokyo to demonstrate the feasibility of longer transmission paths and improve reliability of the Chicago to London transmissions.

3DB will use the renewed experimental authority to continue improving its technologies in anticipation of DPA Mac’s launch of commercial service pursuant to Part 73 of the Commission’s rules. Once testing to support DPA Mac’s Part 73 license application is complete, the need for experimental authority will end.

¹ 47 C.F.R. § 5.3(k).

² See IBFS File No. IHF-C/P-20201228-00010.

³ See ELS File No. 0281-EX-CR-2019, Exhibit 1 at 1 (May 16, 2019).