

# Shanghai EFIX Geomatics Co., Ltd

---

**Office of Engineering and Technology  
Laboratory Division  
Equipment Authorization Branch  
Federal Communications Commission Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046**

Subject: Extend Frequencies Justification Original Application FCC ID: **2A3MU-C5**

**Company:** Shanghai EFIX Geomatics Co., Ltd  
**Address:** Building 1, 158 Shuanglian Road, Qingpu District, Shanghai.

Dear Sir or Madam;

We, **Shanghai EFIX Geomatics Co., Ltd** declares that the Digital radio meets 47CFR Section 90.203(j)(4) and 90.203(j)(5) spectrum efficiency requirement;  
This Digital radio is support both 12.5 KHz and 25 KHz for GMSK, 6.25KHz, 12.5 KHz and 25 KHz for 4-FSK digital modulation; Emission Designator: F1D for data modes, also this Digital radio designed in accordance with ETSI TS 102 361-1 requirement, will at least support 4800 bits per second in a 6.25 KHz channel bandwidth, 9600 bits per second in a 12.5 KHz channel bandwidth and 19200 bits per second in a 25 KHz channel bandwidth, GMSK will refer 2 time slots in one 12.5 KHz bandwidth and refer 4 time slots in one 25 KHz bandwidth accordance to ETSI ETS 102 361-1, which equal with  $9600/2 = 4800$  and  $19200/4 = 4800$  bits per second in one 6.25 KHz channel bandwidth;

We, **Shanghai EFIX Geomatics Co., Ltd** declares that the Digital radio capable of operating on the nationwide public safety interoperability calling channel (453.2125 MHz), meets 47CFR Section 90.203(j)(1) requirement;

**Signature:** Glenn Chu **Date:** 2022-07-11  
**Name:** Glenn Chu  
**Title:** Certification Manager  
**Company:** Shanghai EFIX Geomatics Co., Ltd