

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Petition for Rulemaking: Amendment of)	CG RM-11844
Rules Governing Ultra-Wideband Devices)	
and Systems)	

To: The Chief
Office of Engineering and Technology
Via: ECFS

Dresden, 30.08.2019

Reply to UWB Alliance supporting statement - by ZIGPOS GmbH

On July 18, 2019 the Federal Communications Commission (FCC) in its Public Notice Report No. 3130 published the filing of the Petition for Rulemakings RM 11844, submitted by the petitioner Robert Bosch LLC (Bosch), in which the petitioner requests that the FCC initiates a comprehensive review of the regulations governing Ultra-Wideband (UWB) devices and systems.

ZIGPOS GmbH (ZIGPOS), a global company serving customers worldwide (including the U.S.) providing energy efficient real time locating systems (eeRTLS) based on UWB radio, by counsel and pursuant to Section 1.405 of the Commission's Rules (47 C.F.R. § 1.405), would like to reply to the supporting statement of UWB Alliance in support for such a review and revision.

ZIGPOS would like to continue to underline the importance for such a review and subsequent enhancement of the so far existing "ultra-conservative" UWB spectrum access rules in the U.S. in order to allow for further growth and increased competitiveness of several industrial sectors by the introduction of innovative precise eeRTLS uniquely enabled by UWB radio. Modern radio technologies are capable of deploying advanced interference mitigation techniques with only little increased effort and thus enabling a far more dense and efficient use of the radio spectrum for

innovative license-free applications while protecting authorized services at the same time avoiding harmful interference.

ZIGPOS therefore welcomes the constructive proposal submitted by the UWB Alliance in its comment filed for the spectrum access based on co-existence in order to enable a more flexible and more efficient use of the whole radio spectrum band from 3.1-10.6 GHz.

Besides the increase of the currently allowed mean transmitted power spectral density from ridiculously low -41 dBm/MHz by +10 dB towards a still super low -31 dBm/MHz for intentional transmissions a more flexible regulation on the application of fixed outdoor UWB installations is required from ZIGPOS business perspective for the benefit of its U.S. current and potential customers. This modest increase of transmit power would allow a UWB device to operate with its intentional transmit power level at least on the same power level, which is allowed as unintentional radiation for many other narrowband and broadband radio services.

The UWB outdoor application restrictions and the extreme low maximum permitted transmit power levels for UWB radio in general are ultra-conservative and should be relaxed in an updated rule making therefore.

The base for such updated rulemaking avoiding to request expensive and timely waiver procedures are two fold. First there is no report filed to the knowledge of ZIGPOS that since the introduction of UWB in the field any harmful interference to any authorized system has been occurred and therefore the estimation of the FCC, that the initial rules governing UWB are “ultra conservative” and “over protective” have been proven to be true and can be relaxed now. Second, since the early adoption of unlicensed radio technology there has been substantial improvement in technology and algorithm development enabling efficient interference mitigation and radio co-existence.

ZIGPOS respectfully proposes, as requested in the petition and as supported by the UWB Alliance in its comment to consider for an update of UWB rules an increase of the permitted maximum UWB transmit spectral power density by 10dB as well as a removal of the outdoor UWB application restrictions.

ZIGPOS GmbH supports the UWB Alliance comments supporting the petition mentioned above and respectfully requests the FCC to start process of rulemaking to revise and update the rules governing UWB operation. ZIGPOS welcomes in particular the constructive incremental proposal from UWB Alliance to FCC for opening a wide spectrum range to any radio service following dedicated new co-existence rules, which implicitly provide both, protection of authorized and license-free services from harmful interference as well as allow for innovative license-free radio applications.

Respectfully submitted,
ZIGPOS GmbH

Erik Mademann
CEO