Subject: FCC/IC Certification of RADWIN 2000 3GHz BAND, RADWIN 1000 3GHz BAND and RADWIN 5000 3GHz BAND

November 13, 2011

To whom it may concern,

RADWIN Ltd wishes to market the RADWIN 2000 3GHz BAND, RADWIN 1000 3GHz BAND and RADWIN 5000 3GHz BAND radio devices, complying with FCC 47CFR, Part 90 at 3.650 - 3.700 GHz regulation.

RADWIN 2000 3GHz BAND and RADWIN 1000 3GHz BAND are point-to-point radio links, consisting of two radio units, one at each end of the link, enabling wireless connectivity for either urban or rural deployments, supporting both access and backhaul applications, providing Ethernet and TDM data interfaces.

RADWIN 5000 3GHz BAND is a point to multi-point system consisting one base station and several client units (CPEs), enabling wireless connectivity for either urban or rural deployments, supporting both access and backhaul applications, providing Ethernet and TDM data interfaces.

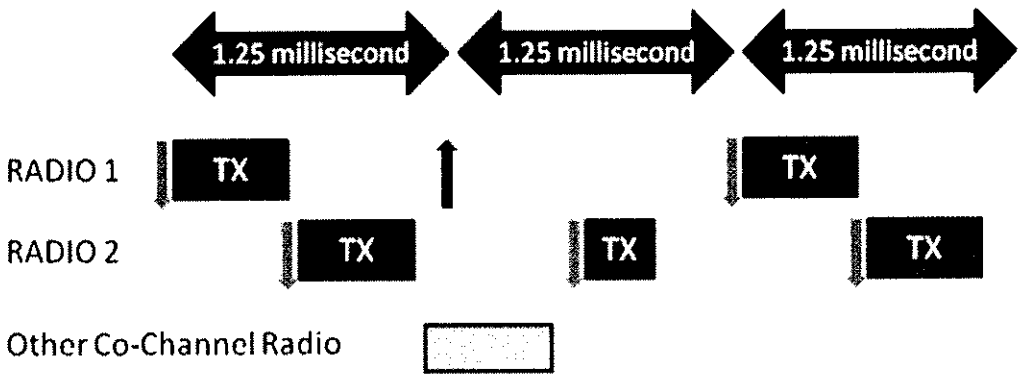
RADWIN Ltd wishes to conform to FCC DA 07-4605 (November 14, 2007) FCC-certified equipment requirements:
"Unrestricted contention protocols are broadly compatible and function to prevent interference even with other, dissimilar contention technologies on the market. Equipment using an unrestricted protocol can operate on all 50 megahertz (3650-3700 MHz)".

The RADWIN 2000 3GHz BAND, RADWIN 1000 3GHz BAND and RADWIN 5000 3GHz BAND radio links are based on RADWIN TDD air protocol that meets the FCC definition of a "unrestricted" contention based protocol capable of avoiding co-frequency interference with devices using other types of contention-based protocols, by incorporating the following mechanisms:

1. Spectrum Sense and co-channel interference sensing mechanism when the operating channel is sensed in order to detect and determine if there are other devices, similar to RADWIN air interface protocol or others, that transmitting in co-channel.

   This carrier sense is done before every frame transmit. Under detection of co-channel interference the system cancels the next transmitting frame to enable sharing the bandwidth in the same channel for other transmitting devices.

   The following picture illustrates the RADWIN propriety mechanism of carrier sense and action:



Power detection – Channel is clear

Power detection – Channel is in use

Canceled transmission

2. Threshold detection to determine occupancy rules

The threshold detection to determine occupancy in co-channel operates according the following rules:

a. The power detection threshold level is -75 dBm for 100% interference detection success.

b. The system detects interference signals lower than -75 dBm and down to -85 dBm with interference detection probability of 90%.

   The detection probability at levels lowers than -85dBm decreases with direct correlation to the interference signal strength.

   There is no way to change the threshold detection value since it is an internal modem implementation.

c. The system observes to determine if the channel is busy at the initialization process and in between communications in a period of 10usec every 1250usec (radio frame duration).

d. The bandwidth being monitored for co-channel occupancy is the same as the system operating channel bandwidth

e. The system observes to determine if the channel is busy before each attempt to transmit a frame. This occurs every 1250usec.

f. Master and client devices use the same carrier sense mechanism for co-channel occupancy.

3. The method to permit occupancy to other systems consists of:

   a. Cancel transmission when a detection of co-channel occupancy occurred.
   b. In case many concurrent carrier senses detected co-channel occupancy and the system cannot provide the required service to operator, the system will achieve the sync loss threshold and will evacuate the specific channel.

      The system in this case will select a less interfered channel for acquisition using an ACS mechanism for the next link synchronization.

   c. The impact of the traffic depends on the percent of canceled transitions due the co-channel detection.

4. The opportunities for other similar systems to operate are provided by:

   a. The system activates the same described mechanism in all system states including start-up acquisition and operational mode.
   b. The system activates the same described mechanism in any traffic load.
   c. When there is no information to transmit the system still performs a spectrum sense in order to evaluate any co-channel occupancy.
   d. The system (master and slave) listens prior to every transmission or retransmission of a packet.
   e. The system enables the co-existence of two RADWIN radios in the same channel by :
      a. Activating a RADWIN propriety synchronization mechanism that synchronizes the transmit and receive path of two radios
      b. Reduce the TX power of the both radios to a level that can decrease the co-channel interference
   f. The system enables the co-existence of two radios, one of RADWIN and one of other air interface protocol in the same channel by :
      a. Reducing the TX power of the both radios to a level that can decrease the co-channel interference.

With the implementation of the above mechanisms RADWIN radio links enable a reasonable opportunity to operate in a co-channel under unrestricted mode.

Best regards,
Turgeman Eli
VP Product Management
RADWIN