



TCCA Spectrum Position January 2019

Considering that

- PMR systems are characterised by being privately owned and operated under licensed conditions, offering professional group-communication facilities, tailor-made UE design, with deployment of predominantly portable devices allowing users to have full control over their activities and staying very competitive.
- PMR services include Group Call Voice Services (commonly called 'all informed net' and 'talk group call'), Pre-Emptive Priority Call (Emergency Call), Call Retention, Priority Calling, Dynamic Group Number Assignment (DGNA), Ambience Listening, Call Authorized by Dispatcher, Area Selection, Late Entry, Direct Mode, Short Data Service, Packet Data service and smooth migration from analogue to digital platforms.
- PMR Industry is serving the market with solutions ranging from very small single site systems to huge nationwide PPDR networks.
- PMR sector is highly competitive with 20+ vendors.
- The 400 MHz Spectrum is heavily used by PMR with more than 100,000 licenses in effects in CEPT48.
- The benefit of the harmonised spectrum in 380-400 MHz for PPDR use is recognised.
- However, usage of the 400 MHz spectrum band varies significantly – country by country.
- Half of 450-470 MHz have been used by non-PMR for many years.
- LTE technology in 410-430 and 450-470 MHz will be included in an updated ECC Decision.
- In AustralAsia private enterprise spectrum will likely only be found in 1800 or 2100 MHz – and only in 10 MHz block licenses.

Further considering that

- LTE in 450-470 MHz is backed by two 3GPP standards – Band 31 and a newer one – Band 72.
- Each band is 2 x 5 MHz and mostly overlapping. Each country will have to choose which one they want – if they want.
- LTE in 450-470 MHz has been identified by ITU-R for many years.
- CDMA is operated in the band 450-470 MHz in many countries.
- Norway, Sweden, Denmark, Finland have already converted their CDMA systems to LTE.
- Other “CDMA countries” want to do the same – but have been waiting for the forthcoming update of ECC Decision ECC/DEC (19)02
- 450-470 MHz was listed as an additional PPDR band a few years back.
- 410-430 MHz will now also be listed as a band possible for PPDR use.
- LTE in 410-430 MHz is not supported by a standard, but the forthcoming update of ECC Decision ECC/DEC (19)02 has triggered standards work to be initiated in 3GPP.
- 2 x 5 MHz blocks is the maximum possible in each band.
- 410-430 MHz spectrum is idle many places in Eastern Europe – regulators look for alternative usage.

Therefore, the TCCA position is:

- 410-430 and 450-470 MHz should continue as FDD bands.
- Introduction of LTE into 410-430 & 450-470 bands must not harm existing license holders – PMR, PMSE, MIL radars, DTT, RAS etc.
- In countries with dense PMR usage, 410-430 MHz is likely to remain a PMR band for the foreseeable future.
- Countries with idle spectrum have opportunities to follow LTE profiles.
- TCCA recognises that implementation of ECC/DEC (19)02 is voluntary.
- Private broadband spectrum in higher frequencies will be supported.