

DECT Forum

Additional comments:

Responding to the Variation of Concurrent Spectrum Access 1781 MHz Licence consultation

Dear Sir / Madam,

In response to the request for comment to the above subject matter, the DECT Forum would like to make the following statement:

As an industry association, it is our duty to signal activities in the DECT guard bands to the industry at large and our members. The DECT guard bands are already in use for LTE in Germany and several other European administrations.

What we can say is that although most DECT applications which are indoor remain relatively unaffected, those that are outdoor can suffer a degradation in voice quality. The following 2 examples outline the issues encountered.

DECT Forum member companies communicated concerns over the use of LTE in the guard band.

Example 1:

One such complaint was returned to us from Turkey where LTE is in use in the guard band since April 2016. The LTE base station in this case is positioned very close to a DECT corporate PBX system.

During calls, the interference level increases resulting in a higher number of bad frames per second received from the handset by the base station, which in turns leads to voice quality degradation.

In another example DECT equipment is in use in an Austrian healthcare institution.

Example 2:

Report:

"It has been reported from several sites, that portables lose connection to the system and/or experience bad speech quality with calls even being dropped in outdoor areas. No obvious reason could be found while checking the system internally. The environment has been verified and as a common factor there was a high density of LTE antennas around these sites. the problem seems to be caused by the LTE when the downstream frequency is close to the lower border of the DECT bandwidth. In this case the base station filters are not steep enough to eliminate the LTE signal. There needs to be some official advice or procedures on how to overcome such situations"

DECT Forum shares the concerns expressed by BT in their response to this consultation and wholeheartedly endorse their suggestion to add an additional constraint of 24dBm maximum EIRP.

BT excerpt

"..For the licence, we propose a change in the limits in section 9 to read something like 0dBm/kHz or 7dBm/kHz with an additional constraint of 24dBm maximum EIRP, or 31dBm maximum EIRP with agreement. This will allow continued use of LP-GSM, assuming one carrier per BS, and would allow the LTE femtocells to operate at 24dBm. It would however substantially limit the risk of a wideband signal to cause blocking of DECT.

DECT Forum appreciates the opportunity to comment on the consultation and remains at your disposal should any further information be required.

Yours sincerely
DECT Forum