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Submission in response to proposed VHF IoT Testbed Rules

I support the proposed rules but wish to make the following points::

- 1. There needs to be some consideration given to the extent of receiver desensing in domestic situations for users of the 184-206MHz DAB frequencies.
- 2. I consider the proposed channel plan to be workable given the technologies known at present. The inclusion of a channel plan is far better spectrum management than the ruleless situation in other IoT bands issued under GURL.
- The use of land mobile simplex style licences is a far better way to allocate spectrum, It is
  inequitable that some users of spectrum contribute to management and compliance costs
  while GURL users do not. I suggest that the licensing system continues after the pilot is
  completed.
- 4. Some consideration needs to be made about the proposed licences. At present, landmobile simplex licences can be issued with multiple frequencies. In the case of IoT VHF licences, is it possible that one licence could be issued for all 50 frequencies for use in a major TLA for thousands of mobiles? This could lead to capture of a large portion of spectrum under only a few licences, without relative contribution to management and compliance.
- Spectrum is a national resource. Whilst IoT technology can operate co channel, particularly if limited duty cycles are used, spectrum use needs to be protected from being monopolised.
- 6. In the field, it is noted that many installations for UHF frequency use are now being made of equipment on high sites by IT engineers with little RF knowledge or experience. In VHF bands, even 200mW at a high site requiring -100dBm MPIS, bad engineering can result in major issues of intermod affecting users over large areas. Just as spectrum engineers are registered and audited, some consideration needs to be given to installation engineers.

Vern Talbot

30<sup>th</sup> Nov 2018