Rationale for a ‘light-touch’ licensing regime in 531-1602 kHz

While it is appreciated that the regulator is highly resource constrained, little effort should be required in consulting users (and potential users) regarding the future use of the broadcast spectrum between 531 and 1602 kHz. Medium Frequency broadcasting is currently undergoing a rapid ‘sunset’ with no future use road map having been defined to date.

Early consultation could reveal a surprising amount of interest in this unfashionable band - for heritage, education, hobby and innovation use. Small modifications to the existing regulatory regime could enable this with little effort and with very little opportunity cost.

Audience migration to digital platforms has for some years resulted in the gradual closure of AM transmitting stations around the UK. The BBC made it’s intentions(1) known over a decade ago and commenced closures in 2018. INR2 (operated by Bauer Media Audio) has already commenced the closure of some relays and has applied power reductions to main transmitting stations in reaction to rising energy costs.

The current energy crisis is likely to cause further thought to the commercial viability of wide-area AM transmission given the dwindling audience figures, rising levels of man-made noise and the duplication of broadcasts on other (more popular) platforms. This is likely to expedite the closure of the band and therefore now may be a good time to consider the impact and opportunities.

While the deprecation of the band may be desirable to support the growth in the use of other means of delivering broadcast radio, there is nothing to be gained from allowing such spectrum to lay fallow. In some EU countries, ‘light-touch’ regimes already exist and these are allowing broadcast spectrum in the MF and also the HF (internationally shared) broadcasting bands to be used, to the disadvantage of would-be UK users in terms of spectrum access.

An example of one such relaxed regime is operated by the Netherlands, who in addition to providing low-power (<1 kW) access to HF bands, is providing access to it’s AM Medium Frequency spectrum resourced agreed under the Geneva ‘75 plan. Frequency planning is simple, with a maximum EMRP of 100 watts P.E.P (Peak Envelope Power) with re-use distances between licensees operating within the envelope of the internationally agreed rights. These are shown in maps(2) available on the Agentschap Telecom website which sets out the offering(3) in detail.

Why?

- AM broadcasting is the earliest form of radio dating back to Reginald A. Fessenden’s first transmission over 115 years ago and it therefore holds considerable heritage value.

- There are millions of serviceable (including antique) receivers which would be rendered worthless by abandonment of this spectrum, increasing e-waste, resulting in monetary and environmental impact.

- AM is incredibly simple to understand and is indirectly responsible for the career choice of many STEM professionals through their construction of ‘crystal set’ receivers - there is no other wireless technology that is as easy to get a firm ‘foot-hold’ on as a young learner.

- The MF spectrum has unique properties which may attract innovative uses in different geographical locations. A ‘light-touch’ regime may produce meaningful innovations, for example: antenna design and datacasting applications.

How?

It is understood that as well as a need to test the water through consultation, Ofcom would need to work within the constraints of the Acts that govern spectrum use. It is suggested that Ofcom could consult on and apply the following suggested amendments to the Analogue Engineering Code:

- (3.2) stipulates break points to control spectral occupancy: It is proposed that these could be replaced by a single requirement to provide 40 dB of suppression at the channel edge at +/- 9 kHz

- (3.5) be removed due to (3.2) providing the same function and the consideration of what is now achievable through digital signal filtering

- (3.6) be removed to encourage and enable experimentation and innovation

It is also appreciated that compliance with the Broadcasting Act would be required and that Ofcom could not be expected to expend resources in seeking legislative change for a small waveband of apparently limited usefulness. It would appear that 'light-touch' access could be provided as a Restricted Service Licence within the meaning of the existing legislation. Some changes to the RSL Notes of Guidance could enable this without disproportionate effort:

- Removal of the need to serve only a defined site or location

- Relax the requirements of a licensee to be linked to an establishment being served

These suggestions are a 'straw man' with respect to the implied simplicity of implementing a wider application and 'light touch' access regime to this band. This submission is designed to provoke further thought and discussion into the future use of this broadcasting waveband, which should be considered at the earliest - given the apparent low opportunity cost of opening it up to other would-be users.

If asked the question, industry could well provide Ofcom with sufficient evidence of demand in order to consider this proposal for inclusion in the Plan of Work for 2022/23. Doing so would put the UK on a more level footing with some of our neighbouring countries whose citizens and consumers have been enjoying the benefits of more relaxed access to the band for a number of years.

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(1) https://www.ofcom.org.uk/__data/assets/pdf_file/0027/36891/bbc.pdf
(2) https://www.agentschaptelecom.nl/onderwerpen/radio-en-televisie/commerciele-omroep/laagvermogen-middengolf
(3) https://www.agentschaptelecom.nl/onderwerpen/radio-en-televisie/documenten/kaarten/2019/02/14/frequentierechten-middengolf-nederland