

Your response

British Amateur Television Club (BATC) response to WRC Agenda Item 1.1 Possible allocation to the Amateur service in 50 - 54MHz in Region 1.

Over the past 4 years members of the BATC has conducted experiments and tests to show the viability of sending real time true High Definition video in bandwidths of less than 1 MHz on the recently allocated Amateur Radio spectrum at 146MHz and 71 MHz.

Ofcom have fully supported these tests and John Regnault, the RSGB VHF manager, has on 2 occasions presented the results to Kevin Delaney in Ofcom Spectrum Policy and Planning and the Business Radio Interest Group.

Following on from this success, where video was transmitted over distances up to 150Km using single carrier DVB-S modes, we are now keen to try similar experiments on 50 MHz where we think that by using certain advanced types of OFDM modulation, it may be possible to achieve distances of 100s if not 1,000s of Kms.

In order to minimise interference to other already established amateur services and give the potential to conduct experiments with operators in region 2 and 3, we would ideally conduct these experiments in the 52 – 54 MHz segment.

We believe harmonising 52 – 54 MHz in IARU region 1 would help us to achieve maximum benefit from these experiments which have already shown UK amateur radio operators to be innovation leaders in this field. We therefore ask that Ofcom actively support agenda item 1.1 rather than adopt a monitoring position.

The screenshot displays a comprehensive software interface for receiving and processing real-time video. The central focus is a live video feed of a landscape, with a red arrow icon in the top-left corner of the video area. Surrounding the video are various control and monitoring panels.

- Top-Left Panel:** Contains frequency and FEC settings. It shows a frequency of 00333 and 01138265, an offset of 00000000, and several SR (Symbol Rate) options: SR2000 (1255 MHz), SR1000 (2395 MHz), SR500 (437 Serit), SR333 (437 Sup), and SR125 (46 Serit MH). It also includes checkboxes for Low SR, DVB mode (DVB-S, DVB-S2, AUTO), and various FEC (Forward Error Correction) codes.
- Top-Right Panel:** Manages PID (Program ID) and audio settings. It shows 'Pid from .ini', 'Rpidatv', 'F602P-H264', 'HDlowSR', 'France24', and 'QRZ DX'. It also includes a 'RaspberryP' option and settings for Format (4/3, 16/9, 1/1, auto), Width (704), Height (576), and Audio (MPA, AAC, AC3). A 'Station' field is set to 'Rpidatv' and 'Infos' to 'DVB-S'.
- Bottom-Left Panel:** Displays 'Web Station ID: 1' as 'G8GTZ' and 'MY-CITY IO80LX'. It includes antenna direction settings (Ant. Dir: East, Gain: 12 dB), picture options (Video, QSL, Auto, Stop), and timing settings (Timing: 3 sec, 00000 0).
- Bottom-Center Panel:** Features several meters and indicators: 'Carrier Lock' at 100%, 'Timing Lock' at 98%, 'Power RF' in dBm (-60 to -110), 'MER' in dB (18 to 36), and a 'Constellations' diagram. It also shows 'Viterbi err: 1', 'Vber: 0%', 'FEC 7/8', 'TS err: 0', and 'Bytes recvd: 14476'.
- Bottom-Right Panel:** Contains system controls: 'Beep', 'Dvbe', 'UDP Record', and a 'Quit' button. There are also 'Info' and 'B3' checkboxes.

Screen shot of real time video on 71MHz over an 87Km path