

Terry Tew Sound & Light Ltd

PMSE clearing the 700 MHz band: Support for PMSE equipment owners, July 2017

Introduction

Terry Tew Sound & Light Ltd is a PMSE equipment hire company based in Essex. Started in 1992, Terry Tew is one of the leading suppliers of sound, lighting and audio visual hire equipment across the UK, supplying all aspects of the broadcast, presentation, entertainment, events and leisure industries. We have 22 full time employees and access to a range of freelance specialists in the field. We have grown consistently, and now have a turnover of £3.5 million. We have £9 million worth of hire stock, of which £2.5 million is wireless equipment. Terry Tew Sound & Light Ltd specialises in the area of high quality audio equipment.

We supply equipment to some of the most spectrum intensive events in television and broadcasting including Ant and Dec's Saturday Night Takeaway, The Voice, Let it Shine, Comic Relief, Children in Need, Pitch Battle, Sports Relief, EastEnders and Strictly Coming Dancing. Each of these draw an audience of millions and Strictly Come Dancing reached a peak of 13.1 million viewers last year. Ironically, it is exactly this content that will be streamed over the mobile networks that are replacing our services in the 700 MHz band and the importance of this content to the UK's cultural and economic life cannot be overstated. The creative industries as a whole generate £9.6 million an hour for the UK economy and TV and film production has been one of the five fastest growing sectors in the last two years, with 2016 seeing record inward investment.

Ofcom research has suggested that 93% of events use 24 or fewer RF assignments and will be able to continue operating using their current working practices after the 700 MHz band is cleared¹. That is not the case for us; our shows fall within the 7%. This means that, in order to continue operating as close as possible to current production values in the UHF band, we will have to replace all of our kit to maximise spectral efficiency, not just 700 MHz equipment². If we are to be able to continue providing our services as normal after clearance, it is essential that we receive more than the proposed 47% of replacement costs under the proposed eligibility criteria. The current funding proposals would force us to rely on loan capital to cover our costs. If we are unable to raise this loan capital, we will go out of business.

We argue that, if Ofcom does not relax the eligibility criteria across the board, Ofcom must at least differentiate between different types of users. Businesses who service the 7% of peak spectrum demand events have different needs to smaller operators and will be devastated by Ofcom's proposed eligibility criteria and headline funding level. These businesses will also incur significant incremental costs associated with replacing a large volume of equipment which must be covered in Ofcom's final funding scheme.

Answers to questions

Q1: Do you agree with our proposed criteria for who should be eligible for the grant scheme?

¹ https://www.ofcom.org.uk/data/assets/pdf_file/0025/28492/consultation-future-use-700MHz-band.pdf
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² We have confidentially supplied an annex which provides an analysis of how we anticipate the 700 MHz band clearance will impact our ability to meet the channel counts for our existing programmes, demonstrating our need to make wholesale equipment changes to meet the demands of operating in more limited spectrum.

We broadly agree that eligible claimants should be legally operating PMSE equipment owners who have held a licence in the last two years or be able to produce verifiable evidence that their business is based on hiring out PMSE equipment rather than using it.

We do not agree that the scheme should be limited to equipment with 50% or more of its tuning range in the 700 MHz band (which we will detail in our answers to questions 2 and 3) and we do not believe that the scheme should be limited to radio equipment; anything that has to be replaced because of the 700 MHz clearance should be eligible, including accessories. Additionally, in our case, we do not agree that equipment should have been purchased before Ofcom issued formal notice in its October 2016 statement.

We regularly supply programmes and locations that use all of the UHF spectrum available to PMSE. When 700 MHz equipment fails and needs replacing, or when we need new equipment for a specific purpose, we cannot simply purchase equipment that operates below 694 MHz. This means that, in order to continue providing our services, we have been purchasing equipment since October 2016 and will continue to have to do so up until clearance. If we do not do this, we will lose business and the spectrum intensive events we supply will not be able to go ahead as planned.

As an example, one of the BBC's new series, Pitch Battle, required 75 microphones with identical capsules. Through our own stocks and what we were able to secure through sub-hire, we were able to furnish 45 of these capsules. This meant we had to purchase 30 new microphone capsules at £300 a unit. When we change microphone systems as part of our move to digital in preparation for clearance, these accessories will also become defunct. If such accessories are not funded, we will be left out of pocket.

We cannot stop replacing or purchasing equipment, including accessories, and expect to continue winning business. Therefore it would be unreasonable for Ofcom to deny funding for equipment and accessories which have been purchased since Ofcom's 2014 statement where there has been a clear need to do so.

Q2: Do you agree with our assessment of the impact clearance will have on equipment which operates exclusively below 694 MHz?

We do not agree with Ofcom's assessment of the impact of clearance on equipment which operates exclusively below 694 MHz. For a hire company that supplies equipment to productions on the scale that we do, sub-694 MHz equipment is part of a cohesive set that provides consistent sound (including latency in the case of digital equipment) to sound designers. We cannot simply mix and match new equipment with old.

The problems associated with the loss of 12 DTT channels and the re-stacking of the DTT stations in the retained broadcast band will severely restrict PMSE availability in some locations. Elstree and Salford operations are of particular concern, as demonstrated by our analysis in annex 1 and the supporting location channel counts provided confidentially to Ofcom. Initial analysis of spectrum availability post-700MHz clearance suggests that the majority of our operations will be spectrum constrained. From what we have been led to believe, there will only be four completely clean TV channels in Elstree after clearance. Holby City and EastEnders, for example, between them currently use seven channels. This means there is already a shortfall of three channels; there will be no room to continue running additional shows at Elstree alongside these programmes.

At the moment, we have just two racks of digital equipment and the equivalent of 50 racks of analogue. In order to adjust to the new spectrum environment after clearance, we will have to replace all of our equipment with digital, including all equipment which operates exclusively below 694 MHz or straddles the 700 MHz band. Digital equipment is potentially less susceptible to problems relating to intermodulation distortion and interference from DTT stations, which tend to have an immediate audible impact on analogue operation. We have already begun the process of trialling new equipment, with the intention of making a purchasing decision in Q2 2019, a year before clearance. This is clearly not a decision we would have had to make without Ofcom's decision to clear the 700 MHz band. We should therefore be properly compensated for the costs of this decision.

There are also additional categories of equipment operating below Channel 48 that Ofcom has not considered in its analysis of sub-694 MHz equipment. We anticipate that 1W talkback kit will need to be replaced or modified if, after clearance, it is operating co-channel with DTT. Additionally, both halves of duplexed systems, including if one half operates below 694 MHz, will need to be replaced following clearance as these systems are uniquely paired.

If sub-694 MHz equipment is excluded from the funding scheme, we will be forced to seek loan capital to cover our costs. There is no guarantee that we will be able to secure this funding and, if that were the case, we would be unable to continue supplying events such as Strictly Come Dancing, Children in Need and Comic Relief. We are not aware of any companies that have the existing hire stock to service these programmes; any company aiming to service these programmes would have to purchase new equipment.

We dispute Ofcom's analysis suggesting that companies can recoup some of their losses through the secondary market. Funding derived from the secondary market will not be available quick enough for us to use that capital to buy new equipment, nor will it be at an acceptable level. We still have unfunded equipment from the 2012 clearance five years on. By the time of clearance, we will need to have access to enough money up front to purchase new equipment. If Ofcom is confident there is value in the secondary market, it should fully fund PMSE companies to surrender equipment to Ofcom and sell the equipment on itself. Otherwise PMSE businesses will be left without funding for too long, leaving them in the same position as if they had received no funding.

Q3: Do you agree with our analysis of the impact clearance will have on equipment which straddles the 700 MHz band and the spectrum below 694 MHz?

As above, we disagree with Ofcom's analysis of the impact clearance will have on equipment which straddles the 700 MHz band and the spectrum below 694 MHz. For the most spectrum intensive events and locations, such as the television programmes and studios that we regularly supply, we will not be able to continue running events the way we do without making changes to all of the equipment we own. As a result of Ofcom's decision to clear the 700 MHz band, we will have to purchase complete sets of new equipment, including units that operate partially or completely below 694 MHz. These purchases must be funded.

Additionally, Ofcom's 50% criteria will lead to the exclusion of equipment for which there is a clear need for funding for all categories of equipment owner. For example, antennas currently cover 470 – 790 MHz, which makes them ineligible for funding. However, in reality, these antennas will no longer function without additional high performance filtering above 700 MHz to keep out mobile network base stations operating between 758 and 788 MHz. For antennas with integral preamplifiers, modification may not be possible and, even where modification is possible, additional external filters will be necessary which will entail a cost to PMSE businesses.

Q4: Do you have any evidence that an alternative boundary for the tuning range of equipment should be drawn?

For businesses that supply the 7% of events Ofcom identify as being affected by clearance, all equipment should be eligible for funding because all equipment will have to be replaced.

Q5: Do you agree with the proposed formula to estimate the level of funding?

47% of a portion of the equipment that will need replacing does not begin to cover our costs.

Firstly, Government's decision to base the funding formula on residual value of equipment does not reflect the reality of the way we budget for new equipment. We are continually replacing equipment based on our changing needs; we do not set aside specific amounts of money for each individual piece of equipment as it depreciates across our books. As in the example of Pitch Battle above, our purchasing decisions are often driven by new business opportunities. The clearance of the 700 MHz band does not represent a new business opportunity; it is only a cost to us and will necessitate purchasing a far greater quantity of equipment than we have the capacity to

buy. Even with the 47% funding proposed by Ofcom, we will still be significantly out of pocket. Ofcom should be aiming for far closer to 100% funding to reflect the scale of the disruption to our business.

Secondly, purchasing equipment is only a proportion of the costs we expect to face. We will also have to dedicate additional resources to meet manufacturers; trial and test new equipment; inventory existing equipment, assess the impact clearance will have on events after 2020 and plan for these changes, supervise new installs, and plan the logistics for and execute the switch between old equipment and new. We are already experiencing additional costs associated with Ofcom's decision to clear the band, such as through time spent at events discussing the impact of clearance and membership of organisations that engage with the process. These were costs that were not covered in 2012 and which left us much worse off as a business.

I understand from the DTG-PMSE working group that DTT multiplex operators are receiving reimbursement for project management time spent on the 700 MHz clearance project as well as claiming the full cost of replacement transmitter equipment. The project management costs for large hire companies are very significant and Ofcom should give consideration to some compensation for such organisations. This would also mean that Ofcom would be treating network operators and PMSE businesses equally in the clearance of the 700 MHz band.

If Ofcom pursues the funding scheme as proposed, we will be significantly worse off than we were before the clearance. We have already been made worse off by the clearance of 800 MHz and the 700 MHz clearance will be orders of magnitude worse. We do not expect clearance to leave us better off; we only ask that we are left no worse off, consistent with Pascal Lamy's recommendation in his report on the future use of the UHF band³. For this to be the case, the funding formula must be amended to reflect our additional costs, be extended to cover sub-694 MHz equipment, and provide more than a paltry 47% of replacement cost.

Q6: Do you agree with our approach to calculating asset life?

We do not believe that asset life should be relevant to Ofcom's funding calculation. Regardless of the age of a piece of equipment, rental companies derive exactly the same economic return from its hire. This means that if Government funds a scheme based on asset age, rental companies will be paying more than expected, earlier than expected but still generating the same economic return, leaving a budgetary shortfall. This is not an acceptable situation which would leave our business no worse off. Instead, we would be left worse off up until the point in time at which the expected asset life of old equipment is exceeded by the remaining life of new equipment and our cash flow returns to normal. However, to make up the shortfall in the short term, we would be reliant on loan capital – which we would have to service – leaving us worse off in the long term even if we are able to source the funds. To prevent us from being left worse off, Government should pay the full cost of replacement up front. PMSE businesses should not be expected to bear the burden of clearance.

Q7: Are you aware of any developments which would mean data from the 2013 equipment survey or the 2010 Channel 69 statement are likely to misrepresent average asset life?

As above, we do not believe that asset life is relevant.

Q8: Do you agree with the use of an average asset age for the estimation of funding entitlements? If not, do you have any suggestions for an alternative approach?

As above, we do not agree with an asset age in the calculation of funding entitlements. To reflect the way that hire-equipment generates money, Government should provide funding that is much closer to 100%.

Q9: Are we correct in our assumption that a large proportion of PMSE equipment owners will not have evidence of when they purchased their equipment?

³ <https://ec.europa.eu/digital-single-market/en/news/report-results-work-high-level-group-future-use-uhf-band> Point 3, page 12

Yes. Due to the substantial amount of paper work, Terry Tew Sound & Light retains paper receipts only for as long as legally required. We will however be able to provide an accredited asset register.

Q10: Do the data in the 2013 equipment survey provide a reasonable basis for calculating average equipment age? If not, do you have an alternative approach for gathering relevant data for making this calculation?

Terry Tew Sound & Light Ltd has no comments on the 2013 equipment survey.

Q11: Do you have any comments on our proposals for how the claims handling process should operate?

As explained in our answer to question 1, we will have to continue purchasing equipment up until the point of clearance in Q2 2020. Therefore it is important that we can amend the register of equipment we anticipate claiming for after the registration period has closed and for the whole duration of the process.

The claims handling process needs to be at least a year long. We have a substantial amount of equipment to replace and we will have to stagger replacements. It is also important to us that there is no financial penalty for surrendering equipment towards the end of the scheme as was the case in 2012. We are not in a position to surrender all of our equipment at once and should not be penalised as a result.

We agree with Ofcom's proposal that hire companies should be eligible should they be able to provide proof that their business is based on hiring out equipment and therefore does not need a licence. However, we think that Ofcom should also require proof that equipment is being hired out to companies that do have licences to avoid paying out to companies that do not operate within the law.

We understand that Ofcom will be consulting on a rate card at a later date. We advise Ofcom to ensure that the rate card includes all accessories, antenna systems and mainframes that have to be replaced as part of the move out of the 700 MHz band. Ofcom should also include 'specials' as part of the funding scheme. We have commissioned individual pieces for specific shows such as Strictly Come Dancing and Comic Relief. For instance we have 20 customised microphones and capsules, commonly referred to as 'bling microphones', which can cost up to £1,000 per piece, including 4 red glitter mics for Comic and Sport Relief and a number of silver and gold mics used by artists such as Jessie J, Kylie Minogue, and Cheryl Cole. Since we will be changing the models and manufacturers as part of our switch to digital equipment, these microphone casings will no longer fit and will have to be replaced. They should therefore be compensated.