

## Ofcom Consultation

### British Entertainment Industry Radio Group (BEIRG)

#### *PMSE clearing the 700 MHz band: Support for PMSE equipment owners*

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#### **Executive Summary**

- Clearance of the 700 MHz band has zero benefit and only negative impact on the PMSE industry.
- The funding scheme should be based on Pascal Lamy's principle that the PMSE sector is left "no worse" off by the 700 MHz clearance. The scheme as currently proposed would leave the PMSE sector significantly worse off.
- There are three areas where the proposed scheme must improve to ensure that PMSE equipment owners and operators are not left worse off by clearance:
- **The scheme must not be based solely on residual value of equipment.** Equipment costs are only a proportion of the costs that PMSE equipment owners and operators will face. Ignoring these costs will result in PMSE businesses struggling to find capital to cover the labour and ancillary costs of clearance. Ofcom should recommend that Government reviews its decision to base the funding scheme solely on residual value.
- **A 47% contribution towards replacement equipment is not enough.** The proposed funding formula makes erroneous assumptions about the way that PMSE companies budget for new equipment and ignores the fact that these businesses are typically cash poor and at the mercy of events outside their control.
- **The eligibility criteria are too narrow, both in terms of equipment captured and type of user.** There will be many instances, particularly among the largest users, where equipment owners have to replace entire systems

in order to adjust to the new reality of operating in reduced spectrum following clearance. Excluding sub-694 MHz equipment from the scheme will harm these users. Additionally, it is not only equipment owners who will experience costs, equipment operators such as theatres and studios will be saddled with a cost burden as a result of clearance. Where users are left worse off, they must be compensated.

## **Introduction – The principles of a funding scheme**

The professional PMSE industry will be negatively impacted and severely disrupted by Ofcom's decision to clear the 700 MHz band. Consequently, BEIRG welcomes the Government's decision to design a funding scheme. However, the scheme as currently proposed does not go nearly far enough and will ultimately leave the industry significantly worse off, contrary to the guiding principle set out in Pascal Lamy's report on the future use of the UHF band<sup>1</sup> – "A decision by a Member State or at Union level to repurpose the 700 MHz band would create costs for reconfiguring broadcasting networks and distribution models as well as upgrading PMSE and consumer equipment, but also probably generate auction proceeds. The broadcasting and PMSE sectors should not be disadvantaged by such a transition and cost compensation should be duly addressed" – and contrary to many discussions BEIRG has had with Ofcom personnel at all levels, including the current and preceding CEOs. Ofcom's own statement in 2014 states the need to ensure the PMSE community is in a position to continue delivering the important benefits it provides today<sup>2</sup>.

The currently proposed scheme is constrained in particular by Government's decision that funding should be based solely on residual value of equipment, despite the existence of significant associated costs and without reference to the way that the industry operates, again despite many conversations with Ofcom personnel at all levels, including current and preceding CEOs. The impact on the industry was well recognised in the 2014 statement in which there are multiple references to associated costs such as training, recruitment, removal of old equipment, the need for upgraded equipment that is more agile and technically advanced<sup>3</sup>. BEIRG recognises that this analysis was undertaken as part of a cost-benefit analysis for the economy, but these are real costs borne by real companies which will be severely disadvantaged by having to bear a financial burden as a result of PMSE services clearing the 700 MHz band. BEIRG is aware that additional costs will be compensated for in the case of businesses involved in DTT infrastructure – why is this not the case for PMSE?

As it stands, providing a 47% contribution towards the replacement of some equipment does not adequately compensate for replacement equipment, let alone the scale of additional costs facing the PMSE industry. As a result, most equipment owners will struggle, and some will fail, to make up the remaining 53%. This will result in compromised production values at best and companies going out of business at worst. This is not an over-dramatic assessment. Freelancers and small companies rely on their equipment as a critical part of their livelihoods, and simply cannot afford to fund the shortfall.

While the scheme as currently proposed would be bad for small scale equipment owners and freelancers, the scheme fails to recognise the different costs that will be experienced by the organisations that own the most equipment as well. The currently proposed scheme is based on a fundamental misunderstanding of the industry – a large majority of the PMSE work that creates content, live entertainment and events is carried out by a few organisations who own the most equipment. An approach based on large scale economic analysis and averages does not reflect the different types of equipment owners and demonstrates at best the desire for an over-simplified, one-size-fits-all solution, and at worst a significant misunderstanding of the industry and how it produces the billions of pounds of revenue for UKPLC. This must not be overlooked and needs to be addressed.

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<sup>1</sup> <https://ec.europa.eu/digital-single-market/en/news/report-results-work-high-level-group-future-use-uhf-band> point 3 , page 12 and point 4, page 11

<sup>2</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/46923/700-mhz-statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/46923/700-mhz-statement.pdf) paragraph 2.9.2 , page 10

<sup>3</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/46923/700-mhz-statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/46923/700-mhz-statement.pdf) paragraphs 7.13 and 7.17, page 47 and paragraph 7.18, page 48.

If the resultant scheme is a bare minimum one-size-fits-all approach, there will be no incentive to buy equipment in the 960-1164 MHz band, which in turn means there will be no incentive for manufacturers to produce equipment for the band. This problem is further compounded by the fact that the security of tenure of the remaining 470-694 MHz spectrum is potentially only up until 2030, so industry will again be forced to buy equipment with a life expectancy longer than its potential use cycle from a licensing perspective. Industry and manufacturers should be incentivised and encouraged to make and buy equipment in alternative areas of spectrum and Ofcom should reinvestigate the potential for PMSE to operate in areas of spectrum covered by ERC Recommendation 25-10, in addition to the 960-1164 MHz band.

BEIRG believes that trying to save money on the PMSE funding scheme is a false economy; PMSE is a fundamental part of the UK's world-leading creative industries and properly supporting the industry will be paid back through its contribution to the wider economy. The West End alone generated £644,719,639 for the UK economy in 2016, drawing a total attendance of 14,325,121 people. Events like these bring further benefit to local economies, with £4 being spent in the wider West End economy for every £1 spent on tickets. At the same time, British film experienced its best year for inward investment in 2016, with more film makers looking to make their films in the UK. Recent policy developments leave no scope for these sectors to continue growing, and this will be a net detriment to one of the most consistently growing industries in the UK economy and one which is only increasing in importance. This is directly contrary to Government rhetoric supporting the creative industries. In January 2017 the Culture Secretary Karen Bradley said: *"The creative industries are and will be at the heart of this government's work on industrial strategy. It's one of the major growth areas in the country and I want to assure you that I, Greg [Clark], the prime minister and others understand just how important our industries are to the UK economy"*.

## Answers to Questions

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

No.

BEIRG believes that a funding scheme should be based on the principle set out by Pascal Lamy in his report on the future use of the UHF band: the PMSE sector should be left "no worse" off in either financial or spectrum terms by Ofcom's decision to clear the 700 MHz band. Ofcom's principle for eligibility: "[eligible claimants] should be PMSE equipment owners operating legally who will incur a loss attributable to Ofcom's decision that they should lose access to the 700 MHz band in May 2020", captures this as formulated but not in the way that it is applied.

This is because the losses attributable to Ofcom's decision to clear the band extend far beyond solely the residual value of new equipment. The disruption caused by the necessity to replace significant quantities of audio PMSE equipment will require rental companies to use additional man hours to inventory and swap out equipment<sup>4</sup>, theatres to run additional rehearsals so that sound designers can familiarise themselves with new equipment, and a host of other additional expenses which are not covered by the currently proposed funding scheme. In some instances such as Media City the impact of clearance is doubled by the financial costs and the loss of spectrum which will badly compromise the ability to use stages and studios simultaneously. These additional costs will be significant and, if they are not compensated, will place an unfair burden on PMSE equipment owners, with devastating consequences to the sector.

In modelling the costs of clearing the band, Ofcom estimated that PMSE equipment owners would encounter additional expenses roughly equal to 5% of the value of equipment being claimed for<sup>5,6</sup>. By not compensating

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<sup>4</sup> We have included an annex in which BEIRG member Autograph Sound details the additional work associated with the 800 MHz clearance in 2012

<sup>5</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0027/71928/700\\_mhz\\_implementation.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0027/71928/700_mhz_implementation.pdf) paragraph 4.8, page 19

<sup>6</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/46923/700-mhz-statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/46923/700-mhz-statement.pdf) table A2.1, page 75

these costs, which Ofcom have previously recognised, Ofcom are not capturing the full extent of losses attributable to their decision to clear the band. This will leave PMSE users considerably worse off. BEIRG has learnt from a meeting at the Digital Television Group that project management costs are being included in the funding scheme for those involved in DTT infrastructure and therefore questions why PMSE is being treated differently.

It is also important to note that additional project management costs will fall on PMSE equipment operators who do not necessarily own any equipment. Theatre producers expect to face a host of significant costs as a direct consequence of Ofcom’s decision to clear the 700 MHz band. BEIRG has approached two West End musical producers to ascertain the extent of the costs they expect to face. We were told that, because of the scale of the equipment changes necessary to keep a show running, each show would have to run at least one additional, full rehearsal. This would include participation from the orchestra, cast, and crew, almost certainly paid at overtime rates due to the already packed schedule of a West End production. The producers provided indicative costs for their shows ranging from c. £9,500 to c. £13,500, according to the size of production. These users should not be denied funding if the Government is serious about protecting the creative sector.

BEIRG understands that Ofcom will be consulting on a rate card at a later date. We urge Ofcom to include ancillary equipment which is affected and paired equipment where one component operates below 694 MHz but is made redundant because it is uniquely paired with equipment operating above 694 MHz. Where a piece of equipment is no longer in production, Ofcom should ensure that the replacement on the rate card fully replicates the function of the obsolete equipment.

BEIRG takes issue with Ofcom’s decision to exclude equipment which has been purchased after Ofcom’s statement giving notice that the 700 MHz band is to be cleared in 2020. In some cases, users will have been forced to purchase new equipment in the 700 MHz band after the 2016 statement in order to continue providing normal services. In these circumstances, BEIRG strongly recommends that the equipment owner would be eligible for funding through Ofcom’s proposed “exceptional circumstances” procedure.

In summary, Ofcom has fallen short in both *who* is eligible for funding under Ofcom’s proposed criteria by excluding groups like theatre producers who are affected despite not owning equipment, and *what* is eligible for funding by being overly selective in equipment terms and ignoring all incremental project management and ancillary costs.

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

No.

Owners of PMSE equipment in fixed locations will be adversely affected by the re-planning of DTT. For example, according to Ofcom’s indicative post-clearance spectrum map, owners of 42 MHz tuning width radio system such as Sennheiser G3 range G will be unable to use their equipment in locations such as Liverpool. This equipment operates between 566-608 MHz, covering channels 33-37. In Liverpool, you can currently safely use channel 33, 35 and 36 (each of which has four green bars on Ofcom’s spectrum planner) but not 34 and 37 (which have only one green bar on Ofcom planner), allowing you to use 24 radio mics across these frequencies.

After the 700 MHz clearance, it will be impossible to use any of these channels, rendering the equipment useless:

<b>Liverpool</b>		
Channel	Current channel availability	Channel availability post-700 MHz clearance
37	X---	X---
36	XXXX	XX--

35	XXXX	X---
34	X---	X---
33	XXXX	XX--

This issue is already affecting PMSE equipment owners. A number of examples concerning sub-694 MHz equipment have been brought to our attention recently. For example, in March, one member of the BEIRG steering committee advised a client on a purchase of 19 wireless microphones for a fixed installation in the West Midlands area. At the time, he recommended the purchase of Sennheiser Range A equipment, which would have had three TV channels available. Since the publication of the indicative map of available white space after the 700-MHz clearance, it is now clear that only one TV channel will be available in that range, which is not enough to support 19 wireless microphones. If the client had chosen equipment in Sennheiser Range G, three TV channels would be available before and after clearance, but they would be different channels. This would mean an engineer would have to visit the site to retune the equipment, at a cost to the equipment owner.

As well as showing that sub-694 MHz will be impacted by the DTT re-plan, this example also raises two further issues. Firstly, it demonstrates that funding for these issues should not be restricted to equipment purchased before Ofcom gave notice in 2014 since the information necessary to inform these purchases – the indicative white space map – was not published until June this year. Secondly, these are issues which the industry will begin to experience from Q3 2017 in some locations and from Q1 and Q2 2018 more widely as the new DTT network is rolled out<sup>7</sup>. In this specific example, the West Midlands transmitters are moving in Q2 2018. This is a problem because Ofcom currently propose that claims will begin to be processed in mid-2019, some 12 months after some businesses will have had to replace or modify equipment due to the rollout of the new DTT network.

BEIRG questions why Ofcom has currently chosen to assess eligibility for equipment operating below 694 MHz based on it being made wholly redundant. If reducing available tuning range by 50% constitutes a significant impact for equipment which straddles the two bands, the same must be true for equipment operating wholly below 694 MHz. BEIRG therefore believes that Ofcom should adjust its criteria to reflect the fact that access to a much diminished tuning range is not good enough for PMSE equipment owners who have made significant investments with an expectation of having access to the advertised tuning range of equipment for the whole of the asset's life.

BEIRG rejects Ofcom's current assumption that PMSE users will be able to recoup their losses through resale of sub 694 MHz equipment on the secondary market. While equipment has a consistent rental value over its whole life, its resale value diminishes quickly. If there are large quantities of equipment on the market following clearance, resale value will be even lower due to a surplus of supply. On top of this, most professional users of PMSE equipment do not buy second hand equipment and there is no established market for it.

Once the value of the equipment has been adjusted to reflect the fact it is second hand and the time taken to research and find a buyer is factored in, we anticipate that most users will be reclaiming a negligible proportion of their initial investment. These problems will be made worse where equipment serves a more specific purpose or where equipment is discontinued legacy equipment. Even in the small minority of cases where PMSE users could recoup a portion of their costs on the secondary market, the timeframe is not quick enough; equipment owners need access to capital immediately in order to purchase new equipment.

BEIRG also challenges the belief that rental companies can simply hire out equipment to areas of the country where this equipment is not affected. Firstly, this does not reflect the reality of touring productions, where hired equipment needs to work across the country. Secondly, if equipment is only useable in certain areas of the country, its economic value to the hiring company will be diminished as a result of Ofcom's decision to clear the 700 MHz band and, as such, the owner should be entitled to recompense. Working with such a piece of

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<sup>7</sup> [http://www.digitaluk.co.uk/\\_\\_data/assets/image/0003/92073/Ofcom\\_700MHz-clearance-rollout\\_map.jpg](http://www.digitaluk.co.uk/__data/assets/image/0003/92073/Ofcom_700MHz-clearance-rollout_map.jpg)

equipment would place additional administrative and logistical burdens on the hiring company, leaving them worse off. Therefore, if equipment operating below 694 MHz is not useable where the PMSE equipment owner would normally use it, it should automatically be eligible for funding.

In some cases, **all** equipment should be eligible for funding regardless of tuning ranges. This is because some categories of equipment owner will be forced to purchase entirely new systems in order to adjust to the new demands of operating in a vastly reduced and a more congested spectrum environment. The theatres and studios that these companies supply cannot operate different systems and technologies side-by-side for a variety of reasons:

- Some new equipment works on a set frequency spacing grid to work as efficiently as possible which either allows for growth or requires less spectrum for a given production. However if a portion of the equipment is legacy analogue equipment because it is ineligible for funding then this efficiency is lost as the digital frequency planning has to be treated as though it is analogue, with inter-modulation products calculated accordingly.
- Integrating analogue equipment with zero latency alongside newer equipment that generally has up to 3.5ms latency is unacceptable to studio and theatre sound designers. Side-by-side operation may technically be feasible but it leads to inconsistencies in the audio system which, on large scale multi-channel radio mic installations, causes the vocal sound to become incoherent. Clearly, this would damage production quality and audience enjoyment, and in turn disrupt the revenue generated from the sector.
- For similar reasons, the more subjective aspects of audio quality are compromised by having mixed systems as the old and new will have different audio characteristics that sound different, a situation which is unacceptable to sound designers and producers.

For these reasons, the organisations which own the most equipment will be forced to purchase complete replacement systems, including equipment operating below 694 MHz. These purchases are unavoidable and therefore should be funded. If these users only get 47% funding towards equipment with 50% or more of its tuning range above 700 MHz, only a tiny proportion of their equipment replacement costs will be covered, to say nothing of additional project management costs.

Ofcom is tasked with securing the “optimal use of spectrum”. If Ofcom does not fund complete systems, where necessary, it will be failing to secure the best use of spectrum while simultaneously compromising the revenue earning potential of major end users such as the West End and television studios. In Ofcom’s 2014 statement 7.27 it states that PMSE should improve their equipment and working practises. Manufacturers and industry already produce and use some of the most flexible and efficient equipment but the industry would engage further with this approach if it was adequately funded to do so, but the current proposals will not allow that to happen.

***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?***

No.

BEIRG believes that any loss of functionality represents a loss attributable to Ofcom’s decision to clear the 700 MHz band. Therefore every user affected should be entitled to receive a commensurate amount of funding as any reduction of equipment utility leaves PMSE equipment owners demonstrably worse off than they were before the clearance.

If a PMSE operator believes that their equipment is still serviceable for their purposes, they will have no need to claim funding, especially given that the proposed funding available currently represents a meagre contribution towards the cost of replacement equipment. BEIRG believes that the end users and equipment owners are best placed to judge whether or not their equipment needs to be replaced.

For those businesses which own the most equipment, all equipment should be eligible regardless of other considerations. These businesses will have to replace equipment below 694 MHz in order to achieve the necessary spectral efficiency to continue serving the most spectrum intensive events.

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

Yes.

If Ofcom does pursue a boundary based tuning range of equipment, contrary to the principle of ensuring that the PMSE sector is not left worse off, BEIRG does not believe that the boundary should be set at 50% as currently proposed.

Ofcom based its analysis on the build ranges of equipment from the two largest equipment manufacturers by market share, concluding that the build ranges fall into two categories: (1) only a small quantity of spectrum is lost, meaning that the equipment is minimally affected and (2) over 50% of the tuning range falls within the 700 MHz band, which Ofcom have identified as being eligible for funding. However, if PMSE is granted access to the 700 MHz guard band<sup>8</sup>, a large portion of equipment will no longer be eligible for funding.

The popular N-GB<sup>9</sup> range of Sennheiser wireless microphones (606-790 MHz) currently have 52.2% of their tuning range in the 700 MHz band, but after the boundary is adjusted, that will fall to 47.3%. This is a huge problem because of the quantity of N-GB range equipment currently in use. The range is very popular with touring productions in particular and one of BEIRG's members, Autograph Sound, reports that around three quarters of their equipment is N-GB.

Since Ofcom have currently selected for convenience the arbitrary cut-off point of 50% with points (1) and (2) in mind, BEIRG argues that, since both points materially change after the 700 MHz guard band is included, Ofcom should review its decision. It is not fair that PMSE equipment owners who have invested in top of the range equipment, spanning 184 MHz should receive no funding when their equipment's usable range is reduced to 97 MHz. This is a difference of 87 MHz and clearly represents a significant reduction in the equipment's utility.

Ofcom should exclude the guard band from their assessment of funding eligibility, especially as it is not yet known how usable that spectrum will be – Ofcom are currently also consulting on interference from mobile networks in the 700 MHz band into DTT below the guard band, which suggests that there is risk. Additionally, Ofcom could consider changing the criteria so that it is based on an absolute loss of spectrum access rather than a percentage – at the moment equipment owners who have invested in top of the range equipment with the largest tuning range are disproportionately affected by a cut-off based on a percentage as they lose access to more spectrum.

However BEIRG maintains that, in order to ensure that PMSE equipment owners are left no worse off by the clearance of the 700 MHz band, any equipment impacted, no matter how minimally, should be eligible for funding.

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

No.

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<sup>8</sup> [https://www.ofcom.org.uk/consultations-and-statements/category-1/700-mhz-guard-band-pmse?utm\\_source=update&utm\\_medium=email&utm\\_campaign=pmse700mhz](https://www.ofcom.org.uk/consultations-and-statements/category-1/700-mhz-guard-band-pmse?utm_source=update&utm_medium=email&utm_campaign=pmse700mhz)

<sup>9</sup> The N-GB range is a UK variant of Sennheiser's N range, designed for the UK market to extend down to Channel 38. Shure's Axient C range (606-814 MHz) is similarly affected assuming the range above 790 MHz, which is already unavailable in the UK, is discounted.

The UK Government's decision to base the funding scheme exclusively on residual value of equipment has resulted in an extremely restricted funding formula that fails to capture the full extent of the costs that PMSE equipment owners and end users will bear as a result of Ofcom's decision to clear the band. The formula must be amended to capture the additional costs outlined in our answer to question 1.

A funding formula based solely on residual value of equipment makes erroneous assumptions about the way that PMSE companies set aside money to purchase new equipment. In an ideal world, equipment owners would of course set aside an amount of money equal to the replacement value of equipment divided by expected asset life each year, but this fundamentally misrepresents the reality of running a PMSE business. These businesses are cash poor and are vulnerable to their changing circumstances. When times are good, businesses can set aside money, but this is by no means always the case. Venues may have to make unexpected repairs, rental companies may not be presented with new business opportunities, shows may not be a commercial success and these companies will take a view on when and how to replace equipment based on these factors. In some cases they may choose not to retire old equipment until it has exceeded its expected asset life. The net result of the proposed funding formula is that PMSE companies will not be able to respond to these challenges, or may not be able to find the additional 53% required to purchase new equipment at the time of clearance. This will harm their ability to attract inward investment into the sector, damaging the growth of the industry.

If funding is apportioned according the currently proposed formula, by the time of clearance equipment owners will essentially have had to pay 153% of their expected initial investment (the cost of the original piece of equipment plus the 53% shortfall to purchase replacement equipment) for each piece of affected equipment while at the same time experiencing no uplift in terms of profit over the same period. This will create an acute difficulty for the cash flow of these businesses, leaving a hole in their budgets compared to a situation in which clearance had not taken place, a problem which is multiplied by each piece of equipment claimed for. While arguably this effect is balanced in the long term by the new equipment outlasting the expected asset life of the old equipment, it would be disastrous in the short term for PMSE businesses which are typically cash poor and, with the proposed funding formula, may not last long enough to see their cash flows return to parity when they would originally have expected to replace their equipment. At minimum PMSE enterprises will have to compromise on production values. At worst, companies will be going out of business if they can't make up the shortfall between funding provided and the replacement value of equipment or if they encounter any other difficulties in the short term which require expenditure.

Previous funding formulas have made allowances for the cost of bringing forward a capital expenditure; the formula in the 2010 statement<sup>10</sup> and the modelling of the cost of clearance in 2014<sup>11</sup> were both based on different principles which attempted to correct for the economic burden of bringing forward payment. BEIRG understands that the 2010 formula was based on security of tenure and is grateful that Government did not base the scheme on such a principle this time as it would have led to market failure. However, since Ofcom has chosen to use an average asset age and life expectancy, the scheme could still be based on when owners could reasonably have expected to replace their equipment. With an average asset age at the time of clearance of 8.5 years<sup>12</sup> and an average asset life of 15 years, PMSE equipment owners would reasonably expect to replace their equipment at the end of 2026, resulting in a funding period of 6.5 years. Applying either the 2010 funding formula or the 2014 modelling formula on this principle would result in a more positive outcome for PMSE users. BEIRG believes it would be fair to take this view because the asset life of equipment has always extended beyond the security of tenure of 2021. PMSE equipment owners never had the option of buying cheaper equipment with a shorter asset life because it does not exist. PMSE users could therefore never reasonably be expected to base

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<sup>10</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0021/46551/statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0021/46551/statement.pdf) pages 74-77

<sup>11</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0025/28492/consultation-future-use-700MHz-band.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0025/28492/consultation-future-use-700MHz-band.pdf) paragraphs A14.3 to A14.5, page 175

<sup>12</sup> Average age will be 8.5 years at the time of clearance but not when equipment owners will be replacing equipment. See our answer to question 10.



their purchasing decisions on such a short security of tenure and can only have expected to receive full economic value of their equipment over the course of its expected life.

Ofcom should recommend that Government reviews its decision that funding is based solely on residual value of equipment. The additional costs outlined in our answer to question 1 must be included to reflect the reality of the cost burden that will be placed on PMSE businesses.

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

BEIRG has no comments on Ofcom's approach to calculating asset life.

***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?***

No we are not aware of any developments.

***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?***

If the scheme is based narrowly on residual value of equipment, the heavy reliance on averages is a problem. BEIRG appreciates that it is necessary to use averages in the absence of any other reliable method of collecting data. However, as Ofcom acknowledges, there will be some instances where PMSE users do not receive as much funding as they would have if Ofcom had undertaken a case-by-case assessment. While from an economic perspective this may balance out across the industry as a whole (which BEIRG disputes since the proposed funding formula only covers a proportion of the costs equipment owners will face), it will not always be the case across individual users' inventories. BEIRG does not believe that some equipment owners doing slightly better on average balances out other companies going out of business.

***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?***

Individual businesses will have different approaches to accounting but we have no reason to suspect that anything has changed since the 2012 funding scheme which will mean that PMSE companies are more likely than last time to have evidence of when they purchased equipment.

***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?***

Ofcom have calculated the average asset age in mid-2020, the time by which the 700 MHz band must have been cleared. In reality PMSE users will begin replacing their equipment some 18 months before clearance to allow for refitting of large venues and the additional work required for rehearsals and testing. They will therefore be ceasing to gain economic value from their equipment in mid-2018. The average age of equipment should be adjusted to reflect this.

Ofcom have made the assumption that PMSE users "have not materially expanded their stocks of equipment since 2013". This does not match our experience<sup>13</sup>. This means that the average age of equipment is slightly younger than Ofcom have estimated.

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

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<sup>13</sup> Autograph Sound has confidentially supplied Ofcom with an inventory of equipment purchased since 2013 in annex 2.

Ofcom currently intends to process claims in mid-2019. As demonstrated in our answer to question 2, the DTT rollout will begin to affect PMSE businesses from Q4 2017 in some locations, and more widely from Q1 and Q2 2018. This means that PMSE expenditures as a direct result of Ofcom's decision to clear the 700 MHz band will begin much earlier than Ofcom will be processing claims. Additionally, as explained in our answer to questions 10, the largest owners of PMSE equipment will begin swapping out equipment from around Q2 2018, to allow time to refit large venues and to synchronise equipment changes with breaks in the touring schedule. As a consequence, Ofcom should prioritise the rate card development, alongside reviewing responses to this consultation, in order to deliver a scheme that begins as early as possible in 2018 and runs for as long as required to allow a smooth transition for the industry. This should include continued access to the band beyond 2020 so that PMSE doesn't face the upheaval only to see the spectrum lie fallow during the auction and early MNO deployment phases.

In designing the claims handling process, Ofcom needs to deeply consider how PMSE users operate. For some operators, much of the equipment being claimed for will still be in use up until the time it is replaced. Ofcom must therefore build as much flexibility into the claims handling process as possible in order to allow PMSE users to claim for their equipment at a time that does not negatively impact their businesses or the smooth running of theatre and studios. This may mean extending the period during which PMSE equipment owners can process their claims.

By the same token, processing claims should be as quick as possible to minimise the time that PMSE users are without equipment or funding. We note that users will currently be expected to surrender their equipment. In some cases, such as touring productions, there will not be a convenient break in their schedule which allows them to surrender equipment. These users will need finance up front to cover the cost of new equipment, which may mean seeking finance from alternate sources, incurring interest charges which Ofcom should fund.

An alternative to this approach would be that PMSE users do not have to surrender their equipment. This would mean PMSE users being funded for the lost utility of equipment, but still allowing them to maximise the remaining utility, such as by allowing them to use equipment in the 700 MHz band up until the introduction of mobile services, making the transition between old and new equipment smoother. This would have the additional benefit in saving Government money by removing the need to collect, store, and dispose of prematurely retired equipment.

BEIRG recognises that Ofcom have required the surrender of equipment in the past to avoid the possibility of fraud. We urge Ofcom to investigate ways to avoid this issues, for instance through indelibly marking equipment.

Ofcom should also ensure that the funding scheme is well publicised and user-friendly. Many claimants will be SMEs and freelancers, and it is important that the scheme is easy to navigate considering the limited resources at their disposal.

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### **British Entertainment Industry Radio Group**

The British Entertainment Industry Radio Group (BEIRG) is an independent, not-for-profit organisation that works for the benefit of all those who produce, distribute and ultimately consume content made using radio spectrum in the UK. Venues and productions that depend on radio spectrum include TV, film, sport, theatre, churches, schools, live music, newsgathering, political and corporate events, and many others. BEIRG campaigns for the maintenance of 'Programme Making and Special Events' (PMSE) access to sufficient quantity of interference-free spectrum for use by wireless production tools such as wireless microphones and wireless in-ear monitor (IEM) systems.

As well as being vital in producing live content, wireless PMSE technologies play a key role in helping to improve security and safety levels within the entertainment industry and other sectors. Their benefits include improving the management of electrical safety, the reduction of noise levels, the development of safety in communications and reducing trip hazards as well as providing an essential tool for the security orientated services. Wireless equipment and the spectrum it operates in are now crucial to the British entertainment industry.

BEIRG is a member of the Association of Professional Wireless Production Technologies (APWPT)<sup>14</sup>, which promotes on an international level the efficient and demand-driven provision and use of production frequencies for professional event productions, as well as safeguarding such production frequencies for the users on the long run.

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<sup>14</sup> <http://www.apwpt.org/>