



Response to Ofcom Consultation: Digital Dividend Review: 550 – 630 MHz and 790 – 854 MHz Consultation on detailed award design.

1. Company profile

JFMG Ltd is the dedicated band manager for programme-making, entertainment, special events and related activities. It is a privately owned company created specifically to ensure continued and equitable spectrum access to all areas of the programme-making industry.

JFMG successfully coordinates the use of spectrum, issues licences and collects licence fees on behalf of Ofcom, and have done so since 1997. The spectrum we manage ranges from 47MHz to 48GHz and requires expert knowledge of the bands, their uses and restrictions. This currently includes all of the spectrum included within Ofcom's Digital Dividend Review. JFMG own bespoke tools that uniquely enable us to coordinate this spectrum, ensuring both protection for broadcasting and effective access for programme makers.

In the UK, the professional use of radio for programme making and entertainment purposes is referred to as Programme Making and Special Events (PMSE). PMSE applications include:-

- Broadcast television studio production
- Broadcast television and radio coverage of news, sport or other public events including state occasions
- Theatre and touring shows (e.g. Doctor Dolittle, Cirque du Soleil)
- Music and other entertainment productions (e.g. Live8, Mandela, Glastonbury, T in the Park)
- Motor sport communications and remote monitoring (e.g. F1GP, Moto GP)
- Conferences, and corporate presentations and events
- Movie film productions

As the dedicated band manager JFMG Ltd facilitates the successful running of these events. JFMG also provide on-site consultancy services and are dedicated to leading the industry through the transitional period ahead.

2. Consultation Questions

JFMG has responded only to questions that we believe are relevant to the management of PMSE in the DDR spectrum. Some questions also appear in the Band Manager Award consultation published on 31 July so where there are duplicate questions we have not responded to them here. We will instead respond in full within our Band Manager response.

Question 4): *Do you have any comments on our assessment of the most likely uses of the cleared spectrum and the amount required for these services? Are there any other potential uses that we should consider?*

JFMG would like to suggest an amendment to Table 4.1 on page 27 of the cleared consultation document. The table summarises the likely spectrum requirements of potential users of the DDR spectrum as identified by stakeholder engagement. Within it the PMSE industry's requirements have been captured as Interleaved spectrum and 8MHz of channel 69. However, PMSE stakeholders were unaware of the inclusion of channel 38 in the cleared award until the publication of the consultation and were instead expecting the channel to be included within the Band Manager award. Whilst current usage would not seem to suggest significant demand for 38, analysis work of the interleaved spectrum has identified that it would help facilitate UK touring post 2012. We would therefore suggest that PMSE should be included as a likely candidate use of the cleared award, with particular interest in Channel 38.

Question 5): *Do you agree that we should proceed with our current timetable, with a view to holding the cleared award in summer 2009?*

JFMG agree that Ofcom should proceed with their current timetable and hold the cleared award in summer 2009. However, we believe that there may be some confusion regarding timing for some PMSE users of channel 36, and would suggest that further clarification may be required.

The cleared consultation document states that channel 36 will become available for use immediately after the auction in 2009. If this is the case then PMSE licensees would have until the auction to vacate the channel. We would therefore suggest that licensees be contacted individually to ensure that they are clear of this requirement. Alternatively, if Ofcom decide to extend temporary access to channels 31 – 40 and this includes channel 36, then again clear communication needs to occur as we believe there exists some confusion over the issue.

Question 7): *What are your views on deferring the start date for rights to use cleared spectrum in London to help meet the need for wireless microphones and other audio links for the London 2012 Olympic Games and Paralympic Games?*

JFMG agrees with Ofcom's proposal to defer the start date for rights to use cleared spectrum in London until after the 2012 Olympic and Paralympic Games. Switchover is not scheduled to reach the London region until 2012 anyway so successful bidders will only need to wait a few months longer than they had already anticipated.

Whilst the impact for new owners of the spectrum will be limited; the benefits for the smooth running of the Games will be significant. Wireless microphone manufacturers have stated that they are unclear whether there will be sufficient volumes of equipment available by the 2010 technology freeze to make use of the digital interleaved spectrum. If this is indeed the case the continued use of legacy equipment during the games becomes vital. Allowing access to the upper sub-band of 790 – 854 MHz will be especially important as the vast majority of equipment currently in the market operates in this band.

In addition, there would be a considerable reduction in channel availability at the Olympic village site after switchover. There are currently 43 channels available, but after 2012 it would be limited to less than 19x 8MHz for indoor use (and less for outdoors). Actual wireless microphone requirements for the games have not yet been confirmed but this may not be enough. The deferring of start dates until after the games will ensure that this will not be a concern.

JFMG would also suggest that it may be worth considering the impact that licence start dates may have on other Olympic venues not based in London. For instance, football will be hosted at a number of stadia around the UK and the sailing will be based in Weymouth. The West Country region switches in May 2009 so as the situation currently stands successful bidders of the cleared award could use the spectrum from the close of the auction onwards. This could impact on programme makers' operations, affecting ease of movement of equipment and equipment substitutability.

Question 8): *Do you agree with the use of SURs as the approach for defining consistent TLCs for this award?*

JFMG support the employment of SURs for defining consistent TLC's as long as the interference levels defined are adequate to protect PMSE use in Channel 69 and interleaved spectrum.

However, we believe that it may be necessary to create a further SUR to cover the possibility that the winning bidder of some channels may wish to provide access to wireless microphones or other PMSE uses.

The most likely candidate for this kind of low power use is obviously Channel 38, subject to likely values and the development of a viable business case. Introducing a 6th possible use could enable further participation in the auction by PMSE aligned bodies. Wireless microphones currently enjoy



access to Channel 38, which we recently identified as a potentially important channel to facilitate UK-wide touring after switchover.

Whilst the consultation states that all requests to amend TLC's will be considered after the auction, the absence of a suitable TLC for PMSE could deter risk-averse bidders.

Question 14): Do you agree with our proposals for managing interference between new and existing users?

JFMG believes that there is an inconsistency between the way Ofcom intends to manage interference between new users and the proposed approach to managing interference between new and existing users. Whilst new users of the cleared spectrum will have the comfort of guard bands to ensure satisfactory co-existence with other new users of adjacent frequencies, existing users are afforded no such luxury.

We are particularly concerned about this from a PMSE perspective rather than DTT. The protection clause in the cleared TLC's should ensure that no undue interference is caused to DTT, but there are no such measures to protect PMSE use of either Channel 69 or adjacent interleaved spectrum.

The consultation document states that protection of Channel 69 microphones should be satisfactory based on typical operating parameters of the most likely uses of the Digital Dividend upper sub-band. This conclusion was reached as a result of ERA report 2008-0417 on UMTS interference into analogue PMSE receivers operating in Channel 69. Whilst we have not had the opportunity to fully analyse the study (along with two other relevant pieces of work also published on the 8th August) there are no guarantees that the most likely users will be the successful service. Therefore there is a risk that the new users of channel 68 will render band edges unusable and so enforced "guard bands" will appear. In addition, the document does not mention that adjacent channel issues could also apply to PMSE use of interleaved channels 30, 41 and 60. Enforced guard bands could be created on the channel edges if insufficient limits on interference levels are set within SURs or protection clauses for PMSE use are not added to licences. We would be interested to know if Ofcom are confident that their work on channel 69 equally applies to PMSE use of channels 30, 41 and 60 or whether the protection applied for DTT in adjacent interleaved spectrum will also protect PMSE use.

Question 24): Do you agree with the proposed basis for awarding Channel 38 as a distinct lot in the auction?

JFMG have some views regarding the auction of Channel 38 as a whole, the detail of which will be included in our response to the Band Manager consultation. However if Ofcom believe inclusion in the auction is necessary then JFMG agree with the proposed basis of awarding Channel 38 as a distinct lot. Its individual restrictions mean that it is unlikely to be useful as part of a package of channels, apart from those adjacent to it. Auctioning it as a single lot will provide smaller and less cash rich users with an opportunity to participate.