



Future Spectrum Management for Programme Making and Special Events

Background

Ofcom published¹ its initial ideas on spectrum trading in 2004. This document indicated that Ofcom's preferred arrangement for the future management of spectrum used in Programme Making and Special Events (PMSE) sector is for one or more Spectrum Management Organisations (SMO). With spectrum users having a choice between competitive suppliers for their spectrum needs, Ofcom expects that the benefits of a spectrum market can be realised.

In response to these first thoughts on spectrum trading, JFMG led the PMSE industry in promoting the operational and efficiency imperatives for a single SMO for the sector. Ultimately, Ofcom opted to defer the introduction of trading in PMSE until 2007 and agreed with JFMG an extension of the current management arrangements until 31st March 2007.

Spectrum Management Organisations

Ofcom envisages that prospective SMOs will engage in a competition for the rights of 'ownership' for PMSE spectrum. The preferred competition is likely to be an auction although the process would inevitably be subject to recommendations of Ofcom's advisors and a subsequent consultation. Options might include single or multi-round bidding and the spectrum might be divided into separate lots by frequency band and/or geographically. Clearly, if Ofcom's desired objective of more than one SMO is to be achieved then the spectrum must be divided into at least two broadly comparable lots. It is expected that an SMO would secure spectrum rights for a period of at least 5 years. Once spectrum has been secured through a competition then an SMO is free to charge commercial rates.

Industry Anxieties

For current PMSE spectrum users, the prospect of an auction to secure spectrum rights is disconcerting for several reasons:

- There is widespread concern that PMSE is the poor relation of other radio sectors such as cellular mobile and will not be able to compete in an open auction. The feared result is that all but the least attractive spectrum will be lost.

¹ Ofcom/RA joint consultation on spectrum trading – published Nov 2003; closed Feb 2004



- Future exposure to commercial rates is seen as a business risk particularly for organisations who are not stakeholders in the successful SMO.
- Although the operational and efficiency benefits of a single SMO are clear, the prospect of a monopoly further exacerbates the concerns over exposure to commercial rates.

It is reasonable to imagine that major stakeholders (and perhaps also groups of smaller businesses), faced with considerable uncertainty and risk would take action to reduce their dependency on others and hence control their own destiny. Despite the declared broad support for a single SMO in February 2004, it is thought that ultimately the PMSE sector would fragment into the broad factions that existed prior to 1997.

To keep the industry together, a prospective SMO (and especially a monopoly SMO) would need to recognise these concerns and find a mechanism to provide comfort for all stakeholders in PMSE spectrum.

An Alternative Approach

JFMG would prefer that spectrum rights are held directly by users rather than by an intermediary SMO. This approach has been proposed by Ofcom for other radio sectors and may be viable for PMSE too.

In this model, the basic principle is that tradable rights to spectrum would simply be gifted to established users at the introduction of the new arrangements. Users would be free to trade their spectrum subject to Ofcom's general procedures covering trading and liberalisation. Since users have not acquired their spectrum through competition, the annual fees payable would be set according to Administered Incentive Pricing (AIP) principles.

Some PMSE spectrum is 'pooled' amongst many users on a timeshare basis so there is no clear single user. The rights to this type of spectrum could be owned collectively by its users. Key issues such as the charging rate per use or the



acquisition/disposal of spectrum to suit sustained growth/decline in demand could be decided by General Meeting of members and their appointed band managers.

Some programme making spectrum (such as UHF TV bands) will not be ready for trading in 2007. Under the current arrangements this spectrum requires close management of each individual event or location to protect broadcasting. This would be best managed under a new 5 year contract to run to the completion of digital TV switchover in 2012.

Some of the features of this alternative approach are analysed from users' perspective in Table 1.

Table 1 Analysis - From **users'** perspective

Advantages	Disadvantages
No spectrum competition	
No uncertainty over fees	Significantly increased fees compared to 2005
Future not dependent on behaviour of an intermediary	
Larger users can resource own spectrum management	Frequency management expertise may disperse to larger users

A Role for JFMG

The proposed alternative approach presents a different set of challenges and opportunities for JFMG. The extent to which Ofcom' would wish to continue to sub-contract services such as licensing and supporting users will ultimately determine if there is a viable business at all.

JFMG is ideally placed to manage access to pooled spectrum on behalf of its owners. It has developed sophisticated tools and expertise that currently facilitates successful and efficient sharing of pooled spectrum.

With licence fees charged according to AIP principles, JFMG has estimated that the value of the sector could increase by at least 50%. This forecast dividend could be used to continue to resource a professional frequency management service for PMSE licensees. Also, it could be argued that this increased revenue to Ofcom



should be returned to provide other value-added services directly to the sector such as interference investigation and event management.

In the worst case, Ofcom may simply decide to license established (i.e. on-going) users in-house and provide no support to any 3rd party spectrum manager. In this case JFMG would have to negotiate service agreements with any user or event organiser who believes there is benefit from additional expenditure on top of AIP based licence fees.

Some of the features of the alternative approach are analysed from JFMG's perspective in Table 2.

Table 2 Analysis - From **JFMG's** perspective

Advantages	Disadvantages
Role continues to be 'supporting industry' rather than profiting from it	Greater uncertainty as business may not be viable if package of services does not exceed 'critical mass'
No need to secure investment backing	May require individual service agreements with key users and rate card for others.
Future not dependent on outcome of an auction	Expertise may disperse to larger users
	Unclear on 'asset' and 'liability' issues of lightly used spectrum

Ofcom's Objectives

Any alternative approach would need to be consistent with Ofcom's policy objective to introduce market forces into PMSE sector. Some of the features of the alternative approach are analysed from Ofcom's perspective in Table 2.

Table 3 Analysis - From **Ofcom's** perspective

Advantages	Disadvantages
Trading introduced in PMSE on schedule in 2007	
No exception to standard policy needed. Solution is fully consistent with other sectors.	
No monopoly issues	
Innovative approach to 'Band management' of pooled spectrum	Missed opportunity to introduce flagship SMO

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1st June 2005