



*Representing the Communications Services Industry*

**FEDERATION OF COMMUNICATION SERVICES**

**Business Radio Trading and Liberalisation  
And Modifications to Spectrum Pricing**

**FCS response to the Ofcom consultations issued on 6 July 2006**

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## Introduction

The Federation of Communication Services, FCS, is the Trade Association for the communications services industry with members delivering products and services to the UK economy by means of a variety of fixed, IP, mobile and radio technologies. A full list of FCS members may be found on the website [www.fcs.org.uk](http://www.fcs.org.uk).

Manufacturers, suppliers and operators of business radio products and services, totalling 100 companies, form the FCS Business Radio Group, which has compiled this response.

We have to express our general concern about the consultation process, which is 10 weeks over the summer holiday period (although anticipated for the first 6 months of 2006). The timing has reduced the sector's ability to respond effectively and for trade associations such as FCS to adequately consult their members. Ofcom staff have themselves been on holiday during the consultation period and so have had limited availability to answer questions that could help stakeholder understanding and their ability to respond. We have found out that, after Ofcom's series of round the country presentations in the last week of July 2006, the time to fully implement the proposals has slipped another 6 months to end 2007/2008. We have proposed therefore that Ofcom provides more elapsed time for the industry to understand and scrutinise the proposals within the consultation documents as there is less pressure on the date of delivery by Ofcom and Ofcom's IT system design would benefit from more comprehensive feedback from stakeholders.

## Overview of Business Radio

Business Radio has characteristics that make it uniquely suited to certain key operational needs for businesses and organisations. These are listed below but it is in the combination of these characteristics that users of business radio find the service so invaluable.

1. Very short call set-up time
2. Excellent team-working facilities
3. Close control over team dynamics and operational focus
4. User has control over the network

Business radio does not have the same characteristics as public telephony and is not wholly interchangeable. Whilst other systems could possibly claim that they have facilities that approximate these characteristics, none do any of them so well and none are able to combine all of them to the level of excellence needed to make the communications system sufficiently robust to be used in critical situations.

The users of business radio span the economic sectors, summarised in Ofcom's channel statistics report 2006. They include the public and private transport sector, construction, the utilities, local and central government, banks, the logistics sector for transportation of cash, goods and services, universities and campuses. Crucially radio is used for health and safety, mission critical and business continuity- services that do not always have a price tag but are dictated by health, safety and sector legislation. Users require access to spectrum and cannot safely rely on a lottery to acquire it without damage to the underlying services. It is this crucial issue that we also consider in this response.

Business radio is not a one size fits all service. Civil contingency uses are quite different to short term hire for construction for example.

Ofcom refers to consumers rather than businesses when describing its approach to management of the radio spectrum; it would be helpful if Ofcom could specifically refer to UK business in this context as well. Spectrum is a raw material for the provision of services to UK plc in addition to the general public.

## The consultations

In this response we consider both the Business Radio Trading and Liberalisation and the Modifications to Spectrum Pricing changes consultations together as they are inextricably linked.

The current consultation on trading and liberalisation has many very attractive ideas that could provide benefit to stakeholders and help to develop business radio services. However, there are also proposals that, if pursued too far, could result in the spectrum becoming unsuitable and even perhaps introducing new elements that have unforeseen effects. This may include safety issues or even dangers to end users which previously were not there. We offer our analysis to help to ensure such dangers are mitigated

The probability of ensuring these important communications are received from the sending party is critical. It is not relevant that the intended human operator is unaware of the interfering signal because his receiver is fitted with protection. What matters is that the interference is causing the loss of incoming calls.

Ofcom refers to spectrum being in the hands of those that value it most. In the business radio sector we have seen examples of a high value investment in the Dolphin network which failed, whereas smaller lower cost dedicated Common Base Station services have continued to thrive and deliver services to their customers.

On the whole we find the consultation documents to be too complex, repetitive and at too high a level for the intended audience of licensees and their suppliers who need to know- what are the changes that affect my business? Ofcom is taking a broad brush approach to business radio as if it were a homogenous service. One size fits all is inappropriate for this sector.

That said we support much of Ofcom's intention and the specific proposals:

- To simplify the licences, noting that removal of the strict boundaries is acceptable sometimes
- 5 year licence term
- Tradability within the business radio bands; when questioned at the London seminar on 31 July 2006 we were assured that licences would only be traded within the business radio classes, not outside the classes to mobile or broadcasting. We were assured that non business radio use was not Ofcom's intention in these bands.
- Removal of some of the unnecessary technical constraints.

Therefore, the FCS has considered the proposals in the consultation in this light and is pleased to contribute the following comments.

## Specific issues

1. All the proposals for administrative simplification in terms of the number of licence types are most welcome. We congratulate Ofcom on this step. However, we note that there is a consequential need for an increase in the information to be provided from the register of licences to support trading (section 7). This is because the scheme provides information to prospective traders by quoting the specific licence class. If that becomes more general, the same information would presumably need to be provided separately. However many licensees remain concerned about the detail within their licences that will be published on the register, as these details may jeopardise security and company confidential information. We suggest that Ofcom reconsiders how it can balance confidentiality with providing sufficient data for spectrum trading purposes and considers providing greater emphasis on identifying the licensees' agent or dealer and less on the licensee themselves as an option.
2. We are unsure of the efficacy of considering shared channels only in the light of a 50% sharing. We foresee the possibility of more than two sharers on a channel in the future (especially following trading). Significant difficulty could result from this apparent limitation; in some circumstances many more users might be possible making more efficient use of the spectrum.
3. In respect of area licensing, we understand the simplification to administration that might be consequent on considering the country in trading units based on ordinance survey squares. But setting the minimum area that can be traded at a 50km square seems inappropriate in many instances. For example, this means that spectrum in London must be traded as a whole, not in part. We recommend that Ofcom reviews this restriction with some urgency.
4. We are concerned over the proposals to allow spectrum segmentation to change the spectrum arrangements. It is not clear how Spectrum Quality Benchmarks could be defined in a meaningful way in consideration of increased interference caused by such a process.
5. The proposal to allow trades to move from 12.5 kHz rasters to 6.25 kHz rasters with different centre frequencies seems fraught with difficulties arising from increased interference. It is further unclear how this could be allowed at all in a shared channel without the expectation of interference.
6. Sections 7.14 and 7.15 (Digital PMR) indicate Ofcom's willingness to introduce multiple rasters in the same band and to superimpose one service on top of another. Whilst the FCS recognises that these sections are in relation to licence-exempt use, there is concern that this has been proposed despite the inevitability that interference will be significantly increased in the event that both types of the new service become popular due to multiple centre-frequency systems that have over-lapping pass bands etc. The FCS would see this as creating an unwelcome precedent. The existing occupants in this particular case appear to be able to maintain an acceptable service at present.
7. We are unclear how a partial trade could proceed in a shared channel and request clarification.
8. The FCS supports the extension of the licence notice period as described (section 7.16 et al). We further note the caution for Band III users that they may not have such advantageous conditions applied (section 7.18).

9. All the time Ofcom has channels to spare the market will be slow to develop; some would argue against trading since Ofcom is not paying for the spectrum it holds.
10. Specialised uses within the framework need careful consideration. Mission critical spectrum use needs special understanding and does not fit into standard rules that Ofcom is proposing. It is accepted that public safety needs a higher level of protection and strategic national infrastructure, including Civil Contingencies Act uses- utilities, water, transportation- trains buses, aircraft - requires preservation. Ofcom states in section 2.27 that it “would not, for example, allow change of use or configuration of the spectrum used by the emergency services if this would undermine their ability to operate effectively”, but it does not appear to recognise that the same issues apply to the civil contingency sector nor that the same disastrous effects could result.
11. Spectrum Quality Benchmarks, which appear to be the similar to Spectrum User Rights, are not adequately defined. Ofcom is rethinking SURs following negative feedback to its consultation earlier in 2006. Overall, more thought into the relevance of the whole concept is needed.
12. A clear explanation of the growth in interference management due to more activity arising from liberalisation is needed. The consultative documents are silent on the implications of more interference cases.
13. The definition of a Designated Service Area (DSA) appears tied to specific technology assumptions; (section 4.24) we would like to know whether a DSA will remain for 10 plus years. Also in 4.49: should this be between the licensees or existing users? We would like a clear explanation as to how their coverage is affected, and whether licensees will be able to refuse with no comeback from Ofcom. Our members are concerned that this looks like market manipulation again.
14. Business radio simple site class (section 4.54) will have a set of technical restrictions, but it is not clear if Ofcom will have any involvement in policing the restrictions. FCS proposes that a simple code of practice for licensees may assist the orderly functioning of onsite licences. Similarly FCS recommends that Business Radio Suppliers licence holders continue to operate under the FCS Short Term Hire Code of practice that is currently referenced in the licences. We suggest that a review committee is convened including Ofcom and industry stakeholders to review the code in the light of the changing licence conditions.
15. The business radio community has waited with anticipation for some years for the unique MASTS algorithm. We welcome the assurance that the algorithm has been peer reviewed by members of the IET. Several FCS members are concerned that their assignments will not be possible via MASTS and will need to communicate with an Ofcom engineering staff member to gain their allocation. We request that Ofcom sets out clearly the process for such requests and the Service Levels that licensees can expect from Ofcom.

## Impact Assessment

1. As stated above, the reduction in complexity to remove the burden on administration is welcome.
2. We note that in practice most trades will attract a cost associated with the liberalisation (probably the majority of cases). So despite the policy of not charging a fee for electronic transfers, Ofcom still reserves technical oversight over the majority of cases and will charge

for it. This is contrary to previous promises. There is no indication of the level of trading fee that Ofcom will impose.

3. The introduction of Spectrum Usage Rights, SURs, is clearly related to the proposals in this consultation. However, we agree that it is inappropriate to wait for that proposal to come to a conclusion. As we have stated in our response to Ofcom's earlier consultation we do not see a valid argument for SURs for business radio.

## **Annex 6 - Licence Design - Technically Assigned Paradigms**

1. IR2044 is stated to be in need of revision to include a new requirement of Out of Band Emissions (section A6.3). The FCS is keen to receive a confirmation that that this new requirement should not be in any way more stringent than the equipment requirements in the relevant ETSI Harmonised Standards.
2. The revision of IR2044 and the new TFAC are matters of great importance: the FCS requests that due consideration be given to a consultation process for these documents also.
3. Throughout the document reference is made to spectrum quality benchmarks (SQBs). It is not clear what these are in their entirety. The FCS seeks confirmation that further information and perhaps consultation will be provided prior to the introduction of the scheme. Of particular importance are those matters in respect to proposals elsewhere in the document that will increase interference levels.
4. The FCS is concerned that the definition of the designated service area (DSA) is very closely tied to specific technology assumptions. In consideration of spectrum trading and liberalisation, the FCS seeks clarification of the policy impacts in the event that the receiver sensitivity was other than -104dBm/12.5kHz.

## **Modifications to Spectrum Pricing**

1. Many licensees are finding it a lengthy process to estimate the new licence fee cost. Others are just confused. Some fees are likely to rise by over 50%pa under the proposals. No licensee should be subject to such a high fee rise in one year when there are few discernable benefits. Customers of public bodies such as Ofcom, particularly small businesses, would expect a much more considered approach to fee changes such as a maximum change in line with inflation and new fees phased in over a number of years.
2. Ofcom is changing the basis of some licence fees, but it is not absolutely clear what the new fee will be. This we believe to be a flaw in the consultative document. Licensees have spent time seeking to calculate their new fees, but many have found it a problem. Because of the period over which the consultation is being held, licensees have not easily been able to contact Ofcom as staff many are on holiday during the consultation period.
3. Ofcom has recognised that the licence fee charged to CBS operators in urban areas has been excessive since spectrum has not been congested for several years. Rather than restore the fees to the non congested level, Ofcom has sought to sweep up the problem with the current proposals. Fees will not be rationalised until early 2008 - several years too late and unfairly penalising very small business suppliers. We encourage Ofcom to rectify this anomaly urgently as an unfair burden has already been placed on these small businesses.

4. In relation to fees, the FCS would seek clarification whether a dedicated channel that is the subject of a trade of partial rights would then be classed as a shared channel and the fee amended accordingly.
5. As mentioned in point 2 in the section on the Impact Assessment above Ofcom now says that it will impose a trading fee on each trade with is no indication of the level. It is disappointing that the imposition of the fee is a change for previous promises.
6. There is a gross imbalance between the charges for a national channel allocation and the fees charged by Ofcom for individual assignments. For example, if one takes the light user licence of £75 for 5 years for UHF spectrum and compares this with a national channel rate of £9900 per annum, this implies a re-use factor of usage of 660 times. A licensee of a national channel wishing to trade part of that channel in competition to Ofcom would therefore not only have to aim for a higher re-use rate than this, but also have to pay Ofcom the administrative trading fee as well as having made the capital investment for the licence which Ofcom does not have to do. The original rate for a national channel was set in relation to a number of comparisons – fixed links and PAMR, but those comparisons are no longer valid. The national channel rate is now looking increasingly out of line by comparison with other elements in the document and requires review.
7. Minimum trading units of 50km are inappropriate for business radio. We believe that this factor should be left to parties concerned i.e. the market. The 50 km squares seem to be purely an administrative facility for Ofcom that do not bear relation to reality. For example in Great Yarmouth where a small part of the 50km square is on land and the rest is sea is not going to be attractive for trading purposes. In the spirit of liberalisation licensees should be able to trade where they want to trade and should not be constrained by Ofcom's administration system.
8. Population density is not relevant to business radio uses. It may have been a reference point historically for the now defunct national Dolphin system, but not all Area Defined licence uses follow a PAMR paradigm. Roads, airports and oil refineries are by definition places where people do not live.
9. FCS agrees with its member company Air Radio when in its response on fees asked about the definitions used for the BR Technically Assigned Licence Class- the impact of transmitter power and antenna height and the coverage area.
10. Licence fee payments- FCS supplier members note that Ofcom sends out a 'Notification of fees' rather than an invoice; for licensees for whom radio spectrum is just one input service to their business an invoice is the normal format for fees to be paid.

## Questions

In the time available we have not been able to answer the direct questions set out in the consultation documents. We do support (Qu 6) extension of trading to UHF1 and Qu 8 the extended licence term to 5 years.

## FCS recommendations

In addition to our suggestions above we would like to recommend in particular:

1. Extend the consultation period by one month to take account of the August holiday period to 13 October since Ofcom itself is delaying implementation to the end of 2007
2. Ofcom produces some worked examples on fees and impact and publishes a more comprehensive RIA. The proposals are not workable at this point in time. If Ofcom were to go through worked examples of different types of licence, we would all have more confidence in the outcome. We would ask Ofcom to go through a variety of worked examples including wide area, data and voice on same channel.
3. Ofcom should set out how it will monitor the transition period from current to new licences, setting out detailed objectives and milestones.
4. Ofcom should set out its 'Plan B' if its proposals for liberalisation prove unworkable.
5. Ofcom should reconfirm that trading within the Business Radio bands will only be permitted for ongoing Business Radio use.
6. Ofcom should clarify para 2.6 in the Liberalisation Condoc, where it refers to Ofcom's statutory duty to "secure optimal use of spectrum" and "use it to generate greatest economic benefit". There is no reference to business, only consumers. Please can Ofcom explain how the "greatest economic benefit" be measured?