

**Cover sheet for response to an Ofcom consultation or call for inputs**

**BASIC DETAILS**

Consultation title): Call for Inputs: Strategic Review of UHF Spectrum at 420-470 MHz (UHF bands 1 and 2)

To (Ofcom contact): Kevin Delaney

Name of respondent: Derek Banner

Representing (self or organisation/s): On Site Communications Association (OSCA)

Address (if not received by email):

**CONFIDENTIALITY**

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing	<input checked="" type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

**DECLARATION**

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name:

Signed (if hard copy):

*Question 1: Do you agree with Aegis's conclusions on congestion of current use of 420-470 MHz spectrum? Are there any other signs or areas of congestion that Aegis have not identified from their review?*

*We agree with the conclusions on congestion within the Aegis Report. It has been general knowledge within the industry that there is severe congestion in the 450 – 470 MHz band in central London. However, one of our members reports a “marked increase in incidents” and that it is getting worse as time goes on. Note that these incidents are occurring on Technically Assigned Channels, across London (Mile End to Acton) and not just in the centre. These are bursts of 20 seconds or greater (which have to be logged due to the nature of the application); they are currently seeing around ten incidents a week across dozens of TA channels.*

*Members are experiencing very little congestion in any other parts of the country although they all experience some other types of co-channel interference that are not related to congestion.*

*We attach a statement from one of our On Site BR members in support of the above:-*

*“We have deployed nearly 300 hundred self-monitoring radio systems across central London ranging from Mile End in the east through to Acton in the West. They are majority passive, but they are bound by the design specifications to monitor traffic and report on jamming faults. A jamming fault, according to the terms of BS5839-9, is a signal on or adjacent to the registered channel that will stop our radio from broadcasting for a continuous 20 seconds, but without the correct CTCSS encoding.*

*Our first deployment was in August 2010 and we have been consistently adding systems since then. Taking into consideration the growth of the number of units we have noticed a considerable increase in the frequency and severity of jamming faults and comms errors, plus an increase in clustered events. We also see*

sporadic frequency usage in particular places over short periods. All of our systems operate on technically assigned licences.

The collection of this data is unfortunately anecdotal, as the systems are bound to report the fault to the client, but the client is not bound to tell us of every instance. However, because we are actively scanning for interference (unlike standard BR systems), we feel this represents a red flag which is indicative of a worsening trend.

If further quantitative evidence was required, we have the capability to capture that data subject to modification.”

---

*Question 2: Do you agree with Aegis’s conclusions on the future demand and use of 420- 470 MHz spectrum over the next ten years? Are there any other future uses or areas for future demand that Aegis have not identified from their review?*

*We agree with the Aegis conclusions regarding the increase in future demand for radio spectrum. However, whether this demand should be satisfied by providing spectrum in the 420-470 MHz band is another matter completely.*

*For instance, if the utilities require an estimated 2 by 3 MHz then Ofcom should supply this outside of the already congested UHF band, perhaps in the 700MHz band. The commercial and technical arguments for using 420 - 470 MHz should not be a consideration as these apply to every user and supplier in the band. The same can be said for wideband BR applications or any other technical proposals unless they can be shown to relieve pressure on other parts of the band.*

*The Emergency Services should be encouraged to leave the 420 - 470 MHz band and thus free up some much needed spectrum. Let us hope that the replacement ES network enables this to happen. In no circumstances should they be allowed another 1.3 MHz in the band.*

*IoT and M2M will obviously increase demand but much of this can be satisfied on WiFi or on cellular. If not then they should be allocated spectrum in a less used band such as VHF. We look forward to the outcome of the CFI from 2014.*

*There is already a multitude of LE and SRD systems and devices in operation. We think it would be very difficult and time consuming to release spectrum used by these services for high quality, professional use and so there should be no reduction or increase in the allocated spectrum.*

*In addition to the above it should be noted that here is a high proliferation of Light Licences and Technically Assigned Licences in the UHF band, which are neither identified nor defined by OFCOM or the Aegis Report as being 'Public Sector' or 'Emergency Service' applications. In our analysis, many of these licences are used to support systems with respect to:*

- Hospital on-site paging*
- Building and safe area, refuge management systems*
- Fire and safety evacuation*
- Deaf alert and evacuation applications*
- Nurse-call systems*

*Although these applications are local, however, due to the emergency and safety critical nature of these functions, it is argued that this must be considered in a national context with respect to bandwidth allocation and subsequent management. Moreover, UHF Bands 1 and 2 provide the ideal frequency platforms to support these site based applications, therefore, to encourage change-out to new systems and on new frequencies, will not only increase cost, it will also cause disruption and increase risk, which potentially could be on a national scale.*

*These factors reinforce the argument that although these are local services, due to their critical importance they must be viewed in a wider context and not just as a local service with no impact.*

---

*Question 3: Do you agree with Aegis's conclusions that there is not yet any UK demand for wideband services in the 450-470 MHz band (which could for example, be used to improve rural mobile coverage)? Please provide any supporting evidence for your position.*

*We agree with this conclusion and so we would like Ofcom to state that there will be no wideband provision in the 420-470 MHz band in the foreseeable future.*

---

*Question 4: Have you experienced degradation in your systems' performance which you consider to be caused by continental interference in the last 12 months? If yes, what approach did you take towards managing and minimising interference?*

*No! The deterioration has been across London only and has been due to congestion.*

---

*Question 5: Is there additional information relevant to the configuration of the 420-470 MHz band that we should consider in developing our approach to its future management? Please provide any evidence to support your views.*

*We would like to see a very serious attempt to try to relieve some of the overcrowding pressures in this band. We feel that there is an opportunity to do this because some spectrum is being made available, the expertise is available and the BR industry is showing a will to work with Ofcom to achieve this. We feel that a band plan could be put together that could help relieve the congestion in London and perhaps achieve a partial re-alignment of the band IF this can be agreed with the ROI. We believe that a working group facilitated by Ofcom could be formed to examine the above.*

---

*Question 6: Do you agree with the potential solutions Aegis have proposed for managing the 420-470 MHz band to both meet the continued growth in congestion and demand from incumbent spectrum users, and to facilitate the deployment of wideband technologies? Are there any other solutions which you consider we should examine that Aegis have not identified from their review?*

*Please provide any evidence to support your position and reference each solution in your response as appropriate.*

*It seems to us that there is little new advice in the Aegis report on solutions for the congestion and interference issues in the 420 – 470 MHz band. However there are some useful statements that clarify the position within the band and, in turn, these are useful in proposing solutions that will benefit incumbent and new users.*

*It is our view that a mix of the suggestions made by Aegis is probably the most advantageous approach, including migrating incumbent “temporary” users (PMSE, cranes, construction etc.) to new bands or managed networks; pricing in and around London, transmitter power restrictions and perhaps others.*

*We believe that a study in re-engineering the band should be undertaken with the specific purpose of reducing congestion and interference. This should be led by Ofcom but using the vast amount of experience and talent from the private sector.*

---

*Question 7: Do you have any further comments relevant to how we might manage spectrum between 420-470 MHz?*

*Everybody accepts that there is severe congestion in the centre of London and this often results in channels being unusable for short periods. One member is experiencing congestion across London and not just in the centre. We are not experiencing any congestion or congestion related interference in any other parts of the UK.*

*This implies that no new national or London wide services can be introduced without some serious re-engineering of the band. As discussed above we feel that it would now be appropriate to get a small group together to examine what can be done to alleviate the pressure across London.*

---

*Question 8: Do you have any comments on our proposed programme of work, the outcomes from which we will use to inform future decisions on how we manage the 420-470 MHz band? Are there any additional areas you consider we should explore?*

*It appears that the programme is well thought through but we would like to see some specific targets in the final report. Hopefully this work will lead to a better understanding of the scale of the congestion and interference problems which is great. However, we will be looking for what we can do next in order to alleviate the problems and we hope that this work will indicate the best way forward on this.*