

Your response

Question	Your response
<p>Question 1: (Section 3) Do you agree with our proposal for a single authorisation approach for new users to access the three shared access bands and that this will be coordinated by Ofcom and authorised through individual licensing on a per location, first come first served basis? Please give reasons supported by evidence for your views.</p>	<p>Confidential? –N</p> <p>We support the OFCOM proposed single authorisation approach (SAA). However, while various statements have been made by OFCOM staff in the past about how quickly OFCOM respond to licensing requests, this SAA process must be supported by a clear SLA.</p> <p>Spectrum is only part of the requirement for an operator of cellular or mobile services. There are a whole host of other codes that are required. These include:</p> <ul style="list-style-type: none">MNCBSICCI and other site naming formats and conventionsSPCI-SPCIIN <p>Is OFCOM proposing to administer all of these or a sub set but some have to be centrally managed while others can be operator managed. There is also a real issue that some of these resources could become exhausted, in particular the MNC. Its very possible that OFCOM could receive applications from many possible operators such as landlords, mall owners, stadium operators etc. and the MNC resource in the UK was never intended to support 10s of operators. Also, how valid is the issue of one MNC to an operator of perhaps one base station or a group of base stations at a fixed location?</p> <p>As well as spectrum and network codes, there are also numbering resources to consider. Indeed, the OFCOM proposed approach could lead to significant fragmentation of numbering groups to facilitate requirements from 10’s of operators.</p> <p>OFCOM needs to consider these co-ordination requirements and not just the spectrum issue.</p>

Question 2: (Section 3) Are there other potential uses in the three shared access bands that we have not identified?	Confidential? –N No reply
Question 3: (Section 3) Do you have any other comments on our authorisation proposal for the three shared access bands?	Confidential? – N No
Question 4: (Section 3) What is your view on the status of equipment availability that could support DSA and how should DSA be implemented?	Confidential? – N The whole issue of DSA have been considered for other uses such as white space licensing. There is also the current work underway and indeed in some aspects completed to support the CBRS in America. However, the big question here is what does the “D” in DSA mean? Real-time spectrum allocation which, based on experiences elsewhere in the world with mobile operators will most likely, for operational reasons never happen. The UK MNOs will be justifiably massively resistant. If the “D” means temporary allocation for a period of time say, days or weeks/months or even years then are complex DSA systems required? Would this not fit better under the proposed system to grant access to awarded spectrum as outlined in section 8?
Question 5: (Section 4) Do you agree with our proposal for the low power and medium power licence? Please give reasons supported by evidence for your views.	Confidential? –N Yes. This is a good development and makes the provision of coverage easier and more cost effective in rural locations.
Question 6: (Section 4) Are there potential uses that may not be enabled by our proposals? Please give reasons supported by evidence for your views.	Confidential? – N No comment
Question 7: (Section 4) Do you agree with our proposal to limit the locations in which medium power licences are available? Please give reasons supported by evidence for your views.	Confidential? – N We believe this is a reasonable restriction and reflects the complexity of fitting medium powered transmitters into otherwise well developed and complex MNO networks.
Question 8: (Section 4) Do you have other comments on our proposed new licence for the three shared access bands?	Confidential? – N No further comment

<p>Question 9: (Section 4) Do you agree that our standard approach to non-technical licence conditions is appropriate? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>These are fairly standard non-technical conditions seen in other regulatory regimes elsewhere in the world.</p>
<p>Question 10: (Section 4) Are you aware of any issues regarding numbering resources and Mobile Network Codes raised by our proposals which we have not considered here?</p>	<p>Confidential? – N</p> <p>See comments above to Q1 re networks codes.</p> <p>You mention that the normal allocation is 100,000 numbers. Given normal numbering efficiency measures, this could yield 30,000 actual numbers.</p> <p>This could still be a significant undertaking for one of the existing or new private networks operators. It might be sensible to consider allocation in smaller blocks, perhaps as low as 10,000 or even 1,000.</p>
<p>Question 11: (Section 5) Do you agree with the proposed technical licence conditions for the three shared access bands? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>Yes. They are fairly standard and to be expected in a licence.</p>
<p>Question 12: (Section 5) Are there other uses that these bands could enable which could not be facilitated by the proposed technical licence conditions? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>No comment</p>
<p>Question 13: (Section 5) Do you agree with our proposed coordination parameters and methodology? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>These appear to be robust and appropriate. C band co-ordination is very welcome as other administrations have allowed C band users to suffer from 3.4-3.8 interference, especially from WiMax users. This significantly impacted satellite link budget planning and associated system costs.</p>
<p>Question 14: (Section 5) What is your view on the potential use of equipment with adaptive antenna technology (AAS) in the 3.8-4.2 GHz band? What additional considerations would we need to take into account in the technical conditions and coordination methodology to support this technology and to ensure that incumbent users remain protected?</p>	<p>Confidential? – N</p> <p>Such technology will increase base station costs and make deployment, due to equipment size increases more difficult and costly. The requirement to use AAS can be understood but it may lead to cost control issues.</p>

<p>Question 15: (Section 5) Do you agree with our proposal not to assign spectrum to new users in the 3800-3805 MHz band and the 4195-4200 MHz band?</p>	<p>Confidential? –N</p> <p>No comment</p>
<p>Question 16: (Section 6) Do you agree with our fee proposal for the new shared access licence? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>Ofcom adopts a cost base justification for its fees. It would appear that the proposed fees are not inconsistent with this approach but why are they annual. Should they not be a once off/initial/upfront cost?</p> <p>We also believe that all existing base stations operated by guard band users should be transferred free of charge into the new proposed structure. These sites should not attract any new fees.</p>
<p>Question 17: (Section 7) Do you agree with our proposal to change the approach to authorising existing CSA licensees in the 1800 MHz shared spectrum? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>It is an interesting approach given the original 12 are at best only 3 now. Many of these non-active licensees have resisted attempts to acquire their licenses or to enter into any form of JV to exploit their licenses. We remain to be convinced that there is a demand for any significant increase in the users in this band especially without that killer App; inbound national roaming.</p> <p>We cannot see how the current operational licensees will not view this development as a negative activity as it will significantly impact their current business models and indeed the value of their companies. These existing operators should be treated in a kind and considerate manner. Can't help thinking that there may be some form of compensation discussion ahead for Ofcom with the existing operational licence holders.</p>
<p>Question 18: (Section 8) Do you agree with our proposal for the Local Access licence? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>Historically any attempts to engage with the existing licensed MNOs to use their spectrum in places where they were not using it (e.g. band 7 in remote places in Wales or Scotland) have been unsuccessful. So these developments are welcome but we believe that this process must be supported by a robust SLA which is backed</p>

	<p>into the MNOs. Requirements to respond to request within a certain time etc. There should also be some means of appeal or review of an OFCOM decision, especially where the MNO justification may be “suspect”.</p> <p>Perhaps OFCOM should consider asking the operators to published “deemed consent” frequency maps showing areas where the MNOs do not need OFCOM to consult with them as a way to speed up processes. After all, the UK cellular industry relies heavily on systems of prior or deemed consent such as in relation to panning, placing antennas on buildings and structures etc.</p>
<p>Question 19: (Section 8) Do you have any other comments on our proposal?</p>	<p>Confidential? – N</p> <p>No comment</p>
<p>Question 20: (Section 8) What information should Ofcom consider providing for potential applicants in the future and why would this be of use?</p>	<p>Confidential? – N</p> <p>As mentioned in 18 above, the UK operators should be encouraged to publish “deemed consent” frequency maps showing areas where the MNOs do not need OFCOM to consult with them as a way to speed up processes. After all, the UK cellular industry relies heavily on systems of prior or deemed consent such as in relation to planning, placing antennas on buildings and structures etc.</p>
<p>Question 21: (Section 8) Do you agree with our proposal to have a defined licence period and do you have any comments on the proposed licence term of three years?</p>	<p>Confidential? – N</p> <p>We think the 3 year “license” proposal to reuse existing licensed spectrum is very simplistic and does not take into account the real life of a cellular operator.</p> <p>Cellular operators plan capex/opex cycles on 18 month or 24 month cycles to cover network upgrades and expansions. This obviously does not prevent the Friday evening crisis and the following Monday morning rewrite of the plan. The last thing any planner will want at that stage is any “flies in the ointment” in the form of sitting spectrum reusers. There will have to be a notice period attached to accommodate this and to also accommodate other network events such as NTQ from landlords on sites etc. So any relicence period will need a NTQ (notice</p>

	<p>to quite) provision and probably in the order of 6 months.</p> <p>We also believe that there will need to be an emergency NTQ provision too measured in days or at most weeks should there be a catastrophic event in the network.</p> <p>As for the 3 year period, a one size fits all is not a good approach. Instead, we believe that any such period will be geography dependent as to where in the network it is and also very band dependent.</p> <p>In general terms, getting reuse in dense urban or indeed Urban areas will most likely be near impossible. (indoor might be possible but subject to some form of strict co-ordination agreement, perhaps based on the current JOTS document) However, a few days or perhaps a week could be possible for an event etc. but the idea of 3 years in any of the big UK cities is we believe wishful thinking. At the opposite end of the scale, the more remote the location the higher the chances of getting reuse and indeed this could be for many years, especially in the higher bands. Higher band relicensing is more likely in remote locations where this spectrum is unlikely or less likely to be used. An example would be the use of the 2600 FDD or TDD band in remote locations. Reuse or relicensing of the 700, 800 or 900 bands is going to be very difficult in remote locations where the operators will use these bands to maximise coverage. Perhaps 2600 FDD and TDD and maybe 2300 will be sweet spot reuse bands?</p>
<p>Question 22: (Section 8) Do you have any other comments on the proposed Local Access licence terms and conditions?</p>	<p>Confidential? – N</p> <p>No comment</p>
<p>Question 23: (Section 8) Do you agree with our fee proposal for the new local access licence? Please give reasons supported by evidence for your views.</p>	<p>Confidential? – N</p> <p>This would appear to reflect the OFCOM principle of cost based license fees. However, perhaps these fees should be once off/initial application only fees and not annual. Annual costs cannot be the same as initial allocation or award costs.</p>