Your response

Background:

Telint believes that this consultation needs to be considered alongside DCMS's Statement of Strategic Priorities ("SSP") Consultation, which Ofcom is obliged to take account of as it formulates policy. Because Ofcom's consultation predated DCMS', it would be entirely reasonable for Ofcom to change its initial position in some areas to reflect such longer-term policy guidance. Such guidance was specifically given in respect of shared spectrum (also called Dynamic Spectrum Access or "DSA").

If we are truly to enable opportunities for innovation, especially in the 5G candidate bands, then nowhere is it more necessary in our view than the 3.6-3.8 GHz bands, where innovation in remoter deep rural areas could be facilitated if they were carved out from the upcoming National auction. This could be limited to the very remote regions (which Ofcom has already defined in the "in-parallel" running Coverage Obligations Consultation), and this would have the effect of:

- 1 Increasing Mobile Network Operator ARPU
- 2 Preventing the waste of spectrum in the rural areas that really need it for improved coverage
- 3 Generate both social and economic value for the Nation as a result

In short, sharing at 3.6-3.8 GHz needs to be included in this Innovation consultation.

Ofcom has a difficult balancing act to perform. Whatever Ofcom does some group is always likely to feel that they lost out. Now, with clear policy direction, Ofcom's task will hopefully be made that bit easier.

Consultation questions:

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.

We make no comment regarding the 1800 MHz and 2.3 GHz bands, where we argue that the limited spectrum available limits the options for innovation anyway. We suggest it would be better to focus on other bands... especially IMT-2020 bands that are being supported by CPE on a Global scale, providing a larger opportunity to facilitate innovation.

We agree that DSA is the way to go – but disagree regarding the proposed process at 3.6-3.8 GHz. This must, post SSP, now form part of Ofcom's innovation thinking too, in respect of DSA.

Ofcom's plan for sharing is a good attempt that is doomed to fail because:

- 1. Ofcom could be swamped with thousands of requests and be unable to cope when a perfectly acceptable deployable automated solution already exists (the USA, amongst other nations, is already using it)
- 2. The Mobile Networks have a poor track record in this regard (e.g. roaming) which supports not making the process subject to their agreement
- 3. It puts "cart before horse" in terms of duties. Ofcom's principal duty is clear, and it is to citizens and consumers. What is best for them is not to be left at the mercy of organisations whom the CEO of Vodafone compared to the tobacco industry a few weeks ago in Barcelona ("Our reputation with consumers is just ahead of the tobacco industry, and in Europe the operators have only themselves to blame for the activities of the regulators given the protectionist approach that has been adopted."). Similar concerns in this regard are also to be found in the DCMS SSP consultation.

The impression we drew from the 3.6-3.8 GHz Consultation (which was "pre-DCMS") was that there was no alternative to the proposed Ofcom solution. However, we believe that this was not the intention and that with hindsight we got this wrong. We think that in light of recent DCMS statements Ofcom must change its original plans anyway and be prepared to assist on an unpaid basis should our advice be sought. As participants in the DCMS 5GRuralFirst project we feel we may have some value to add.

Question 2: (Section 3) Are there other potential uses in the three shared access bands that we have not identified?

We are confident they will emerge, even if today we do not know what they will be.

Question 3: (Section 3) Do you have any other comments on our authorisation proposal for the three shared access bands?

We see innovation as a journey, and our comments should be read in this light.

Concerning bands:

• 3.6-3.8 GHz

We believe this must also be considered a DSA innovation band, for "deep rural" and that only minimal changes to the proposed auction would be needed to deliver this for the "unserved 10%." We would like to see a simple automated DSA process for the 3.6-3.8 GHz band and/or a carve-out that puts teeth behind the "outside-in" approach. Awarding the spectrum to

operators who would not be able to afford to deploy for many years just results in wasted spectrum and does them no favours either because it depresses their ARPU. If there was a presumption of a right to deploy for Communities and others in deep rural areas for a period of say 4 years (especially in Scotland), Ofcom could be seen to be using innovation to help fix its coverage problem. When nearly 70% of one of our Nations has poor coverage, Ofcom is not serving the needs of those citizens and consumers as well as it might, therefore embracing innovation is essential.

• 3.8-4.2 GHz

We support the proposal to use DSA for the band 3.8-4.2 GHz, but simply state that this is too late. Coverage is a problem right now! Citizens and consumers can access handsets in the 3.6-3.8 GHz band immediately. It could be years before a handset ecosystem develops in non-IMT 2020 bands.

Question 4: (Section 3) What is your view on the status of equipment availability that could support DSA and how should DSA be implemented?

It is perfectly possible to permit DSA in the 3.6-3.8 GHz band now, and the mass market handset ecosystem already exists. The same is not true of 3.8-4.2 GHz, where it could be many years before such an ecosystem is ready.

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.

So long as any power increases do not put humans at risk.

We would add that we do not believe Ofcom or the broader industry has done enough at this time to explain to citizens and consumers what the RF risks might be – however minimal. It might well be that they are very minimal, but this needs to be explained, or Ofcom's attempts to protect people by keeping power levels very low (which is by-and-large what Ofcom has sought to do so far as we can ascertain), looks instead like "officialdom" not stepping up to the plate and giving advice – breeding suspicion and mistrust.

Whilst this is most unfair we are aware that this has been happening and that a significant negative perception of Ofcom already exists in this space. Like-it-or-not, many people turn to Ofcom first. They will not take kindly to being "fobbed off," however unintentionally. Saying that health is not an Ofcom responsibility and providing a few links simply "does not cut it."

Innovation plans in the UK could be seriously disrupted if this matter is not dealt with – and Ofcom could easily commission a trusted consumer organisation to undertake an impartial study as well as seek to improve awareness more generally. All the innovation in the world

is pointless if the ideas that spring from it cannot be deployed due to public health concerns (even if they do appear to be misplaced).

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.

Sharing should be made possible in all bands to some degree, innovation or otherwise. The technology now exists. It is not being exploited fully yet we have a spectrum shortage. How can that be?

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.

In principle, yes – subject to the comments made on safety above.

Question 8: (Section 4) Do you have other comments on our proposed new licence for the three shared access bands?

The consultation now needs revision to ensure it is in line with the DCMS SSP. This is not Ofcom's fault as the SSP had not been published when this consultation was launched.

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.

No comments

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?

No comments

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.

Subject to health concerns being addressed and RF screening considerations.

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.

No idea yet what innovation might generate. That is the joy of innovation!

Question 13: (Section 5) Do you agree with our proposed coordination parameters and methodology? Please give reasons supported by evidence for your views.

No comments

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?

As technology will continue to advance as regards DSA, so Ofcom has to be more flexible and actively permit it – not overly prescriptive and seek to unnecessarily micromanage a process that it could not deliver on anyway. This is in line with the DCMS SSP.

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?

No. Temporary use is fine provided there is a hard stop after which DSA is possible automatically

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.

No. Too expensive. In rural areas where the spectrum lies fallow and the process to access it is automated the cost approaches zero. It is the high cost that has held back innovation and helped to create market distortion.

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.

No comments

Question 18: (Section 8) Do you agree with our proposal for the Local Access licence? Please give reasons supported by evidence for your views.

We are not won over by Ofcom's proposal. Unless it is clear what a "reasonable objection" by a Mobile Network Operator actually is, then almost anything could be deemed "reasonable" in a Court of law. Ofcom needs to use far stronger language or be accused of being "soft" at the expense of citizens and consumers.

Question 19: (Section 8) Do you have any other comments on our proposal?

Ofcom's controlling of the temporary licence process will fail as currently designed and needs to be automated. When considered alongside Ofcom's consultation on verifying compliance with 700 MHz and 3.6-3.8 GHz one also has to ask by what logic is becomes acceptable for 90% of the UK landmass to be covered, including 74% of Scotland. Ofcom, in its own consultation, notes concerns from the Scottish Government – and DSA would immediately help to fix this huge coverage imbalance – which is simply socially unacceptable and has angered many.

One can well understand why the SSP makes it plain that DSA should be progressed in the short term. We believe Ofcom has simply made a mistake and had also not factored in the SSP – which of course now it must. There is a great opportunity, post-consultation, to demonstrate not just listening but to embrace the change needed, and in a way that recognises the continued importance of MNOs too, and the change we suggest, would increase their ARPU whilst involving them in less effort than Ofcom's proposals.

Question 20: (Section 8) What information should Ofcom consider providing for potential applicants in the future and why would this be of use?

Ofcom claims it has its own coverage prediction model, in the Compliance with Coverage Obligations consultation. However, based on what we know, the model is not able to function at mmWave.

There could be an opportunity to build upon the excellent work done by Ordnance Survey and 5G Innovation Centre (5GIC) in this space. The simple act of further refining models to be fit for the 5G era itself will make possible the more efficient use of spectrum.

Given that the efficient management of the radio spectrum is an Ofcom duty, given that the Ordnance Survey's National mapping agreement with Government is coming up for renewal, and given the economic benefit to be derived from such an activity Ofcom is in a unique position to benefit – and in so doing improve the service it offers its customers by providing access to online coverage maps in 3D. This is perfectly possible – now.

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?

No, it is neither one thing nor another. Indefinite licences with a 12-month notice period would be far better. Equally what if spectrum is needed just for a short duration one-off event. How does a three-year licence help then?

Question 22: (Section 8) Do you have any other comments on the proposed Local Access licence terms and conditions?

We would prefer that the spectrum was not initially under the control of MNOs at all in remoter "deep rural" areas – the "missing 10%." There should be a carve out in the upcoming auctions for these areas so they are excluded from the auction completely as there appears to be no plan at all to serve them anyway, therefore, on what lawful basis could such a request be reasonably refused?

Outside these areas then if someone is able to use the MNOs spectrum for free then it seems reasonable that they should be willing to surrender up to 10% of any capacity to the MNO for its own use – to benefit some of its own customers too that it cannot currently adequately serve.

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

No.

This could easily be a fully automated process – and manual input both takes time, requires additional resources, and therefore inevitably puts prices up. How does this assist citizens and consumers? In deep rural areas in particular, £1 could be deemed too much if Ofcom really wants to improve coverage in areas already uneconomic to serve. Moreover, what could the cost of an automated online transaction be? Pennies?

Conclusions

- If Ofcom wants to enable opportunities for *rapid* innovation to the faster benefit of citizens and consumers then some form of spectrum sharing, (in particular for the 10% never to be served) is an urgent priority, both economically, socially and politically. This document lacks a robust enough process to deliver innovative sharing fast enough.
- 2. "DSA-fast" would be in line with the SSP thinking from DCMS which Ofcom could not have reflected in this consultation since the DCMS one had not been released when this was published. We understand this is not Ofcom's fault, but now change is necessary.
- 3. Of com should now set out (it will have to be in its consultation summation) in what ways the SSP has changed its thinking regarding this consultation otherwise we do not know and cannot comment effectively. If "not at all" then we would be

concerned. If in one or two fields only, especially DSA, we could well understand how Ofcom had reached such a conclusion.

Finally, we would ask Ofcom to be more sensitive to the demands of time it places on respondents in future consultations. The multiple issuing of substantial consultation documents places an intolerable burden on smaller business and interested consumers – and does not serve Ofcom well either since it risks losing valuable feedback from those it exists to serve. Ofcom must be for all, not just the industry. How different might this response have been had more of them responded?

In return, respondents should also respect Ofcom's time and exercise restraint by limiting responses to 10 pages maximum. If we don't want to read "War and Peace" from you, then you probably don't want to read it – multiple times – from us either!

END