Question	Your response
Question 1: Do you agree with our proposed changes to the ACI/blocking procedures?	MuxCo operates 10 local multiplexes, serving c. 15 million adults across England and Wales and which carry 70 services from a wide range of service providers – 19% BBC, 39% heritage commercial services and 42% new digital only services.
	DAB digital radio has become one of the primary broadcast platforms for BBC and commercial radio, and consumer adoption of DAB is now well established with reach and listening at high levels.
	Expansion in consumer choice has been the primary driver of DAB listening, bringing competition, variability and uncertainty to the radio market. Many of the new digital only services have only operated for short periods and tend to come and go over relatively short periods of time compared to the historical norm in analogue radio.
	All multiplexes – local and small-scale – face the same issues and opportunities, and MuxCo believes that common and comparable regulation must exist for both local and small-scale multiplexes.
	With the potential for hundreds of small-scale DAB transmitters to be proposed in coming months, each one of which could punch a hole in current coverage, it is essential that new ACI/Blocking procedures are robustly and effectively applied.
	Unless carefully managed, the introduction of small-scale DAB has the potential to punch a significant number of holes in current DAB coverage and to disenfranchise existing listeners across the UK to local and national DAB, particularly in densely populated towns and cities. Such holes in coverage do not just affect individual radio services - they affect listening to all

services on affected local and national DAB multiplexes.

Local DAB is more at risk from ACI/Blocking caused by the introduction of small-scale DAB as the average power output of local DAB transmitters permitted by Ofcom is significantly lower than the powers used by national DAB transmitters. The ACI/Blocking effect of each small-scale DAB transmitter has the potential to permanently block access for existing listeners to well-established DAB radio services, including BBC Local and Nation services, by punching holes in current coverage.

As it will be any proposer of new DAB transmitters who will be the 'interferer' (with existing local and national DAB operators and their listeners becoming the 'victims'), the obligations and costs to protect current coverage and avoid ACI/Blocking sit firmly and exclusively with such proposers.

Current local and national DAB multiplex operators have cooperated widely, at significant expense and over many years, to mitigate ACI/Blocking within the current network. ACI/Blocking can be avoided by either co-siting new transmitters or providing 'filler' transmitters. New DAB transmitter proposers must be required to do likewise to avoid current DAB listeners losing coverage.

The cost of such mitigation measures to proposers of new DAB transmitters must not be used as any justification for such proposers not to protect the interests of current DAB listeners.

MuxCo welcomes the proposed changes in relation to management of ACI/Blocking but believes that Ofcom and the proposers of new DAB transmitters, whether small-scale or otherwise, will have to take great care in the application of the procedures if current DAB listeners are not to be disenfranchised.

MuxCo would strongly encourage Ofcom to amend the proposed

ACI/Blocking procedures to require that:

- As a minimum, the results of all drive-tests are fully recorded electronically and made available to Ofcom and affected multiplex operators.
- The proposer must also provide to all potentially affected multiplex operators, a clear narrative with analysis describing the ACI impact, supported by detailed, accurate and representative 'slug-trail' maps of such drive tests, alongside any tabulated data of the impact of the new site.

By doing so, current operators can be provided with consistent and robust data on which to make an assessment of any particular ACI/Blocking impact, without the need to attend such drive tests.

Question 2: Do you have any comments on the adoption of the new ETSI mask characteristic and on the potential use of the non-critical spectrum mask?

MuxCo is content with the adoption of the new ETSI mask characteristic and on the potential use of the non-critical spectrum mask.

Question 3: Do you agree with our proposed changes on DAB+ audio encoding?

MuxCo operates four DAB+ enabled local multiplexes on which 11 services currently broadcast in DAB+ and welcomes Ofcom's proposal to remove the requirement for licensees to obtain specific authorisation from Ofcom for adopting DAB+.

MuxCo questions what Ofcom proposes in relation to its proposed condition requiring multiplex operators to liaise with service providers wishing to move from DAB to DAB+ and what involvement the multiplex operator should have in providing "appropriate information to listeners on the changes... and advice on the steps listeners can take to continue receiving the service". MuxCo does not believe that any provision of consumer marketing advice should be a Technical Code condition.

Question 4: Do you agree with our other proposed revisions to the Digital Radio Technical Code outlined in Section 6 of this document? Do you have any views on alternative models for dealing with the administration of Sid and TII codes?

MuxCo does not support Ofcom's proposed ban on the use of UEP4 and UEP5 protection-ratios or its proposal to establish a minimum EEP for DAB+.

MuxCo considers there to be no regulatory justification for such a constraint and believes that any DAB protection ratio (UEP or EEP) should be permitted and be a matter solely for agreement between the multiplex operator and the relevant content provider.

It is not clear what Ofcom is trying to achieve by limiting the use of protection ratios as variations of coverage, both service-to-service and over-time, are a feature of all broadcast networks and there has never been any regulation requiring new analogue stations to match the coverage of all existing analogue stations in a given area and it is not clear why this is required of DAB stations.

Fully flexible use of protection-ratios offers more flexibility to multiplex operators to manage finite bandwidth. In light of the continuing high installed base of DAB-only receivers in the UK and the resulting commercial constraints on medium-term use of DAB+, the maximum flexibility on application of limited DAB-only bandwidth is more likely to deliver the widest consumer choice. And in the same way that regulatory limitations on bitrates and mode are no longer considered appropriate, limitations on protection-ratios should be minimal.

MuxCo is content with the Ofcom proposals in relation to SID and TII codes.

Queston 5: Do you agree with our other proposed revisions to the Technical Policy Guidance for DAB Multiplex Licensees document outlined in Section 7 of this document?

MuxCo does not support the change which seeks to apply the current guidance on Audio Characteristics only to national and local multiplex owners.

At a point where the equivalent form of regulation to apply in

future to small-scale DAB is not yet determined, there is no reason to pre-judge that regulation of National and Local DAB should be any different to small-scale.

Any discrimination in technical guidance between national, local and small-scale multiplexes should be subject to consultation and considered only once Ofcom proposals for the small-scale operators have been published.