Question	Your response
Question 1: Do you agree with our proposed changes to the ACI/blocking procedures?	I broadly agree with the proposals but believe that blocking can be addressed as it is for FM buy a calculation using a sensible set of parameters based on how a receiver should perform in the presence of another strong signal.
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?	I have no issues with this proposal.
Question 3: Do you agree with our proposed changes on DAB+ audio encoding?	Yes, the sooner stations move to DAB+ the better this will benefit industry by driving sales of receivers and allow some stations to improve audio quality for the same cost.
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?	I agree with removal of DAB Mode II. I disagree with the removal of the directional coupler. The reason for this is the filter will mask the return loss of the antenna such that one can't prove compliance with the antenna requirements with the transmitter monitoring system. The directional coupler is also the best method of performing on going compliance and maintenance measurements. As licensees seek to save costs the quality of the filter can be compromised and temperature compensation will not be optimal. This was exhibited in many of the early DAB transmitter systems requiring them to be run at the nominal power for a minimum of 30 mins into antenna to reach a stable state. The only way that this can be monitored is via a directional coupler. Also, from experience when a filter is shipped may hundreds of miles it is possible for it to become detuned albeit slightly but enough for a system to be non-compliant. Without a directional coupler there is no quick and simple method of checking the filter tuning. Small Scale DAB should be affordable but not at the expense of good engineering practice.

	Ofcom have said they will keep the requirement for combined systems, there is the same if not more potential for one system getting into another when they are closely located but not into the same antenna system. Again, a directional coupler is necessary to observer and prove compliance. Notwithstanding the above I question how a system can be installed and commissioned without a directional coupler fitted. If like the early days of DAB the regulator checked every installation for compliance then Ofcom will need to carry dummy load, directional couplers and a large variety of expensive connectors and cables to make compliance measurements. Which can be avoided if a directional coupler were provided. Over many years of commissioning 100's of DAB transmitters, I have concluded that breaking into a transmission system should be the last resort not the first line of measurement as Ofcom is proposing. It would also mean the regulator could be held responsible for any damage to the system due to cross threading of connectors etc. Something I thought Ofcom would be keen to avoid. Removal of dummy load requirement. I agree but only if there is a directional coupler fitted. MCI/FIC repetition rate. 20 services have been shown to work with only the minimum information transmitted. If a multiplex operator wishes to use enhanced features that require signalling then the repetition rate is slowed. If more than 20 services are used then I believe Multiplex operators will not be able to meet the repetition rate and provide any extra signalling. It appears the industry is consumed with the number of services for financial reasons and that audio quality has no place in the equation. Now cars are fitted with DAB as standard the industry needs to look again at the audio quality and in car services like TA/TP, Slideshow. AIC removal is the right move. SID codes I believe that there are plenty of SID codes

	available for future expansion. There are currently over 1000 unused codes. At 20 unique services per multiplex that is 50 multiplexes. Re using SID codes has the potential to break many systems not least Radio DNS and Radio Player which are now both industry standards. It is also possible to reuse codes which have dropped out of use i.e. station no longer transmitted, provided a period of rest is used so logos etc can be flushed from the system. This requires industry (mainly car) to stop the practice of burning in logos to receivers and broadcaster to either broadcast them or have them updated via a Radio DNS lookup or a up to date downloadable dataset from manufactures driven by data currently supplied by Ofcom and broadcasters (Radio DNS). If we have a migration from FM then more codes will become available for DAB. TII Codes Ofcom put in place a regional plan which is still viable but needs revisiting to check all the codes are as planned. The main area of concern is London and this would benefit from a review in my opinion. This would have a cost and time implication for the existing transmission providers to make any changes required. Who should allocate codes? The UK is held in very high esteem around the world for the way that the RDS and DAB codes are regulated and fairly allocated. I would go so far as to say one of the best systems in the world. Ask any motor manufacture and he will tell you many of the issues in Europe with incorrectly allocated codes or the lack of compliance with industry guidelines on how codes are used. I see no reason for Ofcom not to continue to be the allocator of codes to maintain the UKs high standing. That is not to say another body couldn't do this with the right dataset and knowledge but there would be a cost in setting this up. Who would fund it? Ofcom, broadcasters or transmission providers would be the obvious candidates for funding. There would have to be a transfer of

	data from Ofcom to the new supplier and a continuing link between the two bodies. Then there are the ongoing costs of employing a suitable qualified person to administer the codes, who pays? Currently I believe this is all part and parcel of the licence fee broadcasters pay and that is the main reason Ofcom do this work and should continue to do so.
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?	Yes, I agree that the minimum UEP should be set to 3 and levels 4 and 5 should not be permitted. For those services currently using level 4 or 5 (2 services) they should be given a 3-month grace period to comply from the date of the new code.