Question 1: which services are most likely to drive take up of DTT consumer reception equipment using new technologies? In particular, are HD services the most likely to do so?:

HDTV seems very likely to be an effective driver of take-up of new technologies. Whether it is the most effective is not something I have a view on.

Question 2: do you agree with Ofcom's assessment that it would be beneficial for the DTT platform to begin to upgrade to new technologies? DVB-T2 and MPEG-4 - to make more efficient use of spectrum and to allow for the introduction of new services?:

It seems advantageous to use newer technologies to make more efficient use of spectrum. If such new technologies are to be used, requiring equipment upgrades, a single change rather than two stages, is preferable.

However, more spectrum should be made available for DTT, to facilitate HDTV becoming the norm, not a curiosity for a minority of the market.

Question 3: Ofcom is particularly interested in hearing from multiplex operators and programme providers as to whether they are interested in using DVB-T2 and / or MPEG-4, and whether Ofcom should consider permitting their use on DTT?:

Not applicable.

Question 4: do you agree that the earliest possible availability and adoption of the technologies is in the interests of consumers and citizens?:

Not necessarily. A longer term plan that includes extra spectrum to build a proper broadly-based HDTV DTT platform would be better than what appears to be a short-term plan to deliver a second-rate outcome.

Question 5: do you agree with Ofcom's view that DVB-T2 MPEG-4 reception equipment could be commercially available in time for DSO in Granada region in late 2009?:

This seems unduly optimistic, given that the DVB-T2 standard is not due to be published until 2Q08.

Question 6: do you agree that some form of intervention is required in order for the DTT platform to commence an upgrade to new technologies without delay?:

Intervention can be helpful, but it needs to include providing more spectrum so that the DTT platform can develop, including widespread provision of HD services.

Question 7: Do you have any proposals for launching MPEG-4 services on a DTT multiplex using DVB-T in advance of the proposed 2009 timetable and if so can you provide details of how such a service would not undermine the proposed MPEG-4/DVB-T2 launch in 2009?:

Not applicable.

Question 8: do you agree with Ofcom's proposed approach for adding SD and HD versions of MPEG-4 and DVB-T2 profiles to the list of permitted standards for DTT in the spring, and that Ofcom's consent must be sought prior to adoption of these standards?:

Yes.

Question 9: do you agree with Ofcom's proposal that Multiplex B should be cleared and upgraded to new technologies?:

As I understand it, this requires existing channels to be squeezed into less spectrum, and hence requires use of the QAM64 transmission method instead of QAM16. This is more susceptible to interference, so it is likely to require a boost to transmitter power to provide adequate reception, especially in marginal areas. Subject to this proviso, and within the constraints Ofcom is imposing of no new spectrum, this seems an effective way of increasing spectrum usage.

Question 10: do you agree with Ofcom's proposal that all multiplexes should be required to upgrade to 64QAM at DSO in order to make the most efficient use of spectrum (ie that the mode change should not merely be optional)?:

See above answer. This is appropriate only if power is shown to be adequate to prevent interference.

Question 11: do you agree with our proposals for accommodating Five, S4C, TG4 and GDS on Multiplex 2?:

No comment.

Question 12: do you agree with our assessment that nine SD services can operate on Multiplex 2? If not, do you have an alternative proposal?:

No comment.

Question 13: do you agree with our proposals for the reorganisation process for the existing multiplex services set out in the central case scenario?:

No comment.

Question 14: do you agree with the principles / conditions that Ofcom proposes to use to evaluate counterproposals for the reorganisation process?:

No comment.

Question 15: Do you have an alternative proposal for the reorganisation process? If yes, please provide details.:

No comment.

Question 16: do you agree with Ofcom's assessment of the options for allocating the upgraded capacity?:

No comment.

Question 17: do you agree with the proposal that HD broadcasting on the DTT platform should use the more efficient progressive format, rather than the interlaced format?:

A careful study would need to be undertaken of picture quality using the other aspects of the transmission standards proposed.

Question 18: do you agree with the proposal that Ofcom should not mandate the use of the capacity for any particular service type (SD or HD) but allow the broadcasters to make proposals?:

A mandate from Ofcom would be inappropriate. However, I would support encouragement of development of HD services, so that the UK keeps pace with developments elsewhere in the world.

Question 19: do you agree with the proposal that the capacity should be allocated in three UK-wide blocks initially, rising to four blocks at DSO?:

No comment.

Question 20: do you agree with the proposed criteria for the comparative selection process?:

No comment.

Question 21: do you have any comments on Ofcom's proposals for the upgraded multiplex?:

No comment.

## Question 22: Do you agree with Ofcom's impact assessment?:

No comment.

Question 23: Do you agree with Ofcom's assessment of the potential benefits, risks and mitigations strategies relating to the impact of these proposals on the DSO programme?:

No comment.

## **Additional comments:**

Ofcom should be facilitating the development of widespread HD broadcasting on the DTT platform, and should be prepared to reserve extra spectrum for this. The current proposals fall far short of this.