

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?:

DTT take up is driven by the number of channels receivable, particularly in homes that have previously had no multichannel television, and in homes that may have multichannel television from satellite or cable but wish to upgrade other television sets in the home.

There may also be a few who will take up DTT as an extra service along side satellite or cable, particularly use of a freeview PVR box or integrated digital television.

HD provision is not necessarily going to drive sales of DTT equipment, although it is true that if an HD service was available on DTT it would be viewed as a poor mans HD service and would be the default HD option, although it will not offer much choice of services for it's viewers.

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?:

Arguably an upgrade to new technologies would allow a few more services, however this would be at the expense to people who have already invested in current MPEG2 DTT technology. As digital switchover has already begun and equipment currently sold is not MPEG-T2 compliant or MPEG4 capable, that will mean a lot of DTT decoders would need to be upgraded needlessly just to provide a few extra channels or services. These issues should have been considered and settled long before the current digital switch over was considered.

It should also be considered that once a standard is adopted, it should not be upgraded as soon as a better standard is available, but a 7 to 10 year time frame should be established to ensure platform stability, and prevent consumer uncertainty which can only harm DTT take up. In this instance, an upgrade to DTT-T2 MPEG4 should not happen for at least 7 years after DSO.

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?:

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

I agree that equipment for sale today should be capable of receiving the new standard and proposed services, however a switch over now will render much of the existing DTT equipment unuseable, I don't think an upgrade should be done unless ofcom and

the broadcasters taking advantage of the new system are able to recompense viewers for the cost of their current DTT equipment. It is likely to result in frustration and confusion for many who have already upgraded to current DTT equipment which works fine, most people will not understand the technical/commercial reasons behind another upgrade.

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?:

I agree it may be possible for DVB-T2 MPEG 4 reception equipment could be commercially available in time for DSO in granada region, but there is already a considerable amount of MPEG2 DTT equipment already cheaply available. If a switchover is desired a nationwide television campaign educating viewers of the DVB-T2 MPEG 4 upgrade and it's implications should be started now.

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?:

No, I think some form of intervention is required to prevent unnecessary upgrades to the DTT system.

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?:

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?:

No, adding DVB-T2 MPEG-4 profiles should be an option at least seven years after the last region has gone through digital switch over.

However, if it is to become a permitted standard, ofcom consent must be sought prior to any broadcaster/multiplex operation adopts these standards.

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

No, multiplex B should be retained as a DTT-MPEG2 multiplex, although it could be used more efficiently.

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)?:

Yes, all multiplexes should be upgraded to 64QAM at digital switch over, this will enable more efficient use of spectrum and is compatible with all existing DTT equipment so no problems should arise since transmitter powers will increase.

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

Since only one of these is a national channel, the rest are regional, at most these channels would only require two slots on multiplex2, if it were upgraded to 64QAM, there would be room for two extra services.

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?:

Yes, it's possible using 64QAM, although it would be at the expense of picture quality.

Currently the ITV/C4 multiplex (digital 3/4) carries eight 24 hour DTT mpeg2 video streams, using 64QAM, the rest of the space is providing audio and teletext style services.

A 16 QAM multiplex typically carries only five video services.

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

It seems a little bit too late, now that commercial multiplex operators have already established themselves and have contracts to provide services for the next 15 years, these can not be re-organised without breaking contracts.

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

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

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

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?:

If HD is to be available on DTT, then 720i or 720p formats should be acceptable, 1080i or 1080p are unnecessary and could be provided by other satellite or cable services who have much more spectrum available for such services.

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?:

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?:

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

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

One HD service, probably provided by the BBC does not equal choice or a satisfactory level of service, and an alternative (possibly satellite) platform should be available for a more complete HD service. Ofcom/government could help by making building covenants and restrictions on use of satellite dishes and television antennas illegal on residential buildings.

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

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?:

Additional comments:

While I can accept that digital transmission affords an opportunity to continuously upgrade services available, the possibility of continuously upgrading doesn't mean it should be upgraded. To avoid uncertainty among the public, platform stability should be considered a priority over providing upgraded services. Even when an upgrade is done, it should be done without inconveniencing existing viewers, so that mpeg4 services can show up on DTT platform without a noticeable loss of existing services or functionality.