

Response by Astrium to Ofcom Consultation on the Future of Digital Terrestrial TV

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?

Consumers of TV are influenced by affordability as well as the service and quality of the offer. All TV platforms must provide greater choice, including local content, without compromising the quality of the material. 'High Definition' is a relative term, having been used by Marconi in 1936 to distinguish its black and white TV system from alternatives. The definition will continue to evolve but the move to HDTV is inevitable for all programmes. Only the speed of transition is affected as different platforms use this as a differentiator.

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 is not possible to say as OFCOM has not published figures on the increase in CO₂ caused by the move to higher order modulation schemes. Theoretically, when implemented on all Multiplexes, the move should increase CO₂ from the DTT transmitter network by 75% compared with the SD plan. With increased implementation margins that will be necessary due to increased sensitivity, the move will at least double the electricity consumption (and CO₂ production) of the network. The original DMCS CBA for DSO did contain CO₂ issues.

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?

No comment.

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

No. Consumers are interested in services rather than the technology behind the delivery. If the service were to become available more cheaply on another platform, then the citizen and consumer would benefit more by reinvestment of the saved money in programmes.

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?

No comment.

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. No intervention was required to encourage other broadcast platforms to move to HDTV so why should the DTT platform be different- unless its operators feel themselves to be immune from competitive pressures.

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?

No.

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 comment.

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

No. Not without a review of the environmental impact of this proposal which will lead inevitably to its adoption on all multiplexes through time, with at least a doubling of the CO2 output of the DTT network.

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)?

No. See answer to 9.

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

Only if OFCOM ensures that they are also included on other platforms (eg Freesat from Sky) as part of the PSB delivery.

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 on proposed plan. An alternative plan would be to provide additional DTT multiplexes from a transmitter at high elevation angle (vertically above the receive antenna). A second simple low gain yagi could be used on a non interference basis with SD DTT to receive additional multiplexes from a HEO satellite system to make room for additional channels.

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?

OFCOM should expend some effort to evaluate the sharing scheme for satellite based and terrestrial based DTT.

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

See answer to 14.

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?

No comment.

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?

OFCOM is free to impose minimum quality standards on the service. including compatibility with HD

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?

4 will not be enough for a competitive platform. OFCOM should indicate a plan for DTT transition to all HD.

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. It would be irresponsible of any organisation to ignore the environmental impact of its proposals, even when it has no direct mandate to take them into account.

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.

Any other comments?

Astrium would be pleased to discuss with OFCOM any issues arising from this submission.