

Jane Humphreys  
DTI  
151 Buckingham Palace Road  
London SW1W 9SS  
and  
Catherine Smadja  
DCMS  
2-4 Cockspur Street  
London SW1Y 5DH

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Dear Jane / Catherine

## **Channel 5 submission to DTI / DCMS Review Digital Television: The Principles for Spectrum Planning.**

Channel 5 is in general agreement with the principle that no existing viewer of the existing TV channels delivered by analogue transmission should lose any of those channels as a result of changes in transmission arrangements.

The September 1999 criteria which stated 95% of consumers must have installed digital reception equipment should be regarded as a minimum before existing services are closed down. Even at this level this would result in over 1 million homes (2.3 million people) losing some or all of their current TV channels that they currently receive by analogue transmission.

Any plan to re-allocate the existing TV spectrum must be flexible. Channel 5 believes that the suggested timescale may be over ambitious, and that requirements in 2010 or 2015 may be very different from those envisaged now.

Although digital terrestrial transmission is a key part of the overall plan, particularly for portable and mobile reception, achieving universal coverage is never going to be economically viable. Although not ideal, other technologies such as microwave distribution, cable and satellite will need to be used to supplement this platform and to achieve the necessary coverage and access. The decision as to which additional means of delivery should be used by commercial broadcasters should not be legislated by Government.

In response to the specific questions put by the consultation:

*Q1. Our working assumption is that planning will continue for six multiplexes, as today. However we would also be interested in views on the costs and benefits of a more radical re-planning. This could be either reducing or increasing the number of multiplexes by one. Do you have views on this?*

If the prime objective is to shut down analogue television transmissions, and this cannot happen until BBC1, BBC2, ITV, Channel 4, S4C and Channel 5 are available to those viewers who currently receive them, then concentrating on one or two public service multiplexes to deliver the maximum coverage possible, as is currently the case, would be one way forward. The commercial multiplexes might not have the same coverage so subsidised receivers cannot be relied on to assist take up in all areas.

Certainly the number of multiplexes should not be reduced, the cost to the consumer for reception equipment is fixed and as many services as is technically possible should be planned for, even if there is no immediate planned use.

*Q2. What do you see as the costs and the benefits of maintaining the current basis for network configuration compared with those for adopting a configuration using fewer frequency channels?*

The only benefit in completely reconfiguring the existing network would be if it were possible to release slightly more spectrum for a use yet to be identified. Given the extremely high cost and disruption to a network that has only been in existence for a few years, this would make the digital terrestrial proposition even less attractive for both broadcasters and consumers. The existing DTT plan was based upon the analogue network for a very good reason, receiving aerials are already aligned to the serving transmitter, and in most cases are of the correct type.

*Q3. Do you agree that we should continue to plan on an interleaved basis to support regional services?*

The five main free to air channels all carry regional variations even if only for commercials (as is the case for Channels Four and 5), therefore the ability to offer regional variations is essential on some services at least. One of the main advantages of terrestrial delivery is the ability to broadcast more targeted services. Satellite on the other hand covers many millions of square miles and relies on conditional access to prevent viewers seeing feeds not intended for their area.

*Q4: To what extent should the future planning of this spectrum take account of the provision of local services?*

If the UK is to move towards closing down analogue TV transmissions, then RSL services must close down at some point in the future, or be given access to part of a digital multiplex. Whether this would be an efficient use of the digital spectrum would depend on the commercial viability of such services.

*Q5. What factors would have to be taken into account in order to plan to support mobile broadcasting services?*

Any services aimed at mobile reception in trains, coaches etc. are likely to be specialised, perhaps even with commercials very locally targeted, rather than the current services. Terrestrial transmission is well suited for this purpose. Although higher signal strengths are needed, this could be targeted, initially at least, to corridors where reception is most likely to be needed, main rail routes and motorways. Different technical standards could be used which were more suited to mobile reception, and reception on fixed domestic equipment might not be required.

*Q6. Does this analysis of coverage potential and associated costs adequately inform those taking decisions about the level of coverage by terrestrial means that should be required for public service broadcasters?*

We do not believe that these preliminary estimates are sufficiently robust to enable final decisions to be made. Based on the experience of Channel 5 Broadcasting in launching in 1997 the cost to the consumer and their resistance to buy additional equipment has been underestimated in the analysis presented. Another factor leading to a significant difference between coverage and the ability to view is the investment needed by landlords of multi occupancy dwellings to replace or upgrade

TV distribution systems to enable digital terrestrial or digital satellite receivers to be installed in individual flats. We believe that to approach universal coverage, a combination of terrestrial and other methods of distribution is essential.

The suggested approach of re-using existing frequencies for digital transmissions implies that the changeover for any particular transmitter beyond the initial 80 will be instant and that, the analogue service could then be switched off and replaced by a digital signal. However a realistic plan will need to be developed to ensure that all households served have installed the required equipment, and that there is a co-ordinated method of handling complaints from those who have not.

*n.b. satellite distribution*

Channel 5 will continue to be available free at the point of viewing via digital terrestrial transmission and we will allow cable operators to distribute our channel. Distribution via satellite is more complex, as there are a large number of satellites that can be received in the UK. Until recently almost all domestic satellite dishes were aligned on a group of satellites located at 19.2 degrees east, now most have been re-aligned to 28.2 degrees which although not quite as good in terms of coverage, carries a large number of English language services.

Since the coverage of these satellites includes Eastern, Central and Southern Europe (in itself not particularly spectrum efficient) our signals have to be encrypted and those viewers within our licenced territory supplied with a card to enable the signal to be decoded. This incurs considerable expense in conditional access fees, call centre operation and card distribution, as well as rental of satellite capacity. Although any satellite and encryption system could be selected, reality dictates that we are limited to one particular combination. Insisting that we reach agreement with the owners and operators of these systems ('must offer') should mean that mechanisms are put in place to ensure that fair commercial terms can be negotiated.

*Q7. Our working assumption is that the public service broadcasters should be required to reach a certain minimum percentage of households by the terrestrial platform. However, we would like your views on whether it is right to require a minimum, what that might be and the associated costs and benefits?*

Public service broadcasters (apart from Channel 5) currently reach 99.4% of UK households, if they were forced by Government to rely on the DTT transmission system that, following 10 years planning and research is still struggling to reach 80%, it would be unreasonable to mandate a higher level without the government offering some financial assistance for the required improvement of the DTT coverage.

*Q8. Do you agree that the level of coverage provided by the networks supporting the four multiplexes carrying predominantly pay-tv services should be left to the commercial judgement of the operators?*

Yes, except to the extent that S4C and Channel 5 (despite our PSB status) have to be carried by one of the commercial multiplexes and therefore may not benefit from any re-engineering.

*Q9. Which channels are cleared will depend on the costs and benefits of different replanning options. For example clearing 5 channels at the top and bottom of the frequency range is less disruptive to consumers and has lower switching costs than clearing ten at the top end. The benefits, though, will*

*depend on the use to which such freed up spectrum can be put. We would like your views on the costs and benefits of different options. And Q10. Which frequency channels should we clear?*

Channel 5 does not believe that sufficient work has been carried out to enable a sensible decision to be made at this stage. In order to carry out an adequate cost benefit analysis, we will need to know what sort of service will be using the released frequencies and how much those services will contribute to the cost of the clearance. At present there is no degree of certainty as to the true cost of moving broadcast TV out of part of the band currently allocated to it.

The major difference between broadcasting and other spectrum users is that while other users generally have full control over both ends of the transmission system and are responsible for specifying and purchasing the receive equipment; broadcasters have no control over the replacement cycle of viewer's televisions and aerials. This is one of the reasons why the transition to new frequency allocations or different transmission standards is more likely to take at least 15 years, probably 20.

In addition we would wish to emphasise the fact that the Channel 5 shareholders were required to spend £150 million to retune VHS machines thus enabling the use Channels 35 and 37. Any future user of released TV channels would have to cover the costs of continuity of viewing for these users who would be moved to another frequency group eg with new aerial installation.

We would suggest that the Government should initiate a detailed research project to determine exactly how channels 58 to 68 could be cleared of digital terrestrial transmissions, the costs of re-engineering the transmitters and the costs of replacing viewer's aerials. (The question of moving analogue services on channels 56 and 57 as mentioned in 4.9 does not arise as they do not fall within the top ten channels.)

The fundamental question that should be asked is:

*Why do the Government wish to pursue such an aggressive timescale in switching off the existing television distribution system?*

There may be little doubt that as digital reception equipment develops which will eventually match current analogue receivers in terms of size, portability and price, and methods of recording programmes to the current ease and convenience of the VHS recorder, then consumers will be convinced as to the merits of buying digital reception equipment. However, this will take many years to reach the point whereby the cost of running the analogue transmitter network is not justified by the number of consumers served. Only once this point has been reached could the costs saved by the broadcasters together with the fees generated by any new users of the spectrum, cover the cost in replacing the remaining analogue receivers.

Yours sincerely

Grant Murray