



File SKW

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From the Private Secretary

27 July 1988

Dear Neil,

**ADDITIONAL TELEVISION SERVICES:
PUBLICATION OF UHF AND MVDS STUDY RESULTS**

The Prime Minister has seen your Secretary of State's letter of 26 July to the Home Secretary. She is content for the announcement on the UHF and MVDS studies to be made on the basis proposed.

I am copying this letter to the Private Secretaries to members of MISC 128 and to Trevor Woolley (Cabinet Office).

*Yes,
Paul*

(PAUL GRAY)

Neil Thornton, Esq.,
Department of Trade and Industry.

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dti

the department for Enterprise

*CBI
C&W*

The Rt. Hon. Lord Young of Graffham
Secretary of State for Trade and Industry

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Prime Minister

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Our ref PS1BFV
Your ref
Date 26 July 1988

*Contact with the proposed UHF
and MVDS announcements at annexes
A and B?
REC 6
26/7
Yes no*

Yes No

**ADDITIONAL TELEVISION SERVICES : PUBLICATION OF UHF AND MVDS
STUDY RESULTS**

minutes attached

Following our earlier discussions in MISC 128, colleagues agreed that there would be advantage in putting into the public domain, in advance of publication of our broadcasting White Paper, the conclusions of the technical feasibility studies into the possibility of providing additional television services at VHF, UHF and using MVDS.

Colleagues will recall that I announced the conclusions of the VHF study, together with our decision not to proceed with that option, by means of an answer to an arranged Parliamentary Question on 20 April. I now propose to adopt a similar format to announce the broad conclusions of the UHF study, and to announce at the same time that we propose to arrange publication of the Touche Ross study on MVDS.

As with the VHF study, that on UHF was carried out by an inter-departmental group of officials together with the BBC, the IBA and the CAA. The detailed report resulting from those studies was aimed at informing the discussion within MISC 128 and 129, and would need extensive re-writing - requiring consultation with, and the agreement of, all those who were a party to the original report - to put it into a form suitable for public consumption. This would require a diversion of the resources

that will be needed to pursue further work towards our White Paper later this year. Annex A to this letter contains the text of the proposed answer on the results of the UHF study.

On MVDS, much of our input came from the report which we commissioned from Touche Ross Management Consultants, though some further work has been carried out by the BBC, the IBA and within the Department. An earlier version of the Touche Rose report was widely leaked, and some of its technical conclusions have since been challenged. The report is now in the final stages of a re-write by Touche Ross, both to put it into a form more suitable for publication and to incorporate some further thinking and developments since the earlier version was completed in January. There are no changes to any of the major conclusions, though our planned liberalisation of specialised satellite services will reduce the dependence of MVDS operators on BT and Mercury for their links from studio to transmitters.

There has been wide-spread interest in the possible applications of MVDS technology within the United Kingdom. I therefore propose to arrange for publication through HMSO of the Touche Ross report in full, though prefaced by a suitable disclaimer to the effect that the views contained in the report are those of the consultants and do not represent Government policy on the future use of MVDS, which has yet to be determined. Publication will take a little while to arrange and I see advantage in announcing the intention to publish at the same time as the UHF announcement. Annex B contains a suggested Parliamentary answer to that effect.

Unless colleagues see any objections, I propose that the two Questions should be tabled for answer on Wednesday, 27 July.

I am copying this letter to the Prime Minister, to MISC 128 colleagues and to Sir Robin Butler.

J. L. David

Q To ask Her Majesty's Government what were the results of the technical feasibility study commissioned last year into the possibility of providing a 5th television service at UHF

A On 14 October last year the Government announced their decision to commission a technical feasibility study into the possibility of a fifth terrestrial television service using the UHF bands IV and V in which existing television services operate. The study was carried out by an Interdepartmental Steering Group of officials which also included the active participation of the BBC, the IBA and the Civil Aviation Authority whose help I gratefully acknowledge.

The study concluded that a fifth channel covering 65-70% of UK households should, subject to the considerations detailed below, be possible from about 1992 using frequencies in UHF Band V.

UHF bands IV and V cover the 44 channels currently used to provide four television services to more than 99% of the population. Band V also includes four channels, 35-38, which are currently used in the UK for other purposes. The study covered a number of possible approaches. Of these the most favourable involved the use of channel 35 (currently allocated for programme making activities and theatre radio microphones) and channel 37 (currently used, together with channel 36, by aeronautical radar). Subject to international agreement and the satisfactory relocation of existing users, these two channels, 35 and 37, could be used to provide a national network, or series of regional networks, covering 65-70% of UK households. They could probably be made available from the beginning of 1992.

The study identified a number of costs and some uncertainties. The costs would include the re-equipment costs of moving existing users to alternative spectrum. Thus aeronautical radars in channel 37 would need to move to channel 36 some 2 years earlier than would otherwise have been the case. Some radars would need to be retuned within channel 36 and also fitted with additional filtering, to avoid interference to and from broadcasting in the adjacent channels 35 and 37. Certain Radioastronomy installations operating in channel 38 would need additional filtering to protect them against interference from television transmissions in channel 37.

There would also be the costs of moving services ancillary to broadcasting and some theatre radio microphones from channel 35. There would be difficulties in finding equally satisfactory alternative spectrum for these users. Creating an additional television network will bring with it increased demands for programme making activities, which it will be more difficult to satisfy if the spectrum available to the programme makers is reduced.

Most video recorders and some home computers use channels 35, 36 or 37 to communicate with the television receiver. They would be prone to cause (or suffer) interference to (or from) television broadcasts in the same or an adjacent channel. Interference might extend to neighbouring premises, and could also affect viewers who had chosen not to receive the new service. To avoid this many video recorders and some home computers within the coverage area of the new broadcast service would need to be retuned. This would involve costs for those households who were not able to carry out the retuning themselves. Because the new service would in most cases be transmitted using a different polarisation or be in a different part of the band from that used by existing television services, a significant number of households wishing to receive the new service would need either a new UHF aerial or a second aerial together with a mixing circuit. The average installed cost per household might amount to £30-£50.

The new transmitters and the new arrangements for aeronautical radars would need to be negotiated in detail with neighbouring Administrations, and we have already registered with the International Frequency Registration Board our interest in introducing a fifth television network using channels 35 and 37.

An alternative approach examined was to make a more intensive use of the 44 channels currently used for broadcasting. The study found that without removing one or more existing services from a small proportion of viewers, and within the planning constraints imposed by the limited standards of immunity achieved by most existing television receivers, the coverage that could be achieved by this means was significantly less than 20% of UK households. Because this coverage was almost wholly within areas that could be covered by a service on channels 35 and 37, this approach could not be used to supplement to any worthwhile extent the channel 35 and 37 coverage.

A more intensive use of the 44 current broadcasting channels might however play a part in the provision of a sixth UHF network. Although the Group's terms of reference did not include the feasibility of a sixth UHF network, they concluded that such a network covering over 50% of the population should not be ruled out as a possibility in the slightly longer term, though its cost could be significantly greater. Further study would be needed to identify this possibility with greater precision. It would depend on securing access to one or more of channels 36, 38 and 69, all of which are currently used for other purposes and may also be crucial to accommodate users displaced from channels 35 and 37. It is possible that benefits in coverage could be obtained if the fifth and sixth services were planned together using all the available channels, although they could thereafter be implemented over different timescales. Nevertheless this would probably delay the introduction of the fifth service beyond 1992.

The Government will not reach decisions on the introduction of additional 5th television services without wide-ranging consultations and without the most careful consideration of all the implications.

To ask Her Majesty's Government if they will now publish the report commissioned from Touche Ross Management Consultants on the technical and economic feasibility of Multipoint Video Distribution Systems ?

Although the Government have not yet reached conclusions on the findings of the Touche Ross study on MVDS, I am aware that considerable interest has been expressed in the Report, and I therefore propose to arrange for it to be published through HMSO within the next few weeks.