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21 February 1983

Dear Patrick

ACCELERATED CLOSURE OF 405-LINE TV TRANSMITTERS

I am writing about one important matter outstanding from our consideration of the interim report of the Merriman review of the radio spectrum. This concerns the possible acceleration of the present programme of closure of 405-line TV transmitters so that they were all closed by the end of 1984 rather than, as previously envisaged, by the end of 1986. When I answered a Question about the interim report last November, I said that I was having an urgent study made of the implications of accepting the recommendation for accelerated closure.

Officials have now completed this study, in the course of which they have consulted the broadcasting authorities and the Cable Television Association. I enclose a note setting out the position.

As the note makes clear, there are two arguments to be weighed against the powerful case for making frequencies in Bands I and III available to land mobile use as quickly as we can. The first is that acceleration of closure will mean that in theory some 90,000 rather than 60,000 people will be deprived of a TV service at the relevant time because they will be outside UHF 605-line coverage. But as the note explains this is a maximum figure, and my conclusion is that these consequences of accelerating a closure programme that is already under way are outweighed by the industrial and economic arguments set out by Merriman. I have given particular thought to the situation in Scotland and Wales but do not believe that the balance of advantage is different in these countries.

The second problem concerns the possible interference to existing cable relay systems on which between half a million and one million people depend for their 625-line services. Kenneth Baker mentioned this problem in his letter of 22 November to Tim Raison. (I should perhaps emphasise that it is a separate issue from the much wider ranging question of the safeguard against electronic interference for the new wide band cable systems of the future, on which we have commissioned ERA Technology Ltd. to carry out studies).

For the reasons indicated in the enclosed note there are difficulties about "phasing in" land mobile services in a way that would minimise the risk of interference, but the work we have done suggests that it should be possible to protect these existing cable systems reasonably economically by suitable screening or by fitting filters. The operators may, in practice, be reluctant to spend the relatively modest sums next year to increase the immunity of their obsolescent systems, but the fact that we can point to practical technical steps which they can take strengthens our hand. My conclusions, with which I hope you agree, is that accelerated closure of the 405-line services should not be delayed to take account of the representations of the cable operators. As the enclosed note indicates, the Cable Television Association have been suggesting that the Government should compensate cable operators for any expenditure they may need to incur in protecting their systems, but I see no basis or justification for doing so.

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Whatever we decide we are going to disappoint somebody and risk political criticism. My own view is that we should accept the Merriman recommendation and make an early announcement by means of an Arranged Parliamentary Question. I attach a draft of what I have in mind to say and should be grateful for any comments by mid-day on Monday, 28 February.

I am copying this letter to the Prime Minister and our other colleagues on E Committee, and also to the Secretaries of State for Scotland and Wales, and to Sir Robert Armstrong.

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Mason
W. H. H.

ACCELERATION OF THE EXISTING PROGRAMME OF CLOSURE OF THE TV 405-LINE SERVICE

This note briefly reviews the arguments for accelerating the existing programme of closure of the TV 405 line service so as to close down the transmitters by the end of 1984, instead of in 1986, as recommended in the interim Merriman report (Cmd 8666), and examines the implications of doing so in relation to 405 line viewers who will in consequence be deprived of service and to those who rely for TV service on cable systems which use Band I and III frequencies.

The case for early closure

2. The view of the Merriman team is that the need for increased allocations of spectrum for mobile radio is urgent and that it should be possible to replan Bands I and III for mobile use, and to produce suitable mobile equipment for use in those bands, so as to enable mobile radio services to move into them by the end of 1984. The need for early release of Bands I and III to the land mobile services is in fact beyond dispute, and the Government's decision to make the bands available to them is in itself a recognition of that need. The Home Secretary's Mobile Radio Committee estimated in their report published last June that the total additional frequency requirement to take the mobile services until 1990 was 27 MHz of which 3.5 MHz was required immediately; and a detailed inter-departmental study chaired by the Home Office which was carried out in the light of the Mobile Radio Committee's report could find no significant source of spectrum to meet these requirements other than that provided by Bands I and III. It seems unlikely that the initial 3.5 MHz required to relieve ^{existing} congestion can be found and there can be no doubt that if the growth of the mobile services were to be stifled for a further two years beyond 1984 there would be a hostile reaction from a wide range of interests.

3. One particular aspect not given much prominence in the Merriman report is the need to allow the fuel and power and other important services in the band 105-108 MHz, which have to be found a new home under the provisions of WARC 1979, to move into Band III with a minimum of delay as their equipment becomes due for replacement. Although because of their level of investment it will take many years to convert them to their new frequencies, the sooner they are given access to them the better. Furthermore, and more generally, it is necessary to have a

firm international basis on which to plan the use of Bands I and III, and the United Kingdom's negotiations with neighbouring administrations will not be helped if by retaining the 405-line transmitters in operation the impression is conveyed that the expansion of the United Kingdom's land mobile services is not a matter of any great urgency.

4. The closure of the 405-line services will leave some people without a TV service, whatever closure date is adopted. The earlier that date is, the higher will be the number affected, since the programme to bring UHF services to small pockets of population will be that much less advanced. The difficulty is in knowing how many viewers will be affected. The broadcasting authorities estimate that by end-1984 some 90,000 people will not have available a usable UHF 625-line service; by end-1985, 80,000; and by end-1986, 60-70,000. (The 1984 figure is the same as the estimate given by the Home Secretary in his announcement on 20 May 1980* of the programme of closure of the 405-line services, delay in extending coverage to communities of less than 500 being offset by the progress with self-help schemes).

5. The true number of viewers who will actually be relying on 405-line services on the relevant dates is however almost certainly lower. While the broadcasters assert that the great bulk of the 90,000 will still be watching 405-line TV by the end of 1984 because they would have no alternative, their argument seems suspect. Some of the 90,000 will belong to the quarter of a million people who have never received 405-line services, and others again may well have given up watching 405-line TV because of poor reception on sets which would be at least 20 years old by 1984. The Home Office would put the figure of 405-line viewers without a usable alternative signal ^{at the end of 1984} much lower, say, 20-40,000. This estimate, however, based as it is on the incidence of interference complaints, rests on a number of assumptions and the Government would not be in any position to place much reliance on it (although it was quoted in the Merriman report) in any public debate. It could however be validly maintained that the theoretical figures of those affected are unchanged from those indicated in 1980, and that the true effect must be less than this; that the two years notice of closure can near enough be retained; that the vast bulk of the Phase II engineering programme (to serve communities of over 500) will be completed in the timescale indicated in 1980; and that the programme to bring UHF coverage to smaller communities will be continuing

* reproduced at para 2.13 of the Merriman Interim Report

thereafter, together with further developments in self-help projects.

6. The situation in Scotland and Wales needs special thought because some parts may be relatively badly served at UHF on account of the terrain. It might be technically possible to retain the existing closure plan so far as Scotland and Wales are concerned while closing down the remainder of the transmitters by the end of 1984. On the IBA's own figures, the maximum number of people outside UHF coverage who could theoretically benefit for up to two years would be about 22,000 in Scotland and 18,000 in Wales, and as said above, the true number of beneficiaries would be substantially smaller; and there would be larger numbers in substantial pockets of unserved population in areas of England who could with justice claim a similar dispensation. Against these modest gains has to be set the fact that the introduction of land mobile services would be substantially inhibited by the retention of Scottish and Welsh 405-line transmitters, whose interference range extends from 150 to 300 km, and would therefore affect land mobile services in, for example, South Wales, Merseyside and North East England. On balance therefore it seems preferable not to make any special arrangements for particular parts of the United Kingdom. In this respect the decision would coincide with the preference of the broadcasting authorities who, if the 405-line service is to be terminated earlier than at present planned, would wish to switch off en bloc at the end of 1984 all transmitters at present scheduled for closure in 1985 and 1986.

Interference with existing cable systems

7. Finally there is the question of interference to existing cable systems which use the VHF Bands I and III to distribute 625-line services. The interference caused to existing obsolescent systems has hitherto been minimised by careful planning of the Band I and III distribution frequencies so as to avoid those used by broadcasting in the area, but the introduction of land mobile services into the frequency bands will destroy the basis of that planning (as would any change of use). These existing systems will continue to provide many households with their television reception for some time yet; probably between half a million and one million of the 2.5 million homes on relay systems are served by systems distributing on Band I and III frequencies. The Home Office has therefore looked into the nature of the interference mechanism, and considered what scope there might be for phasing in land mobile services in a way that would minimise the risk.

8. On phasing in, it seems theoretically possible that initially a significant amount of spectrum could be made available for mobile services in London and other urban areas without resort to the channels used by cable systems. It would not however be prudent to place too much reliance on this point. First, the detailed planning of the use of Bands I and III around Continental and Irish broadcasting, which is not yet under way, is likely to be extremely difficult and it seems preferable to avoid at this stage any commitment to defer cable systems as well. Secondly, Band III is unlikely to provide more than 4 MHz of spectrum for important national use, and any further restriction on the availability of such spectrum could have serious consequences.

9. Fortunately the preliminary interference investigations carried out by the Home Office suggest that it should be possible to protect these cable systems reasonably economically by suitable screening or by fitting filters, and the Cable Television Association and DoI officials have been invited to participate in further work. The Association has hinted that the Government should compensate cable operators for any expenditure that they may incur in protecting their systems, but quite apart from the immediate cost this would set a considerable and undesirable precedent.

Conclusion

10. The Government have decided to close down the 405-line transmitters and make the frequencies available to land mobile radio. The question discussed in this note is not therefore whether but when closure should take place. The choice is a difficult one but the Home Office assessment is that the economic arguments for accepting the Merriman recommendations outweigh the disadvantages of doing so.

DRAFT ARRANGED PARLIAMENTARY QUESTION

To ask the Secretary of State for the Home Department if he is now in a position to make a statement about the acceleration of the programme of closure of the 405-line TV transmitters as recommended by the Merriman review.

DRAFT REPLY

After careful consideration I have decided to accept this recommendation and to close down the 405-line services by the end of 1984. The Phase II engineering programme designed to bring UHF 625-line TV services to communities of over 500 people will be largely, though not wholly, complete by that date, but the additional programme to help smaller communities will for contractual reasons be slower and more expensive than was hoped. Self-help schemes, however, have also made a useful contribution, and thus the maximum possible figure I gave on 20 May 1980 announcing the timetable for closure of the 405-line services of 90,000 people outside UHF coverage by the end of 1984 remains unchanged. This figure should reduce to 60-70,000 by the end of 1986. The number of viewers unserved by UHF who will be receiving usable 405-line signals by the end of 1984 cannot be precisely identified but must be smaller than the figure of 90,000 because some of these will never have been able to receive 405-line transmissions, and because 405-line receivers will be at least 20 years old by that time. I recognise that by bringing forward the closure date as recommended in the Merriman report there will be a hiatus before alternative provision for some 405-line viewers is available, while some others will be denied a service earlier than had been foreseen. As the report recognises, however, there is no

alternative but to make these bands available for land mobile services at the earliest possible date if the urgent requirements of these services are to be met.

There is some risk, as mobile services are introduced into Bands I and III, that they may cause interference to cable systems which use these frequencies to distribute 625-line services, but we think that these systems can be protected by suitable screening.

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