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Our Reference: 20100802

Mark Williams MP  
House of Commons  
London  
SW1A 0AA

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Dear Mr Williams

***To ask the Secretary of State for Culture, Olympics, Media and Sport, whether he plans to upgrade relay transmitters across the UK so that all transmitters can receive all channels available on Freeview; and whether he has made an estimate of the cost of such work. [12745]***

***To ask the Secretary of State for Culture, Olympics, Media and Sport, what estimate he has made of the number of people in (a) Wales, (b) England, (c) Scotland and (d) Northern Ireland who receive television through a relay transmitter. [12741]***

I am replying on behalf of the Chief Executive in response to your questions (above) to the Secretary of State for Culture, Media, Olympics and Sport tabled on 28 July 2010. They have been forwarded to Ofcom for a reply as the independent regulator for the UK communications industry.

There are no plans to upgrade relay transmitters to carry the full range of Freeview channels, and I will try to explain the background to the situation.

Freeview digital terrestrial television (DTT) services are broadcast in groups of channels known as multiplexes, of which there are currently six. Three of these multiplexes are the public service broadcaster (PSB) multiplexes, and carry the digital equivalents of the analogue channels (BBC1, BBC2, ITV1, S4C and Five). Around eleven other conventional TV channels, as well as the recently launched Freeview HD channels, are also available on the PSB multiplexes. At digital switchover, in keeping with the government's requirement that the main channels should be as widely available in digital as in analogue, Ofcom required the broadcasters to upgrade all relays as well as the high-power main transmitters to broadcast the three PSB multiplexes. The main four analogue channels were formerly available to an estimated 98.5% of the UK population, and by the time the digital switchover process is complete, the PSB multiplexes will match this level of population coverage.

The other three multiplexes, which have been broadcast from 80 of the UK's larger transmitter sites since the launch of Freeview in 2002, do not carry any of the former analogue channels. Therefore the decision on whether to upgrade relays as well as the main transmitters was a commercial one for the operators of these multiplexes, SDN (a subsidiary of ITV plc), and the transmission company Arqiva. While we have offered the commercial multiplex operators the opportunity to adopt additional transmitter sites, they have chosen not to expand their networks. However, the commercial multiplex operators are increasing their transmission powers at switchover, meaning that they will be available to an estimated 90% of the UK population by the time the switchover process is complete.

While we have not made an estimate of the cost of extending the commercial multiplex's networks to include all of the relay transmitters, building a transmission network that achieves near-universal population coverage would undoubtedly carry a high capital cost. For comparison, the PSB transmission networks require the deployment of over 1,100 transmitters and will cost several hundred million pounds to build.

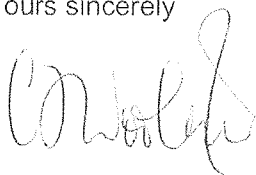
It is also worth noting that there are significant technical constraints on coverage, particularly in areas that face our international neighbours. These constraints arise because television signals cross borders, so they need to be planned internationally. There are simply not enough frequencies available to enable all the multiplexes to be available across the whole UK and we have to accept limitations in some areas, as do other countries.

Turning to your second question, in 2008 we published figures providing predictions of the percentage of viewers in each UK nation who would a) be able to receive the PSB multiplexes after switchover, and b) be able to receive both the PSB and commercial multiplexes (the second and fourth rows of figures respectively in the table below). The document is available on our website at [www.ofcom.org.uk](http://www.ofcom.org.uk), but I have provided the main table in question below for ease of reference.

| Predicted coverage - percentage of addresses (January 2008 figures) |         |          |       |                  |
|---------------------------------------------------------------------|---------|----------|-------|------------------|
|                                                                     | England | Scotland | Wales | Northern Ireland |
| <b>Coverage of PSB multiplexes</b>                                  |         |          |       |                  |
| Pre-switchover analogue coverage                                    | 98.7%   | 97.2%    | 96.7% | 97.6%            |
| Post-switchover Public-Service multiplexes                          | 98.9%   | 98.8%    | 97.8% | 97.5%            |
| <b>Coverage of all six multiplexes</b>                              |         |          |       |                  |
| Pre-switchover DTT coverage (for all 6 multiplexes)                 | 73%     | 82%      | 57%   | 58%              |
| Post-switchover DTT coverage (for all 6 multiplexes)                | 93%     | 88%      | 73%   | 75%              |
| Six multiplex percentage increase from pre-switchover DTT coverage  | 20%     | 6%       | 16%   | 17%              |

I hope this has clarified the situation for you, but if you have any further questions, please do not hesitate to contact us.

Yours sincerely



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