

THE PRINCIPLES FOR SPECTRUM PLANNING

Summary

Consumers' Association (CA), publisher of *Which?* and other consumer magazines and books, is an independent consumer organisation with over 700,000 members. Our work on digital television includes research on consumer attitudes and uptake, publication of advice to consumers on digital services and equipment, and membership of the DCMS Viewers' Panel and the Digital Action Plan implementation groups. We welcome the opportunity to respond to this consultation.

To address the key questions raised in the consultation document:

- Spectrum reserved for public service broadcasting should include sufficient capacity for future enhancements to terrestrial broadcasting, such as additional services, local public service broadcasting, improved EPGs and interactivity.
- CA is adamant that no reallocation of broadcast spectrum can be considered until the switch-off of the analogue television signal has been successfully completed, ensuring universal access to public service broadcasting and other free-to-air digital services.
- Any clearing and reuse of existing broadcast spectrum should be done according to tried and tested spectrum management plans, rather than a desire to gain the maximum value possible from selling off this resource.

A number of more detailed comments are included below.

Allocating spectrum to digital terrestrial television

Spectrum allocations are a key factor in the development of digital terrestrial television. Current restrictions mean that digital services cannot deliver many of the benefits which consumers expect, such as improved picture quality, interactive services and an adequate electronic programme guide (EPG). It would seem perverse if pressures to economise on spectrum, dynamic multiplexing and spectrum trading led to a greater number of poorer quality broadcast signals after the switch to digital.

CA is concerned that spectrum allocations should prioritise the carriage and potential future expansion of public service broadcasting, including interactive features and local services (**Q4**). For this reason, CA would welcome further consideration of the possibility of allocating additional multiplexes for public service broadcasting after digital switch-over. This would ensure that all license fee payers would gain the full benefit of their investment in BBC digital services.

We cannot support the Cave review's conclusion that public service broadcasters should be encouraged to further economise on spectrum through spectrum pricing or sharing without further analysis of the effect on service. The value of broadcasters' spectrum privileges is reflected in their public service obligations, and there may be little scope for broadcasters to economise on spectrum without affecting quality of service.

Coverage required for terrestrial television

The Viewers' Panel report raised questions about the wisdom of abandoning near-universal terrestrial signal coverage after analogue switch-off. Indeed, some members of the Panel took the view that 100% coverage is central to the public and private goods which switchover could offer. Although universal

coverage would be expensive to achieve, ensuring 99.4% coverage of the public service digital terrestrial would guarantee a choice of platforms to the majority of consumers, minimise the danger of future regulatory problems relating to carriage and platform control, and provide a baseline level of universal service which can be used to promote (and measure) take-up (Q7).

It is hard to reconcile the Cave proposals to charge public service broadcasters for the use of spectrum with the analysis presented of digital terrestrial coverage, which assumes that they will also bear the responsibility and costs of roll-out. Given the range of public policy objectives which are linked to digital switchover, it seems reasonable that the infrastructure costs of achieving 99.4% coverage for the public multiplexes should be at least partially offset by revenue from spectrum sales. However, we agree that the level of coverage of the commercial multiplexes should be a matter of commercial judgement for the operators (Q8).

CA is also keen to ensure transparency about levels of coverage, particularly in relation to the switch-off tests. We would therefore welcome clarification of the availability test - with particular reference to terrestrial and mobile reception - and separate regional targets prior to any programme of phased national switch-over. During the transition, it is vital to ensure that effective reception monitoring and complaints mechanisms are in place to protect consumers. The key principle is that no consumer who currently receives analogue television should suffer loss of signal before, during or after switch-over.

We would welcome measures to ensure coverage at sufficient signal strengths to allow mobile reception, particularly since up to 40% of consumers currently rely on set-top aerials. This decision would also minimise the aerial equipment and installation costs of switch-over for many consumers. We understand that other European countries intend to support mobile reception, and that forthcoming improvements in mobile aerial technology may limit the implications for network technology and channel capacity (Q5).

Clearing spectrum for re-use

Although CA would be strongly against switch-off before the 3 key tests of availability, affordability and take-up are met, we recognise that Government has to consider the costs of broadcasting both analogue and digital signals and being unable to release spectrum for other uses. It is vital that Government should clarify this balance when the 70% take-up target is achieved, and ensure that any revenue from spectrum sales is offset against the costs of improving coverage and access to digital equipment. The 3 key tests should not be abandoned on economic grounds, nor should the costs of an early switch-over be met by consumers.

The spectrum allocations used by consumers – through broadcasting, mobile telephony and in domestic systems - are often embedded in particular equipment and services. Consumers are therefore vulnerable to the impacts of spectrum trading on costs, longevity, quality and access to these products. If the value of spectrum exceeds the income derived from a particular use or service, this may lead to the withdrawal of a particular service and/or inefficiencies resulting from redundant equipment. It is vital that consumers should be protected from the impact of secondary markets on existing equipment and services. This might be achieved through legislative or regulatory means, ensuring that equipment can be adapted to use new frequencies, and that adequate notice is given before frequency changes are enacted.

CA is concerned that the introduction of spectrum trading should not be considered an end in itself, but should only be introduced with adequate safeguards and where it is likely to deliver measurable benefits for consumers. The primary objective of future spectrum auctions should not be to generate

revenue for the Treasury, although it is not clear that these dangers can be entirely avoided in any initial release of spectrum. In the auctions for 3rd generation mobile phone, the successful bidders have arguably suffered the 'winners curse' in the auction and may have overestimated the value of the spectrum, at least in the short- to medium-term. This raises issues of how industry seeks to recover these costs from consumers, and may restrict or delay the takeup and roll-out of services using the released spectrum.