

Response of Philips Electronics UK Ltd

to “Digital Television: The Principles for Spectrum Planning”

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28 March 2002

With respect to the consultation on “Digital Television: The Principles for Spectrum Planning”, Philips will be contributing to the comprehensive response that will be made by the FEI, but would highlight the following areas as being of importance for the success of the changeover to digital TV.

1. We consider that the success of the terrestrial digital services is crucial for the widespread adoption of digital TV, particularly by “late adopters” and those with multiple receivers. Therefore:
 - There must be sufficient new free-to-air services to attract consumers to purchase new equipment (idTVs or converter STBs).
 - There must be sufficient terrestrial capacity for pay and subscription services to ensure that the broadcasters can generate enough revenue to sustain their business, given reduced income from conventional advertising in the more fragmented free-to-air market.
 - Putting the basic set of free-to-view programmes onto just one MUX would not allow any reasonable form of added service such as interactivity. Already, there is insufficient bandwidth available, such that the terrestrial platform is at a disadvantage when compared satellite delivery (for instance, additional Wimbledon coverage from the BBC, is only available with satellite). We believe that these added services will inspire many late adopters to convert to digital by themselves.

Consequently, we would support an increase in the MUXs available, over the current 6, that would support these aims.

2. Sufficient spectrum should be allocated to allow high levels of terrestrial coverage and, in particular, reception by portable receivers. While, in principle, satellite offers high levels of coverage, it is perceived to be more complex to install than terrestrial, and may be difficult to feed to all receivers in a house. Therefore, even households with a subscription to satellite or cable services may wish to view terrestrial services on their secondary receivers without the penalty of having to pay a further subscription for those receivers.
3. The current latency when accessing digital text services is perceived to be high, and is particularly poor where services are provided in both English and Welsh. This results from the larger amount of data needed by the rich graphics used by MHEG-5 compared with teletext, and the comparatively low bit rate allocated to these services.

The UK should in our view migrate to the MHP standard, which would provide commonality with mainland Europe for equipment and content, resulting in lower costs to the consumer and greater export opportunities for content providers. The DTI is currently funding a study as to how this might be achieved.

To realise its potential, MHP will require a higher bit rate than MHEG-5, so that more sophisticated applications can be developed without incurring unacceptable latencies. Furthermore, a migration strategy is likely to involve simulcasting of MHEG-5 and MHP applications, albeit potentially sharing graphical data, and adequate spectrum should be allocated to support the necessary bit-rate.

4. In relation to section 3 above, we support Recommendation 11.6 of the Review of Radio Spectrum Management by Prof. Cave, (which relaxes/removes the restriction on non-programme-related data) in order to provide new and interesting interactive applications which will drive the migration from MHEG-5 to MHP. However, we feel that Recommendation 11.2, which allows broadcasters to lease out “spare” capacity, will have a detrimental effect. In view of the financial difficulties of some broadcasters at present, there is likely to be great pressure to reduce the availability of bandwidth for interactive applications in order to provide a revenue stream via unrelated datacasting. This will compromise the perceived benefits of digital TV. In order to alleviate this, the criterion in Rec. 11.2 “once they have met their public service broadcasting commitments” should include a test for acceptability of the latency of the included interactive applications. Given current performance, it is unlikely that fewer DTT Multiplexes will be acceptable.
5. Home networks will be important for the distribution of signals to secondary receivers, particularly in those households subscribing to satellite and cable services. While digital networks will be available, e.g. in the 5GHz band, these will be relatively expensive, e.g. in comparison to a current 14” TV, and the prospects of running low power in-home networks in the UHF spectrum should be considered before any final decisions on spectrum allocation are made.

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