Response from Digital One: Consultation Paper on Data Limits and Data Services on Radio Multiplexes 24 April 2006[1] **[1]**

Digital One holds the licence for the national commercial DAB digital radio multiplex. The multiplex launched in November 1999, and has taken the leading role in DAB digital radio's success in the UK. Its shareholders are GCap Media (63%) and Arqiva (37%).

Digital One plays a active role in both the UK's Digital Radio Development Bureau and the WorldDAB Forum. The company's transmitter network, operated by Arqiva, is the world's largest DAB digital radio network. As a result of our market-making investment in the Chorus chip, the first sub £100 digital radios became possible and thus Digital One facilitated the mass market in DAB digital radio receivers, which currently runs at over three million sold. The company retains a shareholding in Frontier Silicon, the leading DAB chip and module manufacturer whose technology is used within an estimated 70% of DAB digital radios sold in the UK.

Seven national commercial radio stations are broadcast on Digital One's multiplex. In addition, Digital One has contracted capacity to be used by
BT Movio and BT intends to use some of this capacity to broadcast television channels (subject to the outcome of this consultation and the Parliamentary legislation currently proposed in the Paper).

DATA SERVICES ON RADIO MULTIPLEXES

1. *Do respondents agree that DCMS should introduce an order which would allow TV services to be carried on a radio multiplex without the need for the radio multiplex to be reclassified as a TV multiplex?*

Digital One believes the current position has become an anomaly which now runs counter to the public interest.

A few years ago, a series of technology barriers meant there was no expectation that companies would broadcast television via DAB digital radio. The type of non-radio services expected to be broadcast on DAB were limited to pictures, text and graphics.

Since 2003, as the Paper outlines, there has been a series of technical developments which, taken together, makes it possible to use DAB digital radio to broadcast television channels to mobile devices. These include:

- changes to the DAB digital radio standards which provide additional error-protection and therefore make it possible for live television channels to be received without unacceptable levels of errors;
- changes in compression technologies for streamed video which means a channel can be broadcast with significantly less digital capacity;
- new digital rights management technologies;
- developments in silicon chip technologies (affecting power consumption, physical size of chips and processing power) which mean DAB can be built into a mobile phone and used to receive television channels;
- developments in screen technology which have enabled mass market production of colour displays at lower costs, suitable for use in mobile phones.

1[1] Subsequently, this document is referred to as "the Paper".

Whatever the original justification for the ban of television content being carried on a Digital Terrestrial Sound Broadcasting multiplex it is hard to see any justification today.

There is, already, evidence of consumer demand for live television content and video clips on mobile phone handsets:

- broadcast services using DAB digital radio technology have been launched in South Korea and Germany;
- BT Movio's trial in the UK in 2005 demonstrated demand for live television and radio channels on DAB-enabled mobile phones;
- other trials and services enabling consumers to access live television channels on mobile phones (e.g. 3G video services, the Arqiva/O2 Oxford Trial etc.) have also demonstrated consumer demand.

As reflected in the consultation document, the needs and interests of consumers as radio listeners will continue to be protected by the legal and regulatory framework. For example, a multiplex licence defines radio services which must be carried on a multiplex. In addition, market forces will encourage multiplex operators to continue to provide a range of radio channels. In the BT Movio trials consumers spent more hours listening to digital radio than viewing live television.

Where appropriate, UK regulation and legislation follows the principles of platform and technology neutrality. In the UK, where a platform is technologically capable of carrying live television this is almost invariably permitted in law. Other platforms are thus able to carry a mix of live radio and television channels. The legislation being proposed in the Paper will remove the anomaly making it illegal for a Digital Terrestrial Sound Broadcasting multiplex to broadcast television channels. The anomaly does not further the interests of consumers and Digital One supports the change.

DATA LIMITS

2. Do respondents agree that the data limits on radio multiplexes should be increased to 30%?

Over the past two years, Ofcom has consulted extensively on the data limit for Digital Terrestrial Sound Broadcasting multiplexes and whether it should be raised from the current figure of 20%.

Digital One's view has been that:

- audio coding technology and other changes mean broadcasters can now achieve the same, or better, subjective audio quality at lower data rates than was the case in 1998 (when the 20% limit was introduced);
- the needs and interests of consumers as radio listeners are properly protected by the multiplex licence conditions which specify the range and number of services an operator is obliged to broadcast;
- the most efficient use of spectrum would be achieved if the 20% data limit was removed or set at a notional level (e.g. 90%, which would be equivalent to removing the limit);
- maintaining the current percentage limits risks acting as a disincentive on the provision of new and innovative services which consumers would value and enjoy and which would add to the attractiveness of DAB digital radio for UK consumers.

Digital One accepts that DCMS, after discussions with Ofcom, is minded to adopt a more restrictive form of regulation (i.e. to set the data limit at 30%).

Whilst Digital One would have preferred a different outcome, it welcomes the greater flexibility that a 30% limit would allow. For example, market research suggests that the service being developed by BT Movio will have much greater attraction for consumers if it is able to broadcast five live television channels simultaneously. This would not be possible within the 20% data limit but can be achieved within the proposed 30% rule.

As reflected in the consultation paper, Ofcom has a range of regulatory options to ensure the interests of consumers as radio listeners are protected. For example, a multiplex operator's licence defines the number and range of radio services it is required to broadcast. Digital One agrees that the change to 30% can be introduced without disbenefits for radio listeners.
Indeed, there is evidence that the launch of BT Movio's services will benefit the take-up and success of DAB digital radio as an audio technology.

- Digital One has already added more transmitters to its network as a direct result of BT's investment in BT Movio. This has improved the receivability of Digital One's radio services for consumers in all areas where extra transmitters have been added.
- Each DAB-enabled mobile phone will also be a radio, allowing more consumers to listen to digital radio channels.
- Market Research conducted as part of BT's pilot in 2005 suggested that consumers with DAB-enabled mobile phones listen to digital radio stations for more hours than they viewed the television channels.
- The availability of mobile phones with built-in DAB digital radios is likely to make digital radio more attractive to younger consumers (e.g. 15-34 year olds). People in this age group are already more likely to buy hand-held DAB digital radios and are early adopters of innovative mobile phone handsets.

The benefits of the change proposed in the Paper are not limited to the national commercial multiplex. BT Movio is just one example of the type of innovation which will be enabled by a relaxation of the 20% rule. The change will also enable further new services to be launched while, at the same time, multiplex operators are able to offer the existing range of radio channels at the same or better audio quality, thus yielding an efficiency gain in the use of spectrum.

The change to 30% will enable the commercial launch of live television broadcasts capable of being received on mobile phones (e.g. the service being developed by BT Movio using capacity on the Digital One multiplex). Without this change, and the other changes proposed in the Paper, there may be a significant delay before UK consumers are able to benefit from such services. Other options, such as DVB-H, face barriers to an early launch (e.g. spectrum availability and uncertainty about the viability of a business model for such technologies in the UK).

Digital One supports the change in the data limit from 20% to 30%. It will stimulate new and innovative services with benefits for UK consumers and industry, encourage an even more efficient use of radio spectrum and contribute to the success of DAB digital radio (i.e. digital radio stations and a range of digital radios) in the UK.

Digital One 6 June 2006