# Digital Switchover and Impairment

**humanITy Paper**

by Kevin Carey, Director, humanITy



28th August 2012

**Digital Switchover and Impairment**

1. The key concept in considering the needs of citizens with impairments in the course of digital switchover is that the access solutions they require must be end-to-end. There is little point in imposing access regulation for additional services such as audio description, sub-titling and signing if there are no television sets or set top boxes to de-code the additional information. When the United Kingdom embarked on the provision of additional services in the mid-1990s there were no television sets available to de-code the additional data.

2. Although the central purpose of additional services is to make content available, a necessary precondition is the accessibility of the electronic programme guide (EPG). The UK Communications Act (2003)[[1]](#endnote-1) specified a level of special services to be regulated by Ofcom on the basis of television company qualifying revenue but its only regulation of EPGs referred to the fairness of the ranking. Thus, there was a heavy obligation on content providers to make their services accessible but no hardware to realise the experience. Set top box suppliers DTG [[2]](#endnote-2) first asserted that text-to-speech (TTS) was not technically feasible on an electronic programme guide (EPG) and later changed their argument to insisting that no manufacturer could afford to be first mover in supply TTS. The Royal National Institute of Blind People (RNIB) [[3]](#endnote-3) invested £1.5m in creating a 'talking television' chip set which is not only in its own sponsored commercial STB but is also integrated into the latest range of Panasonic televisions[[4]](#endnote-4).

3. Where there is a state broadcasting monopoly or near monopoly, the regulation to provide special services is relatively simple. In a competitive market the most important factor is the proportionality and transparency of the regulation. Broadcasters are generally receptive to the need for additional services as long as they can see how this places them in respect of their major competitors. The largest demographic group requiring such services are the hearing impaired who require sub-titling (or captioning). Very few hearing impaired people insist on signing and where they do this requirement should be subject to an analysis of cost and social gain. Sub-titling is not only of use to hearing impaired people, it also helps those for whom the broadcast is not in their first language. Audio description (AD) (or video description as it is termed in North America) supplies additional material to make sense of standard broadcasting for those who cannot see. It requires a considerable degree of skill to effect the necessary compression. This service will become increasingly important for in-vehicle television.

4. The basic standards for all additional services can be found at National Center for Accessible Media[[5]](#endnote-5).

5. Audio description should pay particular attention to key data (such as telephone numbers) which is flashed on the screen but not spoken, a vital service in the case of emergencies.

6. The provision of appropriate hardware is essential for the conversion to digital radio where TTS should be an integral component.

7. Where additional services are supplied, the default for the system should be that these services are "on" and that those who do not need them can switch them off, rather than vice versa, otherwise the user with an impairment is in a catch 22 situation where they cannot receive the necessary feedback to switch the services on.

1. The UK Communications Act (2003) <http://www.legislation.gov.uk/ukpga/2003/21/contents> [↑](#endnote-ref-1)
2. DTG <http://www.dtg.org.uk/dtg/> [↑](#endnote-ref-2)
3. RNIB <http://www.rnib.org.uk> [↑](#endnote-ref-3)
4. Panasonic Talking Televisions [http://www.panasonic.co.uk/html/en\_GB/News/Latest+News/Panasonic+Launches+Range+of+Talking+TVs/9505034/index.html](http://www.panasonic.co.uk/html/en_GB/News/Latest%2BNews/Panasonic%2BLaunches%2BRange%2Bof%2BTalking%2BTVs/9505034/index.html) [↑](#endnote-ref-4)
5. National Center for Accessible Media <http://ncam.wgbh.org/> [↑](#endnote-ref-5)