

section one

two key things
we need to
understand to
survive the next
ten years...



Digital Britain

At last, an easy-to-understand guide to digital switch-off, written by a former TV programme-maker (not an engineer).

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In ten years' time, Britain should be a truly digital country. If the plans currently being drawn up by the terrestrial broadcasters and Ofcom are implemented, the last analogue transmitters will have been switched off two years earlier, in 2012.

Such an outcome would in one sense be a tremendous success; it would mean that we had persuaded the people of this country to buy around ten million digital TV receivers each year between now and then. This is what is required to replace or adapt the estimated 90 million analogue TV sets and VCR recorders currently in existence. (Compare this target to the current annual purchase of TVs and recorders of around six million a year - most of them still analogue.)

But for the traditional broadcasters - the BBC, ITV and Channel 4 - the switch to digital is scarcely an unmixed blessing. In a fully digital Britain their share of TV audiences could have declined by as much as a third from what they are now. In such a situation, the licence fee could command far less public acceptance than it does today; and the viability of the commercial public service broadcasters could be seriously undermined. The government and Ofcom want the much more efficient use of spectrum that digital delivers; but, given the potential loss of market share, why are the broadcasters going along with such a policy?

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I will offer explanations for this seemingly lemming-like scenario later: but first, let me describe why we are abandoning the current policy of leaving digital switch-over to the market, and describe how switch-over is likely to happen.

Analogue broadcasting is very wasteful. We need 46 UHF channels to deliver just five national services - and two of these aren't truly national: Channel 4 does not broadcast in Wales and Five's analogue service only reaches around 70 per cent of the population. When digital terrestrial TV (DTT) was introduced in 1998, the six digital multiplexes used 'buffer' frequencies - left empty to prevent analogue signals interfering with each other. (The current digital broadcasts are much lower-powered than the

analogue ones, and do not cause interference. In addition, each UHF channel can carry at least six digital channels compared with only one analogue.) This meant we could have a set of new digital networks alongside the analogue ones, and people could take up the new services if they wanted to - or just continue with the old analogue broadcasts.

Unfortunately there aren't enough of these buffer frequencies to provide a simultaneous digital and analogue service for the whole country: at least a quarter of the population cannot get a DTT signal on the current basis. The Government had, however, set a target of 2006-10 for switching off analogue TV, and had promised that everyone who could get the existing analogue services would be able to get them in digital. When it came to working out how exactly this might be achieved, the Government realised it would have to convert some of the frequencies currently used for broadcasting the BBC and others in analogue if the whole country was to get a DTT signal.

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This meant we would have to switch off analogue *before* switching over, not after it, as the original plan had implied. Everyone would be compelled to go digital, whether they wanted to or not. This does not sound very attractive politically, but nonetheless the Government grasped the nettle, and asked the frequency planners at the BBC and the old Independent Television Commission to produce a plan that would provide universal terrestrial coverage for at least three public service multiplexes, and which would also release 14 of the 46 UHF channels currently taken up by broadcasting, so that they could be used for something new.

It is a complicated plan, and there have been a number of technical problems with both transmission and reception to sort out. However, the planning is now sufficiently advanced for Ofcom to intend publishing the key elements in September when it issues the draft digital replacement licences for ITV, Channel 4 and Five. These should tell us not only when switch-over is planned to start and finish, but also the order in which it will happen. The process will need at least two years of preparation, and will then take four years to complete, region by region. (The transmission companies, NTL and Crown Castle, don't

have the people or resources to do it faster. Over 1,150 sites have to be worked on, many of them in remote exposed locations where bad weather can prevent anyone going up the thousand-foot towers.)

Everyone will get at least two years' notice of when the switch will take place in their area. (London will be one of the last - Londoners will in effect get nearly eight years' notice.) The switch itself will be staggered in each region over a period of months. Viewers still using analogue TVs in this final stage will begin to see captions telling them that BBC TWO is about to disappear, and that they need to get digital receivers or adapters since it will be moving to a new, digital frequency. That change will happen overnight. Then captions will appear with the same message for BBC ONE, ITV, Channel 4 and Five. Those too will switch overnight. (In a very few areas with low populations served by remote relays the switch might take 24 hours.)

This will need a substantial communications exercise spread across six years. (Research undertaken by the DCMS and DTI indicates widespread ignorance of and confusion about digital TV, even among those who already have Sky or Freeview.) The BBC has in principle agreed to play a leading role in this, and to provide most of the funding, but it is unlikely to be able to make a final commitment until it knows what the new Charter and licence fee arrangements are - which won't be until the second half of next year. (This is perhaps why the BBC document, *Building Public Value*, published in June, suggested 2012 would be the final switch-off date rather than the 2010 target set by the Government five years ago.)

It will also have a significant impact on the TV manufacturing industry and on retailers. Both are concerned that the announcement of a date for switch-over - though desirable in itself - might destabilise the sale of analogue equipment, including the burgeoning and valuable flat-screen market, unless it is handled carefully. For manufacturers, especially those active around the globe, juggling competing and unpredictable demands for digital equipment is a challenge. Some of these particularly want the market to move towards integrated TV sets and away from low-margin set top boxes. For some small local retailers whose businesses mix TV rental with sales of receivers, the cost implications of digital switch-over could be serious.

Over the next year, therefore, the sectors involved in switch-over will need to work out how to co-operate with each other in a way - and on a scale - that is unprecedented for all of them. The challenges for DTT are far greater than for cable and satellite, where Sky, Ntl and Telewest essentially run vertically integrated operations which they control. Sky invested a couple of billion pounds in converting its services to digital and providing its subscribers with digital equipment for free, and was

thus able to end its analogue transmissions at a time of its own choosing. In DTT it is rather more a question of 'build it and they will come...'

Another difficulty is setting the technical standards for a process that will take eight more years to complete, and which is bound to see significant technological developments in that period. One example of this is the arrival of High Definition Television (HDTV) in the United States, Japan and elsewhere, which coincides with the surge in popularity of large flat screens capable of getting the best value out of the much higher quality of this new standard. The problem for the terrestrial broadcasters in the UK is that HDTV needs much more digital bandwidth than they will get under the current switch-over plan. If there is to be any prospect of HDTV broadcasts being available terrestrially, government and Ofcom will have to allocate this out of the frequencies that are due to be released - and they have no wish to make such a decision at this stage.

In a sense this HDTV issue shows why the switch to digital is necessary for the traditional broadcasters, despite the obvious drawbacks. Many new features that are attractive to viewers and consumers work best (or in some cases can only work) in a digital environment - think of electronic programme guides, personal video recorders, recordable DVDs, wide-screen pictures, interactive applications, access to broadband and the Internet. In addition the extra capacity provided by digital enables the traditional broadcasters to create families of channels and services, potentially off-setting or mitigating the loss of audience share by their main channels. It also of course enables wholly new ways of using the TV set - to shop, to bet, to vote, to play games; all a significant move away from simply watching a programme.

The fundamental dynamic at work in this new digital world is consumer sovereignty. For half a century broadcasting has been built on the existence of passive viewers who largely had to take what they were given, which could too often mean watching the least worst option. As funding mechanisms, both the licence fee and advertising have significant virtues but they both suffer a crippling drawback - individuals cannot signal their particular preferences. With the arrival of multi-channel TV, this historic feature has been declining steadily in the past decade, and will continue to decline in the coming one. The technology will allow the emergence of a world in which most people can watch what they really want to watch, and to pay for it directly, not through a poll tax like the licence fee or through compulsory subscriptions to cable and satellite channels they don't want.

The fact that the technology will allow it does not of course mean it will actually happen like that in the next ten years. That would require both political will and - probably - regulatory action: the first to wean the BBC off the licence fee, the second to oblige satellite and cable

platform operators to give much greater freedom to consumers to purchase individual services. Though I think there will be significant changes to the way the BBC is funded and governed as a result of the current Charter review process, the licence fee is likely to remain for much of the next ten years as its prime source of revenue. On the second issue, it is an open question as to whether Ofcom will in this period take firm action against Sky in particular. I have no doubt the new regulator would prefer to see consumer behaviour and market developments persuade Sky to change the way it conducts its business, rather than for it to have to take on the onerous task of forcing the satellite giant to do so via regulation. However, at the moment only broadband would seem to have the potential for loosening Osterley's grip on the way the pay TV market is organised.

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As to advertising-funded channels, there is a big debate going on about both the significance of the ability of the audience to bypass TV ads (through the PVR) and the consequences for the medium of large-scale audience fragmentation. After three bad years' TV advertising now seems to be picking up again, but few forecasters predict that it will return to the boom years of the eighties and nineties. In ten years' time there will still be free channels funded exclusively by advertising, but they are very unlikely to sustain the range and quality traditionally provided by ITV and Channel 4 - certainly not for original first-run productions at the high-cost end of the range. The bedrock of these channels is likely to be soaps, celebrity programmes and the successors to reality shows like *Big Brother*, *Pop Idol* and *Wife Swap* - if we can find them. Plus of course repeats of shows first seen on pay television.

Where that puts public-service broadcasting, at least as it has traditionally been conceived, is obviously problematic, and is currently exercising Ofcom as it conducts its year-long review of PSB's future. For quite a lot of people, the answer is simple - maintain the BBC in its current form and make sure the licence fee increases sufficiently for it to perform its traditional role. However, for a quite a lot of other people it is either wrong in principle to preserve the licence fee in the digital era or not politically feasible to increase it at a rate that would resource the BBC in the manner to which it has hitherto been accustomed. Others would

worry if the BBC were the only source of public-service broadcasting ten years from now.

My own view is that, in a world where people can freely choose what they want to watch and how much they are willing to pay for it, the need for public intervention will be much less than it is now; that such intervention should be funded by taxation rather than the licence fee, to be channelled to various organisations as appropriate; and that the BBC and Channel 4 should if possible remain as public corporations even if the bulk of their revenues are earned commercially. Organisations that are not in the private sector, and which do not have to answer to shareholders expecting a financial return, can take greater creative risks than those that are subject to such pressures.

What the actual shape of the digital world will be in 2014 is difficult to foresee. I am however reasonably confident that the viewer-as-consumer will be better off than now; and, if those responsible do their jobs properly, the viewer-as-citizen should be no worse off.