DIGITAL TERRESTRIAL TELEVISION: ENABLING NEW SERVICES

Consultation on
the draft Television Multiplex Services
(Reservation of Digital Capacity) Order
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SECTION 1: PURPOSE OF THIS CONSULTATION

1. As part of the Government’s ongoing commitment to ensuring that radio spectrum is used as efficiently as possible, the Secretary of State for Culture, Media & Sport wrote to Ofcom in November 2007 asking the regulator for advice as to how certain new technologies might be used to upgrade the Digital Terrestrial Television (DTT) platform in order to release capacity for new services.

2. Ofcom issued its advice to the Secretary of State in April 2008. This advice, the result of a public consultation process and discussions with the BBC Trust, recommended reorganising existing services on the DTT platform in order to utilise the new technologies and thus allow for new, possibly high definition, services to be provided.

3. In its advice, Ofcom acknowledged the limitations of its own remit in this area and recommended that the Secretary of State used his powers under the Communications Act 2003 (“the 2003 Act”) in order to effect the proposed reorganisation.

4. In the light of Ofcom’s advice, the Secretary of State intends to lay an appropriate order before Parliament. However, before doing so, the Government would like to offer interested parties the opportunity to comment on the text and effect of the order which, in particular, fills in some of the details necessary to give effect to Ofcom’s proposals. Therefore, a draft of the Television Multiplex Services (Reservation of Digital Capacity) Order is attached as Annex A to this consultation paper.

5. This consultation document is structured as follows:

   a. Section 2 outlines the policy background behind the reorganisation of the platform;

   b. Section 3 offers a detailed legal commentary on the text of the order;

   c. Section 4 provides an opportunity to respond to this consultation;

   d. Annex A provides a draft copy of the order itself;

   e. Annex B is a regulatory impact assessment on the potential effects of the reorganisation of the DTT platform, and the need for intervention.

6. This consultation will close at 5.00pm on Friday 9th May 2008.
SECTION 2: POLICY BACKGROUND

Government’s policy on spectrum management

1. On 6 March 2002, Professor Martin Cave published the ‘Radio Spectrum Management Review’\(^1\), a report commissioned by the Treasury and the Department for Trade & Industry to advise on the principles that should govern spectrum management and what more could be done to ensure that commercial and non-commercial users were focused on using spectrum as efficiently as possible. The report recommended a move to a more market-based approach to spectrum management, as this would be the best way to ensure that spectrum was used efficiently and delivered the best possible value to UK citizens and consumers.

2. The Government’s response\(^2\), published on 15 October 2002, broadly accepted Professor Cave’s proposals, and our policy since then has been to continue purposefully and progressively to pursue the development of market-based spectrum management tools to complement regulation.

3. With reference specifically to broadcasting, the Government’s response to the report stated that “there is a balance to be struck between ensuring efficient and effective use of spectrum as a scarce and valuable resource and the promotion of plurality, diversity and universal accessibility of broadcasting services” and noted that “these objectives are not necessarily mutually exclusive”. We are therefore committed to ensuring that the spectrum reserved for broadcasting is used as efficiently as possible, while continuing to deliver certain public service broadcasting (PSB) objectives.

Opportunities offered by switchover

4. The process of digital switchover, combined with recent technical developments in the compression and transmission of digital television signals, offers a unique opportunity to improve the efficiency of the spectrum used to provide the DTT platform. Briefly, three main developments have the potential to make a major impact on the platform:

   a. The **mode change at digital switchover** (four of the six DTT multiplexes will be moving from the 16QAM to 64QAM mode of transmission, meaning that all six will be transmitting at 64QAM) releases extra capacity onto the platform;

   b. The **development of MPEG4 compression technology** allows roughly twice the amount of information to be provided over the same capacity, enabling more services to be carried within the same amount of spectrum;

   c. The **development of DVB-T2 transmission standard** is expected to provide further efficiency gains, estimated to increase the capacity of a digital multiplex by at least 30\(^3\).

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\(^1\) [www.ofcom.org.uk/static/archive/ra/spectrum-review/2002review/1_whole_job.pdf](http://www.ofcom.org.uk/static/archive/ra/spectrum-review/2002review/1_whole_job.pdf)

\(^2\) [www.ofcom.org.uk/static/archive/ra/spectrum-review/govresponse/toreview/indpreviewgovtresponsefinal.doc](http://www.ofcom.org.uk/static/archive/ra/spectrum-review/govresponse/toreview/indpreviewgovtresponsefinal.doc)

\(^3\) More detailed technical information about each of these developments can be found within Ofcom’s consultation document, referred to in paragraph 6.
5. It was with an awareness of these developments that the then Secretary of State for Culture, Media & Sport, James Purnell, wrote to Ofcom in November 2007. The Secretary of State sought Ofcom’s advice on “the most appropriate manner in which we can ensure that [these developments], and the benefits that they could bring, could be introduced to the DTT platform”.

6. To inform its advice to Government, Ofcom issued a consultation – ‘The Future of Digital Terrestrial Television: Enabling new services for viewers’ – on 21 November 2008. This proposed a method of reorganising the platform in order to take advantage of the new technologies and free up capacity for new services. The consultation closed on 30 January 2008, and a final statement was published on 3 April 2008. This statement represents the regulator’s advice to Government on this matter.

**Ofcom’s advice to Government**

7. Ofcom’s proposals involved clearing one DTT multiplex (Multiplex B, owned by BBC Free-to-View Ltd) of its existing services, and upgrading it to the more efficient 64QAM, MPEG4 and DVB-T2 technologies. The upgraded capacity would then be allocated in the following manner:

a. **One third of the capacity** would remain in the control of BBC Free-to-View Ltd, with the BBC Trust having responsibility for deciding the use to which it will be put;

b. **The remaining two thirds** would be allocated by Ofcom following a comparative selection process, with applications for the capacity being limited to the relevant public service broadcasters, and assessed on the following criteria:
   i. Promotion of the efficient use of radio spectrum, and the take-up of new equipment in order to receive the new services;
   ii. Contribution to the fulfilment of the purposes of PSB in the UK;
   iii. Contribution to enhancing or maintaining the range and diversity of high quality TV services available on DTT.

c. At an appropriate future time, these allocations of capacity would be reduced to one quarter and two quarters respectively, with **the remaining quarter** being allocated again by Ofcom following a similar comparative selection process;

d. **Any capacity freed up in the future** as a result of more technical developments would revert to the multiplex operator, with the BBC Trust retaining control over its use.

8. As part of the same reorganisation process, Five’s main PSB service and S4C Digital would also be moved from their current position on Multiplex A to be carried on Multiplex 2.

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6 Section 243(7) of the Communications Act (2003) defines “relevant public service broadcaster” as any of the following:
   a. the holder of a licence to provide a Channel 3 service;
   b. C4C;
   c. the holder of a licence to provide Channel 5;
   d. the Welsh authority;
   e. the public teletext provider.
These moves were recommended in order to ensure that both services have universal coverage (or, in the case of S4C, universal coverage in Wales) after digital switchover.

9. The Government welcomes these proposals, in particular the way in which they recognise the distinct regulatory roles to be played by Ofcom and the BBC Trust. We believe that this method of reorganising the DTT platform demonstrates a commitment to spectrum efficiency, will deliver high quality new services to the UK viewer, and provides a clear path to future technological upgrades for the platform as a whole.

10. The horizontal nature of the DTT platform, and the large degree to which it is subject to regulation, mean that such a reorganisation is unlikely to occur without intervention. Ofcom’s proposals therefore envisage both a role for itself as the telecommunications regulator, and for the Secretary of State for Culture, Media & Sport as the Minister with responsibility for broadcasting.

11. Ofcom’s advice includes a recommendation to the Secretary of State that he uses his powers under the 2003 Act in order to effect certain aspects of the reorganisation which are outside the regulator’s remit. The Secretary of State has accepted this recommendation, and intends to lay before Parliament an order substantially in the form of the draft attached at Annex A. This consultation offers interested parties an opportunity to comment on the draft Order before it is introduced to Parliament.

The Secretary of State’s powers

12. The relevant section of the 2003 Act is section 243, which gives the Secretary of State power to make an order modifying, or making provision in place of, certain provisions in Part 1 of the Broadcasting Act 1996 in connection with television multiplex licences and digital television programme licences, and the grant and award of such licences. In particular, an order under section 243 may require OFCOM to include in a multiplex licence conditions for securing that the licence holder will reserve capacity for services provided by relevant public service broadcasters, in return for payments agreed with the broadcasters or (in default of agreement) determined by Ofcom.

13. The Secretary of State intends to use these powers in order to allow the following aspects of the reorganisation process to take place:

   a. Requiring Ofcom to conduct a comparative selection process for some of the upgraded capacity on Multiplex B, restricted to relevant PSBs, with applications being assessed (in particular) according to certain key criteria specified in the Order;

   b. Requiring Ofcom to vary the Multiplex B licence in such a way as to reserve this capacity for the provision of new services (if any) by those PSBs who were successful in the competition;

   c. Ensuring that if technological developments occur which mean the same services can in due course be provided within a smaller amount of capacity, the capacity freed up by this process would revert to BBC Free-to-View Ltd;

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7 Multiplex 2 is expected to reach 98.5% of the UK population following switchover, whereas Multiplex A is expected to reach around 90%.
8 See footnote 7.
d. Requiring Ofcom to license these new services either by an amendment to the Digital Replacement Licence held by the relevant PSB (if the new service is a simulcast of the existing PSB service), or by the issuing of a new Public Service Digital Programme Licence (if the new service is significantly different);

e. Requiring Ofcom to vary the Multiplex 2 licence so as to reserve capacity for Channel Five, and for S4C in Wales, respectively.

f. Requiring Ofcom to vary the Multiplex A licence to ensure that the capacity vacated on that multiplex by Five and S4C reverts to the multiplex operator, SDN Ltd.

Changes to Ofcom’s original proposal

14. It is worth noting one key element of the draft Order which is different from Ofcom’s original proposal. The comparative selection process will no longer allocate capacity as measured in ‘thirds’ and ‘quarters’, but instead each successful applicant will be reserved ‘capacity sufficient for the broadcasting of a high definition service’. This means that it is envisaged that the capacity will now be allocated in the following manner:

a. **Capacity sufficient for two HD television services** will be allocated by Ofcom following a comparative selection process, with applications for the capacity being limited to the relevant public service broadcasters, and assessed on the criteria listed in paragraph 7;

b. **The remaining capacity – which must be sufficient for at least one further HD television service** – will remain in the control of BBC Free-to-View Ltd;

c. **Any capacity freed up in the future** as a result of more technical developments will revert to the multiplex operator;

d. Eventually, when there is capacity sufficient for four HD television services on Multiplex B, Ofcom can conduct another comparative selection process along the lines of the first and allocate a **third stream** to a relevant public service broadcaster.

Limitations to the order

15. Government is of the view that this order can be used only to reserve capacity for the relevant public service broadcasters, and not for:

a. The BBC;

b. Teilifís na Gaeilge (TG4);

c. The Gaelic Digital Service (GDS);

d. Any commercial, non-PSB broadcaster.

16. Ofcom’s proposals involve one BBC service being carried on Multiplex 2 throughout the UK. Although such carriage cannot be guaranteed within this order, Ofcom set out in their statement that “the reorganisation should proceed on the basis that ... Channel 4 should
carry the displaced BBC service (from Multiplex B) on its half of Multiplex 2” [paragraph 5.25].

17. Ofcom also envisages TG4 being carried throughout Northern Ireland on Multiplex 2. Although, as above, such a reservation is outside the bounds of this particular order, the Government would like to stress that we remain committed to the provision of this service in Northern Ireland, as stated in the Good Friday Agreement9. We will continue to work on ensuring that this service is available in digital format from switchover in Northern Ireland in 2012.

18. The BBC Trust has agreed to reconsider the provision of the Gaelic Digital Service on the DTT platform in 2010. If the Trust decides that the service should be provided on this platform at that time, then we will work with Ofcom as necessary to help secure arrangements for carriage.

Conclusion

19. We therefore believe that the draft Television Multiplex Services (Reservation of Digital Capacity) Order enables Ofcom and the BBC Trust to fulfil their respective roles in carrying out Ofcom’s proposals to upgrade the DTT platform, and that these proposals themselves are consistent with the Government’s policy to ensure more efficient use of spectrum in order to provide the best possible free-to-air television services to UK viewers. A more detailed commentary on each article of the order is contained within the following section.

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9 “The British Government will in particular in relation to the Irish language, where appropriate and where people so desire it ... explore urgently with the relevant British authorities, and in co-operation with the Irish broadcasting authorities, the scope for achieving more widespread availability of Teilifís na Gaeilge in Northern Ireland”. 

SECTION 3: 
COMMENTARY ON THE ORDER

1. **Article 1** formally specifies the title and the commencement date. It is anticipated that the Order, if made, will come into force in early summer. Since section 243 has been extended (with modifications) to the Channel Islands and the Isle of Man, the Order applies there, too.

2. **Article 2** defines certain key terms used in the Order and contains other provisions to aid interpretation and allow the drafting to be shortened in places. Note that expressions having a particular meaning in the Communications Act 2003 have the same meaning in the Order.

3. **Article 3** concerns the competition that Ofcom must hold to select the relevant public service broadcasters which will be awarded capacity on Multiplex B. The broadcasters which are eligible to compete are—
   a. the holder of a licence to provide a Channel 3 service;
   b. the Channel 4 Television Corporation (“C4C”);
   c. the holder of a licence to provide Channel 5;
   d. the Welsh Authority;
   e. the public teletext provider.

4. The competition will be initiated by the publication of a notice under paragraph (2) which will contain the information mentioned in paragraph (3) and invite applications for capacity from relevant public service broadcasters. The notice must be published within six months of the commencement of the Order (if paragraph (12) is satisfied: see below). In particular, the notice must set out—
   - details of the capacity that will be made available;
   - the kinds of services which Ofcom consider should be broadcast on that capacity; and
   - the application fee and closing date.

5. Applications must comply with paragraph (4). In particular they must—
   - give details of the services proposed to be provided by the applicant, and an explanation of why they will promote the objectives in paragraph (8) (see below); and
   - give details of the applicant’s proposals for promoting take-up by the public of equipment capable of receiving DVB-T2 and MPEG4 services.

6. Because of the nature of Channel 3 – which is a nationwide service organised on the basis of regional licensees and one national licensee – any application by a Channel 3 licence holder must be supported by at least 12 others (i.e. a total of at least 13). By virtue of paragraph

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10 Section 243 of the 2003 Act were extended (with modifications) to Guernsey, by article 6 of and paragraph 44 of Schedule 1 to SI 2003/3195; to the Isle of Man by article 6 of SI 2003/3198; and (with modifications) to Jersey by article 6 of, and paragraph 44 of Schedule 1 to, SI 2003/3197.

11 Hence, for example, capacity is in places described as extending to “the British Islands” which, by virtue of Schedule 1 to the Interpretation Act 1978, means the UK, the Channel Islands and the Isle of Man.

12 For example, “OFCOM”, “digital television programme service”; “television multiplex service”, “relevant public service broadcaster”, “Channel 3”, “Channel 4” and “C4C”, “Channel 5” and the “Welsh Authority”.

13 This does not need to be stated in the Order because section 11 of the Interpretation Act 1978 has this effect.

14 2003 Act, section 243(7).
(5), if the Channel 3 application is successful each Channel 3 applicant will be licensed to use the capacity (see below).

7. Paragraph (8) specifies the key criteria that Ofcom must have regard to when deciding which applicants (if any) have been successful in their bids. They must have regard, in particular, to the extent to which the proposed services appear to—

- promote the efficient use of the radio spectrum, paying particular regard to how the content proposed to be included in those services would be likely to encourage members of the public to buy suitable reception equipment;
- contribute to the fulfilment of the purposes of public service television broadcasting (consistently with section 264 of the Communications Act 2003); and
- contribute to enhancing or maintaining the range and diversity of high quality DTT services.

8. Ofcom does not have to award capacity as a result of the competition, and may, for example, decide not to do so if the quality of the bids is inadequate: see paragraph (10). But if (as is expected) they award capacity, they must publicise that fact and either grant a “public service digital programme licence” (see articles 5, 6 and 7) or make provision in the successful bidder’s main public service licence (if applicable) for a simulcast of its existing service: paragraph (9).

9. Ofcom may repeat the competition, subject to observing the limits on reserving capacity contained in article 4. This facility is expected to be used to award the third tranche of capacity (see above) but could be used if, for example, insufficient bids of an adequate quality are received in the initial competition. According to paragraph (12) (and article 4(2)), no competition is to be held for the first two tranches unless (by the time the award would take effect) there would be capacity on Multiplex B for at least three high definition services; and no competition is to be held for the third tranche unless (by that time) there would be capacity for at least four such services.

10. Article 4 requires Ofcom to vary the Multiplex B licence in order to reserve capacity for the successful bidders. Each broadcaster must pay the Multiplex B licence holder for that capacity; if they cannot agree on terms, Ofcom may determine them: paragraph (1). No capacity can be reserved on Multiplex B until at least two tranches have been awarded: see below. Nor can it be reserved unless, as regards the first two tranches, by the time the award would take effect there would be capacity for at least three high definition services, or as regards the third tranche, unless (by that time) there would be capacity for at least four such services: paragraph (2). In other words, in each case, there must be capacity allowing for at least one other service to be chosen by the multiplex operator in addition to those occupying capacity awarded by OFCOM.

11. Paragraph (3) prevents Ofcom from reserving initially more than the digital capacity that is sufficient to allow the broadcasting of two high definition television services. Later, when expected improvements in compression technology allow Ofcom to conclude that at least four high definition services can be carried on Multiplex B, they can hold a further competition to award a third tranche. Any question as to the amount of capacity that is “sufficient” for a high definition service may be referred to Ofcom: paragraph (9).

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As defined in article 2(1).

See article 4(9).
12. First priority must be given to the carriage of the services promised in the successful applicants’ application, but subject to that, Ofcom may permit other services to be carried: paragraph (4). Capacity will be reserved only for so long as the successful bidder remains a relevant public service broadcaster (see also article 8(2)) and for so long as any Channel 3 services are supported by at least 13 Channel 3 licence holders: paragraph (5). Flexibility is retained to reserve capacity only for part of a day – so that, for example, a bidder could provide a peak-time high definition service but choice of services would revert to the Multiplex B licence holder at other times: paragraph (6).

13. As noted above, Ofcom cannot vary the Multiplex B licence to reserve capacity for relevant public service broadcasters until they have awarded at least two tranches of capacity: paragraph (7)(a). When the second tranche has been filled, they must vary that licence within 12 months: that may happen after the first competition, after a second competition during the initial period (see above) or at the same time as the third tranche is awarded: see paragraph (8). If (as expected) the third tranche is awarded later than the first two, Ofcom must again vary the licence, within 12 months: paragraphs (7)(b) and (8).

14. Articles 5 to 7 make provision for a new kind of digital programme licence to be held by a relevant public service broadcaster who successfully bids for capacity on the basis of a new service that is not a simulcast of an existing one. This is to be called a “public service digital programme licence”. Generally, a winning bidder is entitled to a licence, although Ofcom can refuse if they consider that the applicant is not a fit and proper person to hold it or if the ownership rules would be broken thereby: see the modifications to section 19 of the Broadcasting Act 1996 made by article 6(3) to (5). A public service digital programme licence must, in particular, contain conditions requiring actual provision of the services promised in the applicant’s successful bid: article 7(3).

15. Articles 8 to 10 make knock-on changes to Multiplex 2 and Multiplex A. Ofcom’s duty to vary those licences arises only once they have made the changes to Multiplex B required by article 4. Ofcom must vary the Multiplex 2 licence so that—

- Channel Five must be accommodated within the capacity currently reserved for Channel 3 services (i.e. within a segment of Channel 3’s 48.5% of the total);
- S4C Digital (or S4C Digidol) must in Wales be accommodated within the capacity currently reserved for C4C services (i.e. within a segment of C4C’s 48.5% of the total); and
- the public teletext provider retains its current 3%.

Any question as to the amount of capacity that is “sufficient” for a service may be referred to Ofcom: article 8(5).

16. Reserved capacity not required for the main services may, with Ofcom’s consent, be used for BBC services, Welsh Authority services or services provided by—

- Channel 3 licence holders (or a company controlled by holders of such licences);
- C4C or a C4C company;
- an S4C company, or
- a BBC company.

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17 In particular, holds a Channel 3 or Channel 5 licence: as statutory corporations, neither C4C nor the Welsh Authority can relinquish their public service duties or status short of new legislation.
18 See sections 18 and 19 of the 1996 Act.
19 That is, each Channel 3 service (regional or national), Channel 4, Five and S4C Digital.
17. As a consequence of the changes to Multiplex 2, by virtue of articles 9 and 10, Five and the Welsh Authority each lose a corresponding amount of capacity on Multiplex A, i.e. the equivalent of one video stream. Any question as to the amount of capacity that is “sufficient” for a service may be referred to Ofcom: articles 9(3) and 10(3).

18. Article 11 makes consequential modifications in section 12 of the Broadcasting Act 1996. It means that the rule that multiplex operators may not favour one broadcaster over another in contracting to provide capacity does not apply to the extent that the Order overrides it by requiring capacity to be reserved. Also, the licence holder’s consent is not required to changes made under the Order, where section 12(2) would otherwise require such consent.

19. Article 12 confirms that capacity that is not reserved can be used as the multiplex licence holder chooses, subject to the terms of the licence.

20. Article 13 provides that, where reserved capacity is defined by reference to what is “sufficient” for broadcasting a number of high or standard definition television services, then in determining any question arising about how much capacity is “sufficient”, regard is to be had to the amount of capacity actually being used by the multiplex operator for broadcasting any such service on unreserved capacity.
**SECTION 4: RESPONDING TO THIS CONSULTATION**

**RESPONSE FORM**

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If you are replying on behalf of a representative group please summarise the people or organisations your group represents:

Tick this box if you are requesting non-disclosure of your response: ___________

Consultees are invited to set out their response in the box below. All responses must be received by **5.00pm on Friday 9th May 2008**.