# Reviews of the financial terms for the Channel 3 and Channel 5 licences

Statement

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## Section 1

# Executive summary

1.1 In July 2009, the Secretary of State for Culture, Media and Sport brought into effect The Communications Act 2003 (Commencement No. 4) Order 2009[1]. One of the effects of this order was that the holders of Channel 3 and Channel 5 licences may apply for a review of the financial terms attached to their digital replacement licences.

1.2 The earliest date from which revised terms could apply is 1 January 2010. In order for this to happen, licensees needed to apply for a review before the end of 2009. Nine licensees applied to Ofcom for a review of their terms before that date and therefore Ofcom must now undertake a review of the terms covering the period of the licence running from 1 January 2010 until expiry at the end of 2014.

1.3 For each licence in respect of which an application has been made, the legislation requires Ofcom to determine two different types of payment. The first is a percentage of the licensee's qualifying revenue and the second is a fixed annual cash payment. To assess the amount that is appropriate for the annual cash payment, Ofcom is required to determine the amount which, in its opinion, would have been the cash bid of the licence holder were the licence being granted afresh in a competitive auction process.[2]

1.4 In October, we issued a consultation on the approach that we should take to the reviews. The last time such reviews were undertaken was in 2005 and in the consultation we set out that overall we considered the approach taken then remains appropriate, subject to a small number of adjustments. We received four responses to the consultation, all of which were confidential. This statement sets out Ofcom's methodology having considered the responses received and gives more detail of the expected timetable for completion of the reviews.

1.5 Our objectives for these reviews are to determine a fair and reasonable value for each licence which is in accordance with the statutory requirements and to set new financial terms according to a fair and objective process. To the extent possible, the process should also allow us to set terms that are reasonable within the context of the current market environment and that will continue to be reasonable for the period of the licence. This means that we need to take into account changes in the market and regulatory environment that will impact the financial terms for each licence.

1.6 The key elements of the methodology are as follows:

- The methodology acknowledges that an incumbent licence holder's bid for a licence in a competitive auction process would be the minimum amount necessary to win the auction. This amount might be different from the full value of the licence to the incumbent themselves. For this reason, the valuation of each licence is based on the value of the rights and obligations to a new entrant, since it is this valuation that would determine the amount that the incumbent would have to bid in order to retain the licence at auction.

[1] This is available at http://www.opsi.gov.uk/si/si2009/uksi_20092130_en_1

[2] Section 227(3) of the Communications Act 2003 in relation to an application made in accordance with section 15 of the Broadcasting Act 1990 (as amended)

- Where rights and obligations are replicable in the market, then our methodology assumes that the new entrant will incorporate market values in determining the value of the licence. Where this is not possible, then a more detailed modelling approach will be used to estimate the new entrant's valuation for the right or obligation.

- A new entrant would also face entry costs associated with taking up the licence which the incumbent would not incur, and these are also factored in to the new entrant's valuation.

- Each licence is assumed to be offered separately in the auction. This means that the new entrant would not assume the same operating efficiencies that are obtained by the current ownership structure and joint operating of multiple licences.

- Together, these items are captured in a discounted cash flow analysis which, in turn, will inform Ofcom's decision as to the PQR and the amount which, in Ofcom's opinion, would have been the cash bid of the incumbent in an auction.

1.7 This statement also sets out the proposed timetable for review. The valuation exercise requires a considerable volume of data submissions from licence holders to inform Ofcom's decision. Ofcom is working with licensees in order to develop the format and timing for data submissions which are expected to be provided to Ofcom in final form in May.

1.8 Once these submissions have been received, Ofcom will review them and seek further evidence as is necessary in order to arrive at what we consider to be a fair and reasonable determination of financial terms for the remaining period of the licence. We expect to make our determination of the revised terms no later than September 2010 although, if it is possible to do so, we will seek to conclude the review sooner. Once the licensees have received the notification setting out the revised terms, they have a period of 30 days during which they can accept or reject the revised terms.

## Section 2

# Legal framework

2.1 On 27 July 2009, the Secretary of State for Culture, Media and Sport brought into effect The Communications Act 2003 (Commencement No. 4) Order 2009[3]. The effect of this order is that s272 and 273 of the Communications Act 2003 ('the Act') came into force on 31st January 2010.

2.2 These sections of the Act set out "must offer" obligations in relation to networks and satellite services. The purpose of these obligations is to secure that each relevant public service channel is offered as available in digital form on every network including every satellite service, is broadcast or distributed on those networks without charge and is available for reception by as many members of its intended audience as practicable.

2.3 Section 226 (2) of the Act states:

> The holder of a licence in which conditions mentioned in section 272, 273 or 274 will fall to be included when the order comes into force may apply to OFCOM, at any time in the review period, for a review of the financial terms on which the licence is held.

2.4 This means that an effect of the Communications Act 2003 (Commencement No. 4) Order 2009 is that the holders of each Channel 3 licence, the Channel 5 licence and the Public Teletext licence are entitled to apply during the "review period" for a review of the financial terms attached to each of their digital replacement licences. The review period is defined in section 226(3) as beginning with the day on which the Order is made and ending with the time at which, by virtue of the Order, the "must offer" obligations in the legislation come into force. This date is set under the order as 31 January 2010[4].

2.5 The financial terms attached to the Channel 3 and Channel 5 licences were last reviewed by Ofcom in 2005, following applications under s225 of the Act. The revised terms were backdated so that they were effective from 1 January 2005.[5]

### Applications made not later than 31 December 2009 under section 226 of the Act

2.6 Under section 227 of the Act, following an application for a review, Ofcom must determine a fixed annual cash amount (the "cash bid") to be paid for the licence and a percentage of qualifying revenue (the "PQR") payable for each remaining year of the licence period. The Act does not set out any process that Ofcom must follow in order to determine the PQR. As regards the annual cash sum, however, the Act requires Ofcom to determine the amount that, in its opinion, would have been the cash bid of the licence holder were the licence being granted afresh on an application being made in a competitive tender process under section 15 of the Broadcasting Act

[3] This is available at http://www.opsi.gov.uk/si/si2009/uksi_20092130_en_1
[4] There is no current holder of the Public Teletext licence as the licence was revoked by Ofcom on 29 January 2010. Details of the revocation are available at http://www.ofcom.org.uk/tv/ifi/tvlicensing/pt/revocation_notice.pdf
[5] A document setting out the revised terms and the background to those reviews is available at http://www.ofcom.org.uk/consult/condocs/channel3_consultation/ch3ch5fin/

1990 ('the 1990 Act'). This means that as regards the cash bid element of the financial terms Ofcom is required, in practice, to reproduce the effects of a hypothetical auction of the licences.

2.7 Ofcom is required to determine the amount of the fixed annual cash amount from the first calendar year falling wholly or partly within the period under review beginning after the application date; and the percentage of qualifying revenue in respect of each accounting period falling within the period under review. The period under review is so much of the period for which the licence will (if not renewed) continue in force after the application date. The time from which the new payments would take effect is therefore dependent on when the application for review is made and what the relevant accounting period of the licensee is.

2.8 By way of example, if the licensee applied for a review before the end of the 2009 calendar year, the revised cash bid would take effect from 1 January 2010. If the licensee's annual accounting period runs consistent with the calendar year (which we understand is the case for all Channel 3 and Channel 5 licensees), then the revised cash bid would also take effect from 1 January 2010.

2.9 The new financial terms would be set for the period up to the expiry of the licence. Since under section 224 of the Act, the 'initial expiry date' of each PSB licence is set as 31 December 2014, this means that the period under review would be 1 January 2010 to 31 December 2014 (a 5 year period).

2.10 Accordingly, we anticipated that if licensees wished to request a review of their financial terms to come into effect from the start of 2010, an application for such a review would need to be received by Ofcom by no later than 31 December 2009. Ofcom would then conduct a review of the terms and determine the new cash bid and PQR to apply from 1 January 2010.

2.11 In accordance with section 228 of the Act, Ofcom would then be required, as soon as reasonably practicable after making a determination of the new financial terms, to notify each applicant of its determination together with any licence modifications that are required to give effect to the determination, a date by which the applicant must notify Ofcom whether or not he accepts the determination and modifications and a subsequent date by which the applicant's licence would cease to have effect if the applicant does not accept the determination and modifications. If the applicant notifies acceptance of the determination, then the new licence would take effect with the modifications set out in Ofcom's notification and backdated to take effect from 1 January 2010 and any adjustments would be made to give effect to the modifications, in respect of any payments already made for periods affected by those modifications.

2.12 By 31 December 2009 nine licensees had applied to Ofcom requesting a review of their financial terms. These were:

- Five – Channel 5 Broadcasting Limited
- Ulster – UTV plc
- Anglia – ITV plc
- Central – ITV plc
- Carlton (London Weekday) – ITV plc

- Granada – ITV plc
- LWT (London Weekend) – ITV plc
- Meridian – ITV plc
- Yorkshire – ITV plc

## Applications made between 1 January 2010 and 31 January 2010 under section 226 of the Act

2.13 Were licensees not to apply for a review of financial terms under section 226 of the Act by the end of the 2009 calendar year, then it would still have been open to them to apply for a review under section 226 of the Act but they would have had to do so not later than January 31st 2010. In that case, the review would then have determined a new cash bid and PQR payable which would apply from 1 January 2011.

2.14 In fact, no applications requesting a review of their financial terms were received by Ofcom during the period 1 January 2010 and 31 January 2010.

## Applications made under section 225 of the Act

2.15 Under the Act, it is also possible to apply for a review of the financial terms of these licences under section 225 which provides the opportunity to apply for a review of financial terms four years prior to the 'initial expiry date' (i.e. from 31 December 2010). However, in that case, any determination by Ofcom could not take effect before 1 January 2011, the beginning of the next calendar year and accounting period,[6] so the new financial terms would only cover the period 1 January 2011 to 31 December 2014.

2.16 However, where licensees applied for a determination under section 226 as a consequence of the must offer obligations coming into force, then the Act prevents them applying for a further review under section 225 whilst the application under section 226 is pending or less than 12 months after Ofcom's determination of new financial terms has been made.

## Impact assessment

2.17 As is set out in this document, the Communications Act 2003 requires that where an application for review under section 226 is made to it, Ofcom must carry out its review of financial terms as if the licence in each case were being granted afresh in accordance with section 15 of the Broadcasting Act 1990 (i.e.: on the basis of a competitive tender.) It is a statutory requirement that Ofcom should carry out a review on this basis and a separate impact assessment on the statutory requirement is not therefore necessary or appropriate.

2.18 Ofcom has consulted on its proposed approach to such a review within the statutory framework. This statement sets out our conclusions on how Ofcom should approach the review, having carefully considered the responses to our consultation. In the consultation we set out those factors which we proposed to take into account in carrying out a review. We have updated these, having considered the responses received to our consultation and have attempted to assess their likely impact. Where

[6] This is assuming that an application was made on the 31 December itself – if not the determination could not take effect until 2012

there are current uncertainties, we invited views on what would constitute an appropriate approach for Ofcom to take in considering them. The document as a whole, but Section 3 in particular, therefore constitutes our impact assessment.

2.19 Since the decisions in this document do not have any impact on equality issues, no impact assessment in terms of equality including disability equality, racial equality or equality in Northern Ireland is necessary.

## Section 3

# Approach to the review

## Introduction

3.1 This section sets out our approach towards setting the PQR and determining the cash bid when reviewing the financial terms of licensees which have applied for a review of their financial terms by 31 December 2009.

3.2 We consider that the methodology used by Ofcom in 2005 remains broadly appropriate, with some modifications that are set out in this section. We provide an overview of the methodology in this section.

3.3 There have been a number of regulatory and market developments since the last time the Channel 3 and Channel 5 financial terms were reviewed in 2005. These will impact the outcome of any review we undertake.

## Ofcom's statutory task

3.4 Section 227 of the Act sets out the statutory framework for re-determining the licence payments under a digital replacement licence following an application made by the licensee for a review of its financial terms. Since under section 224 of the Act, the 'initial expiry date' of each PSB licence is set as 31 December 2014, this means that the period under review is 1 January 2010 to 31 December 2014 (a 5 year period). Ofcom must determine two elements:

a) a fixed annual cash amount (the "cash bid") to be paid for the licence (i.e. the amount the licence holder would have bid were the licence being granted afresh in a competitive tender under section 15 of the Broadcasting Act 1990 (the "1990 Act")); and

b) the percentage of qualifying revenue ("PQR") as determined by Ofcom to be payable for each year of the licence. The PQR can vary from year to year.

3.5 In a competitive tender application under section 15 of the 1990 Act, Ofcom is required to set out the PQR in the notice inviting licence applications. The PQR would therefore be determined before bids are made for the cash bid element. No guidance is given in the Act as to how Ofcom should set the PQR or indeed the relative sizes of the PQR payments and cash sum. The definition of qualifying revenue is set out in section 19(2) of the 1990 Act and Ofcom is simply required to determine a percentage of it which shall be payable to the Treasury.

3.6 As regards the amount of the cash bid, however, section 227(3)(a) requires Ofcom to reach its decision in accordance with section 15 of the 1990 Act. To assess this amount Ofcom must in effect carry out a hypothetical auction of the licence as though it were being granted afresh.

3.7 Ofcom therefore has a level of discretion in relation to setting the PQR that it does not have in respect of the cash bid. However, Ofcom has taken the view that to ensure a consistent approach to setting both the PQR and the cash bid it is appropriate to conduct a single economic valuation according to common principles. This valuation is intended to meet the requirements of the Act in relation to determining the amount that, in Ofcom's opinion, would have been the cash bid, and also to provide a robust basis for informing Ofcom's decision as to the appropriate level of the PQR, taking into account both the objectives and the uncertainties discussed in this document.

## Ofcom's objectives

3.8 For the purposes of the 2005 reviews, we established a methodology to value each licence so that we could decide on the PQR and determine the cash bid. That methodology was presented in a statement published in October 2004 (the "October 2004 statement"). It can be viewed in full at the following address:

http://www.ofcom.org.uk/consult/condocs/channel3_consultation/c3mstatement.pdf

3.9 In that statement, we set out our objectives for the review as follows:

> Ofcom's objectives for these reviews of financial terms are to determine a fair and reasonable value for each licence, and to set new financial terms according to a fair and objective process. This is necessary in order to ensure that the taxpayer gets a proper return for these licences and, in particular, the right to use scarce spectrum.
>
> To the extent possible, the process should also allow Ofcom to set terms that are reasonable within the context of the current market environment and that will continue to be reasonable for the period of the licence.
>
> *Source: Paragraphs 2.7 – 2.8 of the October 2004 statement*

3.10 We consider that the same objectives are appropriate in reviewing the applications for a review as a result of the "must offer" conditions coming into effect.

## Valuation methodology

3.11 The methodology set out in the 2004 statement was established to inform Ofcom's decision when deciding on the PQR and determining the annual cash sum for each licence. Ofcom has decided to use a similar approach to the current reviews and we set out below our methodology which has been informed by the four confidential responses received, identifying those areas where there are changes from the approach taken in the last review.

3.12 As was the case during the 2005 reviews, the aim of the methodology is to set fair and reasonable terms such that they recover, so far as possible, the combined value of the rights and obligations over the duration of the licence.

## Overarching principles

3.13 Each licence should be valued as a whole, although for the purposes of explanation and analysis, the rights and obligations can be grouped into three broad categories: analogue rights, digital terrestrial rights and public service broadcasting ("PSB") obligations. Likewise, although rights and obligations are considered separately, where possible the valuation should also seek to take into account any significant consequential effect that the presence of one right or obligation has on another.

3.14 In principle, the value of a licence to any potential bidder would equal the additional profits that could be made as a result of the net effect of having all of the rights and obligations associated with holding the licence, over and above the profits that could be made via the next best alternative (i.e.: if they did not hold the licence.)

3.15 The identity of the potential bidder will have a bearing on the value of the licence to that bidder, as it determines the counterfactual to be considered when estimating the additional profits that bidder could make as a result of holding the licence. Ofcom considers that alternative bidders with the highest valuations are likely to be existing television companies, either from the UK or abroad that wish to have a significant presence in the UK free-to-air market.

3.16 In general, if a right similar to one associated with the licence could be acquired through another source the market value of the right would be equal to the cost savings to the licence holder from not having to obtain the right elsewhere. If the right could not be replicated elsewhere then the value would equal the total financial benefit to the licensee of having the right. Similarly, the cost of an obligation would be equal to the extra cost associated with meeting the obligation, net of any benefit to the licensee.

## Circumstances of the hypothetical auction

3.17 The hypothetical auction to assess the overall value of the licence would replicate circumstances as set out below.

3.18 The auction would be designed, within the framework of the legislation, to recover the maximum possible value consistent with the requirement that the successful bidder is also able to fulfil programming and other obligations associated with the licence.

3.19 Each licence would be offered individually on a non contingent basis in a single round, sealed bid auction. This is because, as set out in the October 2004 statement, for the purposes of conducting a hypothetical auction, we consider that the statutory framework makes it infeasible to assume that there is a multiple contingent bid auction.[7]

3.20 The amount the incumbent would bid in a competitive auction would be the minimum required to beat the second-highest bidder, and as such would not necessarily represent the maximum amount the incumbent would be willing to pay. The difference between the value of the licence to the incumbent and the value of the licence to the second-highest bidder should equal approximately the cost of entry.

3.21 In order to determine the amount of the second-highest bid in an auction, Ofcom would estimate the net present value of the licence (efficiently operated) as represented by the expected value to the incumbent and then adjust this value to reflect the additional costs (e.g. start-up costs) that a new entrant might incur.

3.22 The 2005 reviews resulted in a reduction in the amounts payable for Channel 3 and Channel 5 licences[8]. This reflected a number of changes in the market environment since the previous reviews. In particular, it was reflective of a significant reduction in

[7] Additionally, several licences already pay nominal levels of additional payments and therefore might be considered unlikely to seek a review of those terms during the current licence period; where such licences do not seek a review of financial terms, they are not participating in the hypothetical auction.
[8] A document setting out the revised terms and the background to those reviews is available at http://www.ofcom.org.uk/consult/condocs/channel3_consultation/ch3ch5fin/

value associated with what was considered to be the principal right attached to the licence – the privileged access to scarce analogue spectrum.

3.23 For five of the licences considered in the last review, we set the PQR at zero and the cash bid at a nominal sum of £10,000. This was because our analysis was that there was a sound case for concluding that few, if any, bidders would be prepared to bid for these licences given the rights and obligations attached to the licence and given the context of the market environment. In our opinion, therefore, the incumbent licensees would be likely to retain the licence by posting a nominal bid.

## Length of the licence and licence viability

3.24 One respondent to the consultation believed that it would be difficult for a new entrant to make a commercial return in a five year period and that it was possible that there would be no competing bidders in an auction for any of the licences.

3.25 Ofcom considers that the shorter the licence duration, the more difficult it may be for a new entrant to justify a bid on the basis of expected returns. This is because a shorter licence may mean that there is less opportunity for an operator of the licence to earn positive cash flows that are sufficient to offset the start up costs incurred at the beginning of the licence period and incorporated into the Net Present Value calculation.

3.26 Ofcom agrees with the respondent that there may be no competing bidders in an auction if the valuation shows that positive cash flows are insufficient to offset start up costs in the NPV calculation. However, we do not consider that it would be appropriate to assume by default that there would be no competing bidders for any of the licences as suggested by the respondent.

3.27 Rather, the appropriate starting point for Ofcom’s consideration of the valuation should be that there would be a presumption of value in the licence which would attract competing bidders except where our overall assessment of the licence is such that it suggests there would be unlikely to be any bidders other than the incumbent. This assessment will be informed by the overall valuation of the cash flows associated with the licence, the duration of those cash flows, the amount of start up costs and other factors which might impact the viability of the licence for a new entrant, including the market environment.

3.28 As set out previously, in the 2005 reviews, there were several licences where our analysis was that there was a sound case for concluding that few, if any, bidders would be prepared to bid for the licences and in our opinion, therefore, the incumbent licensees would be likely to retain the licence by posting a nominal bid. We therefore consider that such outcomes are capable of being reflected within the context of the methodology outlined.

3.29 Another respondent thought that it would be illogical to place a value of zero on any of the licences.

3.30 As we have set out above the aim of the methodology is to inform Ofcom’s determination of financial terms for the licence which, in turn, should be based upon the amount that a licensee would be prepared to pay for the licence at an auction.

3.31 Ofcom’s determination of financial terms does not, therefore, reflect the value of the licence to the licensee. An outcome, such as that in the 2005 reviews, which reduces payments on a licence to a nominal sum does not mean that Ofcom has placed a value of zero on the licence. It does, however, reflect a view that the incumbent licensee would be likely to retain the licence at auction through posting a nominal bid.

## The market environment

3.32 In our consultation we said that since the 2005 reviews, there had been a number of changes to the market environment which would impact the value of the licence and have a bearing on our decision about the PQR payable and the amount that, in Ofcom's opinion, would be the cash bid for the licence if it were being granted afresh in an auction. Two such developments are the further advance of digital broadcasting and the changes in the UK TV advertising market.

3.33 Digital penetration and the proportion of viewing through digital signals have increased markedly since the last review, whilst the number of homes using analogue as their primary means of viewing has declined. Furthermore, the take up of digital broadcasting services has been faster than was anticipated in our 2005 review.

3.34 With the phasing out of the analogue signal in the period to 2012, the privileged access to analogue spectrum associated with the licences, and previously seen as the primary driver of value for the licences, will cease within a few years.

3.35 Television advertising revenues have declined since 2005, particularly on free to air channels that have an analogue presence[9]. Advertising revenue enjoyed on the licensed services today is lower in aggregate than was anticipated in our 2005 review. Furthermore, given the increased levels of digital adoption, less of this revenue appears to be earned as a result of analogue viewing than was expected at the time of the 2005 review.

3.36 These developments have triggered cost reductions among the licensees in recent years. This means that the level of several costs, such as the level of costs incurred in programming budgets, also appear to be lower than were anticipated in the 2005 review.

3.37 Generally, however, these cost reductions do not appear to have been sufficient, in the context of a lower revenue base, for profitability to have been maintained at either historic levels or at levels that would have been consistent with those anticipated in the 2005 review. Overall, these developments may therefore contribute to a reduction in the level of profits that could reasonably be expected to be earned from the licences, lowering their value to potential bidders.

## Respondents' views on the market environment

3.38 In our consultation we asked what other features of the market environment Ofcom should consider when reviewing the financial terms.

3.39 Respondents broadly agreed with Ofcom's view that the market environment had changed since 2005 but several respondents made specific comments on the advertising market.

3.40 One respondent said that the advertising recession was not anticipated in the previous review and Ofcom should be cautious when making assumptions about the

[9] See, for example, figure 2.14 of The Communications Market Report 2009. http://www.ofcom.org.uk/research/cm/cmr09/CMRMain_2.pdf

future growth of advertising. Another respondent said that in relation to advertising, the recession had exacerbated the downward trend in prices and a bidder would assess the extent to which this would continue, especially if on demand viewing increased significantly. In addition, not only is the analogue audience much smaller than in 2005, there are also fewer 16-34 year olds watching on analogue which means the audience is less valuable to advertisers.

3.41 One respondent also suggested that a potential bidder may not have its own sales house and it would therefore need to sell advertising via a third party. This could lead to less revenue and higher sales costs.

3.42 One respondent also argued that Ofcom should consider licence-specific factors when reviewing the licences, for example factors related to geography, economics and digital penetration.

3.43 Ofcom has considered these points carefully and concluded that the forward looking expectations of the existing licensee provide a strong indicator of the future anticipated advertising revenues that could be generated by a licence, taking into account many of the features that are associated with the licence and current expectations about future outcomes.

3.44 Where possible, Ofcom will therefore seek to utilise such forecasts in determining the licence valuation and will place particular emphasis on forecasts that are prepared and utilised for business planning purposes, such as long term business plans. We will also seek to cross check these forecasts against external forecasts in order take a reasonable view of the amount of advertising that a bidder could expect to generate on the licensed service.

3.45 Taken together, Ofcom considers that these approaches mean that the forecast advertising revenues utilised in its valuation will be capable of offering a reasonable reflection of future expectations about the amount of revenue and its future trends. Where possible, Ofcom will also use this approach in assessing likely future levels of costs. Because we will value each licence individually, we also believe that this offers sufficient scope to take account of licence-specific factors.

3.46 Ofcom does not consider it would be appropriate to take a view of future forecasts which is systematically conservative; rather, it is appropriate for Ofcom to take into account a range of possible outcomes before judging what would be a reasonable overall assessment. This also means that Ofcom will be cautious about incorporating new sources of income or expenditure that depend upon uncertain external factors and we will need to consider carefully what a new entrant would reasonably incorporate into their forward looking assessment when considering a bid for the licence.

3.47 With respect to the cost of advertising sales, we consider that a new entrant would seek to minimise such costs. We will therefore take into account either the costs of an internal sales operation or a reasonable rate of commission that could be expected to be paid to a third party sales house, as would be efficient. Ofcom considers that internal advertising sales operations could be shared across a number of different services, including simulcasts of the licensed service on different platforms and would expect to apportion costs appropriately in view of this.

3.48 In order to determine a value for those elements of the licence which are explicitly modelled, Ofcom will need to project revenues and costs forward. Ofcom's view will therefore be informed by a number of sources, including:

- market reports and externally generated analysis of cost, revenue and technological trends;
- public policy developments and statements;
- findings from Ofcom's work and research in relevant and related fields;
- evidence presented by stakeholders, such as forward looking financial projections; and
- evidence required to be provided by stakeholders to Ofcom, including consideration of pre-existing business plans and forward looking projections which are relevant.

3.49 Ofcom considers that the most appropriate starting point for estimating revenues and costs is to consider that the new entrant would seek to operate the licence as efficiently as the existing licensee. Revenues and costs will, therefore, be estimated on what Ofcom considers is a basis consistent with the current licensee's business model. Where there are specific differences that would arise between the new entrant and the incumbent (such as, for example, start-up costs) then a reasonable estimate of these will be taken into account. Other adjustments will also be taken into account to ensure that the licence is valued on a "stand alone" basis, where these adjustments can be reasonably estimated.

## Regulatory developments

3.50 In our consultation, we highlighted that there have also been a number of regulatory developments that have occurred since 2005 which will impact the value of the licence and will have a bearing on our decision about the PQR payable and the amount that, in Ofcom's opinion, would be the cash bid for the licence if offered at auction.

3.51 In our consultation we said that there had been relaxations of the amount and type of PSB programming that the licensees are required to provide. In particular, the number of different regional news programmes required has been reduced, as has the required volume of non-news regional programming, providing cost savings to licensees and so increasing the viability of the licence.

3.52 The amount of digital terrestrial television capacity available to PSB licensees has also increased, providing them with access to high definition capacity which they would not be eligible for, absent ownership of the licence. Use of this capacity is itself subject to a number of further, specific regulatory requirements that are associated with it. Reorganisation of DTT spectrum has also given rise to further changes in the amount and type of capacity available to different licensees.

3.53 We said that many of the regulatory developments since 2005 have tended to reduce the cost of the PSB burden on licensees and have improved the profitability of the licence. The reduction in the PSB burden means that the licences could be expected to be more attractive to potential bidders than they would have been absent such changes.

## Respondents' views on regulatory developments

3.54 In our consultation we asked what other regulatory developments Ofcom should consider as part of its review.

3.55 One respondent said that while PSB requirements had fallen since 2005, this has had varying effects on different licences and Ofcom should take this into account. Ofcom considers that because the licences will be considered individually, the valuation is capable of reflecting such licence-specific factors.

3.56 In respect of the future costs associated with public service broadcasting obligations Ofcom will take a cautious view about future changes in PSB obligations. However, we will assume that neither the regulator nor licensee will engage in economically irrational behaviour; the valuation will therefore assume that PSB obligations will not be maintained at a level that makes holding the licence no longer commercially viable.

3.57 Another respondent said that Ofcom should assume that the current rules on advertising minutage will endure for the purposes of the valuation. As set out in 3.56, Ofcom will take a cautious approach to assuming future regulatory change. However, as set out in 3.118, Ofcom will take into account information that becomes available to it up to the point at which Ofcom makes its determination of financial terms. Accordingly, where possible, we will seek to reflect regulatory changes that are announced and reasonably certain in our consideration of financial terms.

## Valuation of analogue and digital rights

3.58 Rights will be valued at the lower of the value of those rights in use and the cost of acquiring those rights in the market. This reflects the view that a licensee would not pay more for the rights via a licence payment than it would need to pay for equivalent rights elsewhere

3.59 In practice, the analogue element of the licence should be valued by reference to the cash flows that can only be achieved by acquiring the licence, since there is no other way of acquiring rights to broadcast on analogue spectrum.

3.60 In order to forecast cash flows for the analogue service, expected costs and revenues that are common to the multiple platforms will be allocated across services on the basis of the viewing share expected to be achieved on each platform. The value of the analogue element of the licence should also reflect any causal link between holding the analogue licence and changes in the value of the licensee's business on any or all digital platforms. Likewise, start-up costs will also be apportioned across different platforms to reflect their value to each. Ofcom does not consider that a new entrant would necessarily replicate all existing assets owned by the incumbent license and may consider that leasing an asset for the duration of the licence would be preferable to purchasing it.

3.61 The value of the standard definition digital terrestrial television ("DTT") rights would be based on the costs of replicating those rights through purchase in the market. This is because those rights conferred by the licence can generally be substituted by equivalent rights acquired elsewhere. The cash flows of the DTT business are therefore not included in the valuation, except to the extent that there is a causal link as described above.

## Respondents' views on the valuation of analogue and digital rights

3.62 In relation to DTT rights, one respondent to the consultation said that Ofcom should take into account the determination of the cost of carriage for Five on Multiplex 2. As set out in 3.118, Ofcom will take into account information that becomes available to it up to the point at which Ofcom makes its determination of financial terms

3.63 Another respondent thought that Five's move to a PSB multiplex would benefit Five in terms of coverage and share of viewing, and negatively impact other licensees. Ofcom considers that the appropriate way to value DTT capacity remains an approach that is grounded in market valuations.

3.64 Access to high definition DTT capacity is available only as a consequence of holding the digital replacement licence. Therefore, the net cash flows expected to be derived as a result of access to this capacity during the remaining period of the licence would be included in the valuation of the licence.

3.65 Three respondents thought that HD was unlikely to have a positive benefit over the five year period of the licence.

3.66 The requirement to operate HD capacity is a right and an obligation which is attached to the licence. Relevant cash flows will therefore be included in the valuation. To determine the costs and benefits associated with HD capacity that should be included in the licence valuation, Ofcom will examine the existing business plans for licensees' HD operations for the period covered by the licence. These will be examined separately from other forecasts.

3.67 Where costs and revenues associated with the HD service are specific to the requirement of the licensed service, then they will be taken into account in the valuation. Where costs and revenues associated with the HD service are shared across multiple platforms, then they will be apportioned between the licensed service and other services based on a reasonable estimate of their future share of viewing.

### Digital satellite, cable services and production businesses

3.68 Digital satellite and cable services are not part of the licensed service. They are therefore not included in the valuation except to the extent that there is a causal link to profitability.

3.69 The cash flows associated with an associated production business are not included in the valuation of the licence as they do not arise as a result of owning the licence. Likewise, the costs of production facilities that do not arise as a necessary consequence of holding the licence would be excluded from the valuation.

### The right to an appropriate degree of prominence on electronic programme guides

3.70 The licence carries with it the right to an appropriate degree of prominence on electronic programme guides. In our consultation we said that, as in the 2005 review, Ofcom considers that this is likely to carry some value and we invited views on what evidence exists that could help quantify the value of this right to a new entrant. We said that, in considering such evidence, Ofcom would take into account that the new entrant may not necessarily have access to the same degree of prominence currently enjoyed by the incumbent.

3.71 Two respondents considered that the right to an appropriate degree of prominence on an EPG has no value. The reasons given for this view were that:

- The benefit is for an appropriate degree of prominence, and the meaning of the word appropriate is subject to interpretation

- PSB channels are likely to receive the same EPG position without these requirements as a result of their high audience share and reach
- Viewers will seek out the content they wish to watch regardless of EPG position
- Analysis by Spectrum consultants in 2007 showed no statistical correlation between viewing share and EPG position
- In Ofcom's second PSB review, Ofcom suggested the benefit of an appropriate degree of PG prominence was of limited value to ITV and Channel 4, but may be worth more to Five[10].

3.72 Another respondent thought that the right to an appropriate degree of EPG prominence had some value to incumbent broadcasters, but that a new entrant may not enjoy this because the ability to build an established position on the EPG is much less than it was in the past. The respondent thought that if the new entrant was an existing television company, the right would be linked to how far up the EPG its channel moved as a result of gaining PSB status.

3.73 One respondent suggested that Ofcom should consider the value of EPG positioning in the open market and what impact shifting down the EPG has had on commercial revenue.

3.74 Ofcom's view is that estimating the value of an appropriate degree of EPG prominence is difficult and there are reasons why the benefit may have different values to existing broadcasters compared to the value that would be conferred upon a new entrant.

3.75 No respondent provided a detailed methodology that could be applied to valuing the right to due prominence for a new entrant. We also note that a new entrant would not necessarily assume that they would be granted a particular channel number, since there might be alternative ways of interpreting the right to due prominence on the EPG.

3.76 Nevertheless, we consider that the right would be likely to carry value for a new entrant, and will consider the evidence available to us in order to estimate the value for each licence.

3.77 One respondent expressed the view that the benefits of DTT capacity and EPG positioning alone would equate to a positive value for the licences.

3.78 Ofcom considers that DTT capacity and the right to due prominence on EPG listings are likely to have a positive effect on the valuation of each licence. Ofcom's task is to determine the bid that would have been made by the incumbent if the licence were offered at auction. As set out in 3.20, we consider that the bid would not reflect the full valuation of the licence to the incumbent, but would instead reflect the value of the licence to the second highest bidder.

3.79 Whether the licence would be of value to the second highest bidder would depend upon the overall balance of rights and obligations associated with the licence as well as other factors, such as start up costs, that would need to be considered by a new entrant.

[10] Ofcom's Second PSB review – Phase 2: preparing for the digital future, Para 6.39

3.80 Ofcom does not, therefore, agree with the respondent that the value of DTT capacity and EPG due prominence alone can be used to assert the licence's value.

## The "Viewer Migration Value"

3.81 In the 2005 review, Ofcom set out its view that the analogue licence brought with it a "viewer migration value" since, as analogue viewers migrate to a digital service, the providers of the licensed digital service would likely inherit a larger share of the new digital audience than they would had they been providing a standalone digital service under a digital programme service licence.

3.82 In our consultation we said that, in principle, we considered that the presence of a channel on the analogue platform could serve to increase familiarity with the channel and therefore benefit the channel in the future digital environment. However, given the declining share of viewing achieved through the analogue signal and the proximity of switchover in many regions, the extent to which this advantage would be conferred on a bidder is considerably lower than it would have been in the 2005 review. We invited views on what evidence exists that could help quantify this value to a new entrant.

3.83 We had three responses to this question, which expressed the view that viewer migration would have little or no value due to the proximity of analogue switch off and the size of the remaining analogue audience. Respondents suggested that any value attributed to viewer migration would need to consider geographic and coverage differences between the licences.

3.84 No respondents provided a methodology that could be utilised to calculate a view migration value, although one respondent indicated that its previously proposed methodology for the 2005 review may still have some value.

3.85 We remain of the view that in principle the presence of a channel on an analogue platform could confer benefits in a digital environment. However, given the size of the remaining analogue audience and the proximity of digital switchover, we do not believe a new entrant would assume a significant viewer migration value when submitting its bid.

## Cost of meeting obligations

3.86 The valuation of the licence should also reflect the incremental costs that the licence implies as a result of the obligations it imposes. The primary cost is the cost of meeting the PSB obligations and the additional costs associated with providing such programming will be deducted in full when calculating the value of the analogue element of the licence.

3.87 As in the 2005 reviews, the expected cost of PSB obligations will be forecast and considered separately. The PSB cost calculation will include both the increased programming cost and the reduction in advertising revenue received as a result of showing PSB programming that attracts less advertising revenue than might otherwise be received.

3.88 The valuation will reflect the net cost to the licence of any PSB obligations relating to digital switchover, where these are incurred. The valuation will seek to ensure that the licensee does not receive any financial benefit or suffer any financial loss as a result.

3.89 The valuation should also seek to take account of any significant impact the "must offer" obligations being brought into effect would have on the value of the licence and in particular, any additional costs that are likely to be incurred by the licence holder as a consequence of the obligations being brought into force.

## Respondents views on the cost of meeting obligations

3.90 In our consultation we asked what evidence Ofcom should utilise when considering the impact that the "must offer" obligations would have on the value of the licence.

3.91 Two respondents thought that the must offer obligations would have no impact since it would not make commercial sense for an advertising funded broadcaster to not be on these platforms. There was a suggestion that it was inconsistent to offer a valuable commercial licence which has clear obligations and then to suggest that the provision of these legislated services should devalue the commercial undertakings of that company.

3.92 Another respondent thought that on a forward looking view, the must offer provisions would increase the negotiating leverage of the satellite and cable operators. This is because the burden of the "must offer" provisions fall on the channel provider and they could therefore be forced into accepting commercial terms that would not have been considered in the absence of a must offer obligation. The respondent suggested that Ofcom take account of the potential for this additional cost.

3.93 The must offer provisions were introduced in order to ensure that the Channel 3 and 5 services were available to the widest possible audience. Channel 3 and 5 services have been carried on digital platforms for several years, and as one respondent pointed out, this suggests that the current arrangements are economically viable. To the extent that a new entrant would want his service widely distributed, the must offer provisions do not represent an incremental cost.

3.94 Ofcom is not persuaded that the introduction of the must offer provisions have led to, or are expected to lead to, significant future cost increases for licensees. However, as with other elements of the valuation, Ofcom will consider the evidence contained within submissions provided by licence holders as part of the review.

3.95 As was set out in the October 2004 statement, Ofcom recognises that there may be alternative approaches to individual elements of the licence valuation but considers that as a whole they provide a reasonable basis on which to conduct a valuation of the licence to inform Ofcom's decision about the PQR and the amount that, in Ofcom's opinion, would be the cash bid.

3.96 Respondents to our consultation broadly agreed that the methodology remained appropriate so, taking this into account, we consider that the methodology is a reasonable basis on which to conduct a valuation of the licence.

## Dealing with uncertainties for the purposes of the review

3.97 Valuation of licences on a forward looking basis involves taking account of a number of uncertainties. In the October 2004 statement, we highlighted this as follows:

> *.... [It] is important to recognise the very wide range of uncertainties that Ofcom faces in arriving at this valuation, including the following:*
>
> - *future trends in television advertising revenues and programming costs;*

*• the likely size and speed of structural change in the industry, associated with digital switchover; and*

*• the regulatory environment, including the long-term path of PSB obligations, and future political decisions on digital switchover.*

*Replicating the outcome of a hypothetical single round sealed bid auction adds a further layer of complexity. Neither the exact circumstances of the auction, the identity of bidders, their business plans nor their bidding strategies can be predicted with certainty.*

*Ofcom is unable to eliminate these uncertainties. Therefore, in order to fulfil its statutory duty to determine the financial terms, it is necessary for Ofcom to make a series of assumptions on many issues.*

*This statement sets out Ofcom's approach. Ofcom recognises that there may be alternative approaches to individual elements of the valuation methodology. However, Ofcom believes that, when considered together as part of a coherent methodology, the overall approach provides a fair and reasonable basis for Ofcom to determine the financial terms for each licence.*

*Source: Paragraphs 2.9 – 2.12 of the October 2004 statement*

3.98 Many of the uncertainties outlined in the October 2004 statement are still uncertainties now, although the passage of time means that the future path towards digital switchover is considerably more certain today.

3.99 In our consultation we said that one recent additional uncertainty that has emerged is the scope to which future independent funding for regional news provision might become available and the extent to which regional news obligations will therefore impact the value of Channel 3 licensees in the future. We note that none of the licences which are the subject of an Independently Financed News Consortia ('IFNC') pilot have applied for a review of their licence.

## Respondents' views on Ofcom's approach to dealing with uncertainties

3.100 We asked in our consultation whether people agreed with our approach to dealing with uncertainties, and if not, what alternative approaches were available.

3.101 Respondents broadly agreed with our approach to dealing with uncertainties. One respondent agreed that the position on IFNCs is uncertain and there were various factors which could delay their introduction. The respondent thought that Ofcom should only assume IFNC savings where it is unequivocally clear that IFNCs will reduce or neutralise the costs of regional news for the licence in question.

3.102 As set out in 3.56, Ofcom will take a cautious approach to assuming future regulatory change. However, as set out in 3.118, Ofcom will take into account information that becomes available to it up to the point at which Ofcom makes its determination of financial terms. Accordingly, where possible, we will seek to reflect regulatory changes that are announced and reasonably certain in our consideration of financial terms.

3.103 One respondent stated that bidders would factor into their bids the possibility of ITV plc ceasing to supply its content to the ITV Network if ITV were to lose some of its regional licences in an auction. The suggestion was that this meant it would be unreasonable for a new entrant to assume that they would have access to the same network programming available from ITV plc.

3.104 Ofcom has considered this argument carefully. Under the existing ITV Networking Arrangements, the ITV network commissions programming produced by ITV plc and the programming is therefore made available to all licensees, regardless of licence ownership. If ITV plc wanted to withhold programming from a licensee on the network but continue to show the programming on its own ITV1 licences, it would need to withdraw supply of the programme from the networking arrangements. ITV plc would still be obliged to fund a share of replacement network programming, even if it showed its own in house programming as an alternative. ITV plc would not receive payments from the network towards the cost of making its programming.

3.105 Alternatively, if ITV plc wanted to exploit the value of its programming on alternative outlets, then it would no longer earn advertising revenue for the programming from its own licence areas, nor would it receive contributions towards the cost of the programming from the network budget.

3.106 In order for ITV to believe it would be profitable to move programming to an alternative outlet, it would need to consider that the profits that could be generated by exploiting the content through an alternative outlet would be sufficient to exceed the profits that ITV plc could generate through a combination of the advertising revenue on the owned licensed services and the programme sales revenue achieved from other licensees. Alternatively, if ITV plc wanted to show programming on its own ITV1 licences but not offer them to other licensees, it would still have to contribute towards replacement network programming that then wouldn't be utilised by ITV plc.

3.107 We consider that in the current market landscape it would be unlikely for ITV to believe that such a move would be profitable, particularly if the licences it lost to a new entrant were relatively small or few in number. We therefore consider that it would be reasonable in such circumstances that new entrants acquiring relatively small or few licence areas would believe that they would continue to have access to ITV plc programming through the networking arrangements.

3.108 If a new entrant acquired relatively large or many licences from ITV plc, then it is more plausible that the new entrant might assume that ITV plc would withdraw programming in order to exploit it more profitably through other outlets. However, the greater the number of licences taken over by a new entrant, and the larger they are, the more likely it would appear to be that they would be capable of sourcing replacement programming that would be of an equivalent standard to ITV plc's own programming.

3.109 We therefore consider that whilst the loss of a significant number of licences might cause some disruption to the programming on the network, a potential bidder would not place undue weight on the risk that ITV plc would withdraw network programming. This is because, as the risk of not having access to network programming increases, the more likely it would appear that the bidder would be capable of replacing such programming. It is also relevant that a significant proportion of all network programming, including peak time network programming, is already sourced from independent production companies, rather than ITV plc.

3.110 The bidder might, however, be cautious about the levels of profitability in the early periods of the licence, reflecting that there may be some disruption to network schedules and that there may accordingly be some risk about the success of replacement programming. This might lead to a bidder being more pessimistic about the prospects for obtaining advertising revenue in the early part of the licence period. Ofcom will consider submissions from the licensees in this regard and may make adjustments to advertising forecasts to reflect this approach.

## Discount rate

3.111 As set out above, our view is that the value of the winning bid in a hypothetical auction can be approximated by the valuation of the second highest bidder and that the second-highest bidder would be an existing television company. In order to be consistent with the circumstances of the hypothetical auction, Ofcom's discount rate is intended to reflect the opportunity cost of investment faced by a hypothetical entrant that is assumed to be an existing television company.

3.112 In our consultation we calculated a real, pre-tax discount rate of 8.2%, which was meant to reflect the weighted average cost of capital (WACC) of a hypothetical entrant. The calculation was based on data and estimates relating to the existing licensees.

3.113 One respondent suggested a more appropriate equity beta to use would be 1.14 based on a range of European broadcasters and using weekly adjusted betas. The respondent pointed out that Ofcom considered the betas of other European broadcasters in the 2005 review. The respondent pointed out that Ofcom considered the betas of other European broadcasters in the 2005 review. It also thought that a more appropriate debt premium would be 5.7% rather than the 4.0% assumption made by Ofcom in order to equate the cost of debt in the WACC calculation with the cost of equity. Applying these assumptions, the respondent thought the real, pre-tax discount rate should be 10.2%.

3.114 One respondent thought it would be more appropriate to base the discount rate on the figure used by its parent company of 9.25%. We note that this rate appears to be a pre-tax nominal rate, which would compare to our pre tax nominal rate in the consultation of 10.9%. One respondent also argued that there is a greater risk profile for the smaller and independently held licences and that they should be awarded a higher discount rate.

3.115 Another respondent thought that the WACC formula appeared in line with accepted industry practice.

3.116 We have reviewed our cost of capital calculation and taken into account more recent data on equity betas and also considered the equity betas of some European broadcasters. We do not consider however that setting the cost of debt equal to the cost of equity is an appropriate adjustment to make, and consider that our estimate of 4.0% remains a reasonable estimate for the long term average debt premium for a new entrant. In addition, we note the discount rates published by licensees in their statutory accounts but understand that these are pre tax nominal rates so would be comparable to our consultation estimate of 10.9% rather than the pre tax real rate of 8.2%.

3.117 As a result we have revised our real, pre-tax discount rate from 8.2% to 8.6%. Full details of how we have calculated our discount rate are provided in Annex 1.

## Cut-off date

3.118 As in the 2005 reviews, Ofcom considers that it is necessary for it to be able to take into account any information relevant to deciding the revised licence payments that is or becomes available up to the date of determination. Applicants will have the opportunity to withdraw an application prior to a determination being made, for example, in light of information that becomes available after the date of application but before the determination of new financial terms by Ofcom. In cases where Ofcom is satisfied that a valid withdrawal has been made, the licensee may reapply within the same review period.

## Timetable for the review

3.119 The valuation exercise requires a considerable volume of data submissions from licence holders to inform Ofcom's decision. Ofcom is working with licensees in order to develop the format and timing for data submissions which are expected to be provided to Ofcom in final form in May.

3.120 Once these submissions have been received, Ofcom will review them and seek further evidence as is necessary in order to arrive at what we consider to be a fair and reasonable determination of financial terms for the remaining period of the licence. This further evidence is likely to require, amongst other things, additional submissions provided by applicants in response to follow up enquiries made by us as we review evidence.

3.121 We expect that we will make our determination of the revised terms no later than September 2010 although, if it is possible to do so, we will seek to conclude the review sooner. Once the licensees have received the notification setting out the revised terms, they have a period of 30 days during which they can accept or reject the revised terms.

## Annex 1

# Discount rate

## Summary

A1.1 Ofcom's view is that the value of the winning bid in a hypothetical auction can be approximated by the valuation of the second highest bidder and that the second-highest bidder would be an existing television company. In order to be consistent with the circumstances of the hypothetical auction, Ofcom's discount rate is intended to reflect the opportunity cost of investment faced by a hypothetical entrant that is assumed to be an existing television company.

A1.2 Ofcom has previously considered calculating discount rates on a licence-by-licence basis. However, consistent with the approach taken in the 2005 reviews, we consider that to the extent that there are material differences between licences that may impact the discount rate (e.g. smaller licensees may have a higher proportion of fixed costs), they would be prohibitively difficult to estimate in a robust manner.

A1.3 Ofcom has calculated a real, pre-tax rate of 8.6%, which is meant to reflect the weighted average cost of capital (WACC) of a hypothetical entrant. The calculation is based on data and estimates relating to the existing licensees. This is slightly higher than the rate of 8.2% in our consultation document because we have revised our estimate in line with ITV's medium term average equity beta and taken into account a range of comparators.

## Introduction

A1.4 The discount rate applied to the forecast cash flows in an NPV analysis should reflect the opportunity cost to all the relevant capital providers, weighted to their relative contribution to the company's total capital base. This is approximated by calculating the firm's Weighted Average Cost of Capital (WACC). The opportunity cost that is borne by a class of investor is equal to the rate of return that investors could expect to earn on other investments of equivalent risk.

A1.5 A number of different asset pricing models exist for calculating the cost of capital. In addition to the Capital Asset Pricing Model (CAPM), which measures market risk via a single beta coefficient measured relative to a market portfolio, there are, for example, multifactor models which measure market risk using multiple risk coefficients estimated relative to different factors.

A1.6 Ofcom's preferred approach is to use the CAPM. The CAPM has a clear theoretical foundation and its implementation is simple and well established relative to that of other asset pricing models. This results in the continued wide use of the CAPM by the UK's economic regulators, and its wide use amongst practitioners.

A1.7 Under the CAPM the WACC is calculated according to the following formulae:

- WACC = (cost of equity x (1 - gearing)) + cost of debt x gearing;
- gearing = debt / (debt + equity);
- cost of equity = risk free rate + ( {equity risk premium} x beta); and

- cost of debt = risk free rate + debt premium

## Estimating discount rates

A1.8 Some of the parameters that influence the WACC calculation, specifically gearing ratios, equity betas, and debt premia may vary on a firm-by-firm, and hence potentially on a licence-by-licence, basis. However, Ofcom has decided to apply a single discount rate in its NPV analysis for all of the licences. In theory, it may be desirable to make assumptions regarding the financial/operational leverage and debt premia of generic bidders for each relevant licence. However, in practice, any such assumptions are likely to be difficult to calculate. The most relevant data available to Ofcom to support its calculations relates to some of the existing licensees: ITV, STV and UTV.

A1.9 Data is unavailable on a licence-by-licence basis. Any adjustments made to this data to reflect licence-by-licence variations would be highly subjective. Ofcom has therefore based its analysis on country-wide indicators, erring on the side of conservative (i.e. high) estimates where appropriate in order to reflect any regional or national variations.

## Risk free rate

A1.10 Ofcom has decided to use the 4.5% nominal risk free rate (2.0% real) as estimated in Annex 8 of its recent statement “A new pricing framework for Openreach ” (the “Openreach statement”)[11]. This uses estimates of yields on nominal gilts as a proxy for the real risk free rate. We have also decided to use a forward looking inflation rate of 2.5%, consistent with the Openreach statement[12].

A1.11 No consultation responses specifically mentioned the risk free rate, although in reference to the use of a real WACC, one respondent said that given there had recently been deflation and there is only five years remaining on the channel 3 licences, the use of a real WACC will give an inflated value of the licences.

A1.12 We acknowledge that there has recently been deflation but current inflation statistics for December 2009 show CPI inflation at 2.9% and RPI inflation at 2.4%[13]. In addition, according to the January 2010 edition of HM Treasury’s Forecasts for the UK Economy (which collates a range of independent forecasts for various economic indicators) recent forecasts for RPI in 2010 range from 2.0% to 4.8%[14]. HM Treasury’s November 2009 paper includes longer term projections for RPI and the average of projections was 2.5% in 2011, 2.9% in 2012 and 3.1% in 2013. Taking these forecasts into account, we consider that 2.5% continues to be a reasonable forward looking inflation rate.

## Equity risk premium

A1.13 The equity risk premium is the difference between the overall return on equities and the nominal risk free rate. Its value in the UK reflects the risk of investing in UK equities generally. Ofcom has used a value of 5% for this calculation in line with the equity risk premium used in Annex 8 of the Openreach statement.

[11] http://www.ofcom.org.uk/consult/condocs/openreachframework/statement/annexes.pdf
[12] See para 6.55 of Annex 6 of the Openreach statement
[13] ONS. See http://www.statistics.gov.uk/cci/nugget.asp?id=19
[14] These forecasts can be found here http://www.hm-treasury.gov.uk/data_forecasts_index.htm

A1.14 No consultation responses specifically mentioned the equity risk premium.

## Equity beta

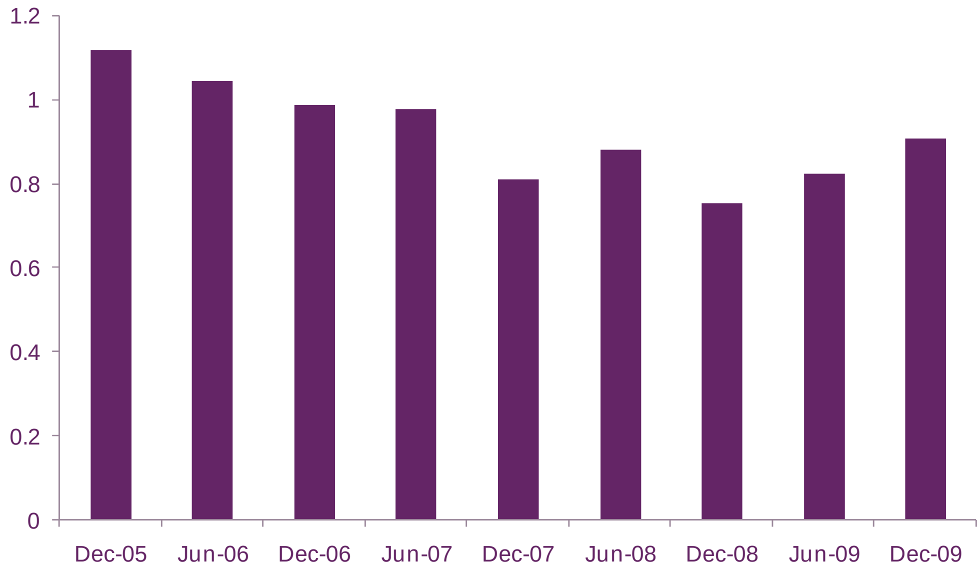
A1.15 The value of a company's equity beta measures the movements in returns (as measured by the sum of dividends and capital appreciation) from its shares relative to the movement in the return from the equity market as a whole. For a detailed discussion of issues relating to beta estimation, see, for example, *Issues in Beta Estimation for UK Mobile Operators, The Brattle Group, July 2002*[15].

A1.16 In our consultation we said that we would give most weight to ITV's equity beta since its shares are relatively liquid and provide a reasonably robust beta estimate. We adopted a point estimate of 0.8.

A1.17 One respondent suggested that a more appropriate equity beta to use would be 1.14 based on a range of European broadcasters and using weekly adjusted betas. The respondent pointed out that Ofcom considered the betas of other European broadcasters in the 2005 review.

A1.18 We have reviewed ITV's unadjusted two year daily betas in each six month period between December 2005 and December 2009. The results are presented in the chart below. We note that the average beta over this period has been around 0.9.

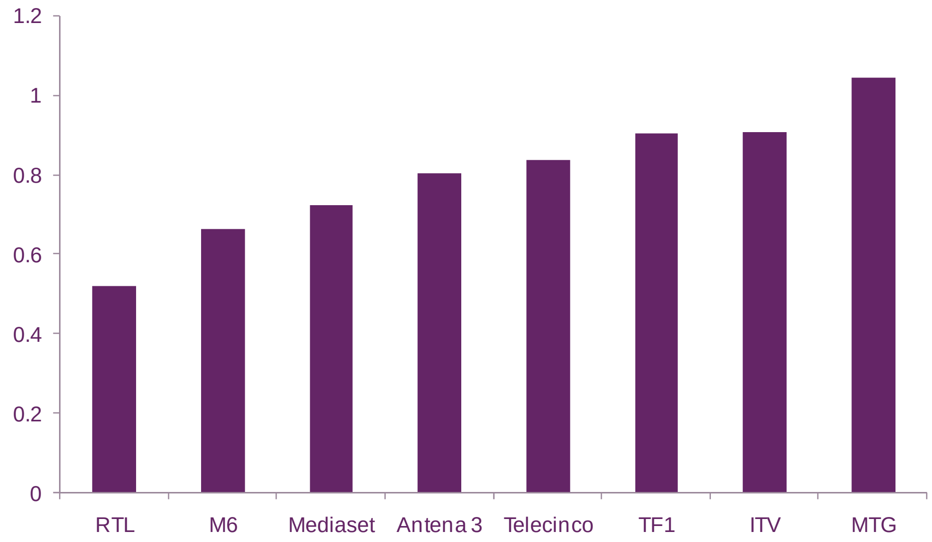
### Chart of ITV's beta since December 2005




A1.19 We have also compared ITV's December 2009 beta against a range of European broadcasters using two year unadjusted daily rates. We note that the average for this group excluding ITV is around 0.8.

[15] http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/sce/ori/beta/

**Equity betas of a range of European broadcasters, including ITV, December 2009**




A1.20 We have decided to revise our point estimate of the equity beta from 0.8 to 0.9 in line with ITV's current beta. This is also representative of ITV's average beta over the last few years, and sits at the top end of a range suggested by the equity betas of other European broadcasters. We also note that the equity beta for the FTSE 350 Media Index against the FTSE All share index was 0.86 as at 31 December 2009.

## Optimal gearing

A1.21 Under the standard Capital Asset Pricing Model a firm can potentially lower its overall cost of capital by increasing its gearing. This is because debt is generally cheaper than equity as a result of tax advantages to debt.

A1.22 Our approach to gearing is to assume an optimal level of gearing, which is that at which the cost of capital is minimised and the value of the firm is maximised. Since the cost of debt is lower than the cost of equity, this suggests that the optimal rate would favour debt financing. However, if the level of debt gets too high the risk of financial distress increases very quickly, and equity investors recognise that their claim on the assets of a firm in financial distress comes after the claims of debt holders. Therefore, equity holders will be wary of high levels of gearing, particularly in firms where there are limited fixed assets (which could be liquidated in the event of distress).

A1.23 In our consultation we assumed an optimal gearing level of 30%. This is the same as the rate we used for Sky in our recent Pay TV phase three consultation document[16]. We had no consultation responses on our optimal gearing assumption.

## Debt premium

A1.24 The cost of corporate debt is made up of a risk free component and a company specific risk premium. In our consultation we noted that ITV's most recently issued debt was trading at around 6.4% above equivalent government gilts, while the same figure for recently issued Sky debt was around 2%.

[16] http://www.ofcom.org.uk/consult/condocs/third_paytv/annex10.pdf, paras 2.44-2.46

A1.25 For the purposes of a hypothetical new entrant, we assumed a debt premium figure of 4.0% in our consultation.

A1.26 One respondent thought that a more appropriate debt premium would be 5.7% rather than the 4.0% assumption made by Ofcom. This figure was chosen so that the cost of debt in the WACC calculation equalled the cost of equity.

A1.27 Our response to this argument is that setting the cost of debt to be equal to the cost of equity is not an appropriate adjustment to make. Standard corporate finance theory contends that equity finance will always be more expensive than debt financing, for two reasons:

i) In the event of failure of the company in question, debt holders are paid ahead of equity holders, and the extra risk associated with equity will be associated with a higher expected return.

ii) Interest payments on debt finance are tax exempt, while dividend payments are not. This means that debt finance has an effective tax shield, while equity finance does not.

A1.28 We have no reason to dispute this line of reasoning, and therefore would not advocate a cost of debt equal to the cost of equity.

A1.29 We note that ITV’s debt, as at the end of January 2010, was trading at around 4% above equivalent government gilts, with Sky trading at around 5%.

A1.30 Given this, we are not minded to change our consultation assumption of 4.0%, and consider this a reasonable estimate for the long term average debt premium for a new entrant.

## Conclusion

A1.31 In our consultation we estimated a single discount rate to be used in the licence valuations, being a real pre-tax WACC of 8.2%. One respondent thought it would be more appropriate to base the discount rate on the figure used by its parent company of 9.25%. We note that this rate appears to be a pre-tax nominal rate, which would compare to our pre-tax nominal rate in the consultation of 10.9% rather than the pre tax real rate of 8.2%. Taking into account the responses received to the consultation, and the additional evidence we sourced as a result of the responses, we have revised our beta estimate from 0.8 to 0.9, which has increased our real pre tax WACC to 8.6%. A summary of the components of the WACC calculation follows:

| Variable | Consulation estimate | Revised estimate |
|---|---|---|
| Nominal risk free rate | 4.5% | 4.5% |
| Equity risk premium | 5.0% | 5.0% |
| Equity beta | 0.80 | 0.90 |
| Cost of equity (nominal, post tax) | 8.5% | 9.0% |
| | | |
| Debt premium | 4.0% | 4.0% |
| Cost of debt (nominal, pre tax) | 8.5% | 8.5% |
| Corporate tax rate | 28.0% | 28.0% |
| Cost of debt (nominal, post tax) | 6.2% | 6.2% |
| | | |
| Gearing | 30.0% | 30.0% |
| | | |
| WACC (nominal, post tax) | 7.8% | 8.2% |
| WACC (nominal, pre tax) | 10.9% | 11.4% |
| WACC (real, pre tax) | 8.2% | 8.6% |

## Annex 2

# Glossary

**Cash bid:** a fixed annual cash amount to be paid for the licence alongside the PQR. It represents the amount the licence holder would have bid were the licence being granted afresh in a competitive tender and is varied each year in line with the retail price index.

**Channel 3**: refers to the 15 regional ITV licensees and one licensee (GMTV) providing the national breakfast-time service.

**Digital Replacement Licences (DRLs):** The DRLs replaced analogue broadcasting licences and contain various obligations related to digital switchover.

**DTT: Digital Terrestrial Television.** Digital Terrestrial Television, currently most commonly delivered through the Freeview service.

**EPG: Electronic Programme Guide.** A programme schedule, typically broadcast alongside digital television or radio services, to provide information on the content and scheduling of current and future programmes.

**HD: High Definition Television.** A technology that provides viewers with better quality, high-resolution pictures.

**IFNC: Independently Funded News Consortia.** Independent groups set up to provide local and regional news. IFNCs were a commitment of the Digital Britain White Paper published in June 2009. The Digital Economy Bill, introduced last November contains clauses that create new powers for Ofcom to procure IFNCs from 2013. Ahead of this the Government will run three pilot IFNCs.

**ITV:** refers to the Channel 3 service, apart from GMTV. ITV plc operates 11 licences in England, Wales and the Scottish. Other ITV licences are operated by STV, UTV and Channel TV.

**Multiplex.** A device that sends multiple signals or streams of information on a carrier at the same time in the form of a single, complex signal. The separate signals are then recovered at the receiving end.

**Must offer obligations.** These obligations ensure that each public service channel is offered in digital form to as many people as possible. These obligations are contained within sections 272 and 273 of the Communications Act and came into force on 31 January 2010.

**PQR: Percentage of Qualifying Revenue.** A percentage that is applied to the year's qualifying revenue in order to determine the amount of the variable payment due in regard to the licence.

**PSB: Public Service Broadcasting/Broadcaster.** The Communications Act 2003 defines the public service broadcasters to include the BBC, ITV1, Channel 4, Five and S4C. These broadcasters have a duty through their licence or the BBC Charter to maintain the ethos of PSB and transmit a range of programmes on their services that would cater for all tastes.

**PSB multiplexes.** There are six multiplexes. Three of these, multiplexes 1, 2 and B are known as the PSB multiplexes.

**Qualifying Revenue**: revenue related to the operation of the licence, for example advertising and sponsorship revenue.

**WACC: Weighted Average Cost of Capital.** The rate that a company is expected to pay on average to all its security holders to finance its assets