Methodology for reviews of financial terms for Channel 3, Channel 5 and Public Teletext licences

Statement

13 October 2004

Contents

Summary

S.1 This statement sets out the valuation methodology for the review of the financial terms of the Channel 3, Channel 5 and Public Teletext licences.

S.2 Section 225 of the Communications Act 2003 ("the Act") allows for Channel 3, Channel 5 and Public Teletext licensees to apply to Ofcom for optional reviews of their financial terms for payments to the Treasury.

S.3 Under the Act, the earliest date on which a licensee can apply for a review of its financial terms is four years prior to the expiry date of its current analogue licence. Following a consultation in January 2004 (the "January Consultation")[1] Ofcom decided to offer Channel 3 licensees the opportunity to align the expiry dates of their analogue licences and, therefore, the dates for their reviews. As a result, if they wish, Channel 3 licensees will be able to apply for reviews from 31 December 2004.

S.4 On 29 June 2004, Ofcom issued a consultation seeking views on the proposed valuation methodology for the reviews of financial terms for Channel 3 licences (the "June Consultation")[2].

S.5 In order to promote further consistency across all broadcasting licences, Ofcom proposed, in a consultation published in July 2004 (the "July Consultation")[3], to extend the offer to the Channel 5 and Public Teletext licensees to bring forward the dates of their financial review periods to begin on 31 December 2004. Ofcom also proposed that the valuation methodology set out for the Channel 3 licences should also be applied to the review of the financial terms for the Channel 5 and Public Teletext Licences. Ofcom has now confirmed in a separate statement published in October that it has adopted these proposals.

Objectives

S.6 Ofcom aims to achieve three policy objectives through the methodology set out in this document. First, Ofcom intends to determine a fair value for each licence, within the framework of the statute, and to set licence payment terms according to a fair and objective process. To the extent possible, the process should allow Ofcom to set payments that are reasonable within the context of the current market environment and that will continue to be reasonable for the duration of the licence. Second, Ofcom aims to improve the clarity and transparency of financial reviews by providing applicants with more information and guidance prior to the application date than was provided in the past. Third, Ofcom proposes to simplify the application process by reducing information requirements and providing licensees with greater assistance with the application process.

---

[1] Ofcom publication: *Consultation on Reviews of Financial Terms for Channel 3 Licences, 26 January 2004*

[2] Ofcom publication: *Consultation on methodology for reviews of financial terms for Channel 3 licences*, 29 June 2004

[3] Ofcom consultation: *Offer to bring forward periods for reviews of financial terms for Channel 5 and Public Teletext licences*, 22 July 2004

S.7 In meeting these three policy objectives Ofcom has considered all the views provided by stakeholders in response to the June Consultation and adapted the methodology accordingly.

Statutory requirements

S.8 Under section 227 of the Act, following an application for a review, Ofcom must determine a fixed annual cash amount to be paid for the licence and a percentage of qualifying revenue (PQR) payable for each 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. 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.

S.9 Ofcom has established a methodology to value each licence overall so that it can decide on the PQR and determine the annual cash sum. This is a hypothetical auction process. One of the main purposes of this statement is to set out the circumstances of this hypothetical auction process which Ofcom aims to replicate in the financial reviews and the corresponding valuation methodology.

S.10 Ofcom's proposals were set out in the June Consultation.

Summary of conclusions

S.11 Ofcom received ten detailed responses to the June Consultation, most of which were confidential. Ofcom also received over fifty letters commenting on the general issues raised. Many respondents stressed the important role played by the licensees in terms of the nation's and regions' economy, cultural life and the health of the independent television production sector. It is also clear that the circumstances of each licensee are not all the same, with several licensees facing particular issues. Ofcom has taken account of the responses and, as a result, some of the original proposals have been modified. The key points made in the responses to the June Consultation are referred to throughout this statement.

S.12 The hypothetical auction to assess the overall value of the licence will replicate the following circumstances:

- As required by the Broadcasting Act 1990, Ofcom would design a sealed-bid auction in which the highest bidder would win the licence;

- The auction would be designed, within the framework of the statute, to recover the maximum possible value consistent with the highest bidder being able to fulfil all of the programming and other obligations associated with the new digital licence;

- It was proposed in the June Consultation that, as far as it was possible, Ofcom would offer the licences simultaneously and would allow contingent bids for multiple licences. For the reasons set out in section 3, Ofcom has given further consideration as to how it should exercise its discretion on this issue when determining the appropriate cash bid under the Act in a hypothetical auction process. Ofcom now considers that it should, in conducting the hypothetical auction, treat each licence individually; and

- 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.

S.13 On this basis, the financial terms for each licence will be set on the following basis:

- 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) and then adjust this value to reflect the additional costs (e.g. start-up costs) that a new entrant might incur;

- Licences will be valued on a standalone basis. This represents a change from the proposed methodology which was to take account of the benefits of common ownership, but is similar to the methodology previously adopted by the ITC;

- Ofcom will value the analogue element of the licence by using a discounted cashflow forecast to estimate the present value of the expected cashflows attributed to the analogue service over the relevant period;

- In order to forecast cashflows for the analogue service, Ofcom will need to allocate costs and revenues that are common to the analogue, digital terrestrial, cable and satellite services. Ofcom will base the allocation on the expected share of viewing via each platform; in Ofcom's view this provides a more reasonable basis for estimating the incremental value of the analogue element of the licence than apportionment on the basis of the percentage of households with analogue-only receiving equipment;

- Ofcom considers that holding the licence will have both positive and negative effects on the value of a licensee's services across all digital platforms. Ofcom will take these into account in the valuation. Specifically:

    - The additional costs associated with providing PSB programming will be deducted in full from the value of the analogue element of the licence, regardless of the platform on which the programme is viewed;
    - Positive and negative effects of the licence on digital revenues will also be taken into account. These include additional revenues that may be generated due to increased coverage, programme spend and digital audience achieved due to the analogue service, less the revenue foregone on all platforms as a result of PSB obligations;

- The value of the digital terrestrial rights will equal the cost savings to the licence holder from not having to obtain the rights elsewhere;

- The valuation will reflect the net cost to the licensee of any public service obligations relating to digital switch-over in the digital replacement licences, such as the roll-out of digital terrestrial coverage and costs associated with raising public awareness. The valuation will seek to ensure that the licensee does not receive any financial benefit, or suffer any financial loss, as a result of these obligations;

- Ofcom will use a real pre-tax discount rate of 12% for all licence valuations; and

- Licence payments will be set at a level aimed to recover the NPV of each licence. Ofcom will determine PQR payments to recover between 75% and 95% of the value of the licence with the balance being recovered via the fixed cash sum. The exact proportion to be recovered via the PQR payments will be determined by Ofcom at a later stage, informed by submissions from the licensees.

Section 1

Introduction

Background

1.1 Section 225 of the Communications Act 2003 (the "Act") allows for Channel 3, Channel 5 and Public Teletext licensees to apply for optional reviews of their financial terms for payments to the Treasury, which were set by the Independent Television Commission (ITC) at the time of the most recent renewal of their analogue broadcasting licences.

1.2 Separately, the Act requires Ofcom to offer to replace the existing analogue broadcasting licences with digital replacement licences prior to 29 December 2004.

1.3 A digital replacement licence will be, primarily, a licence to provide a service on a digital terrestrial multiplex with a requirement to simulcast the service in analogue.

1.4 Ofcom published a consultation on draft versions of the digital licences in September[4] and plans to offer the licences in November. Each licensee will have the option to accept or reject the digital licence. However, if a licensee rejects the licence, its existing analogue licence will cease to have effect within eighteen months of the closing date of the offer, at a date set by Ofcom. The digital licences, if accepted, will expire on 31 December 2014, as set out in section 224 of the Act.

1.5 The process of issuing digital replacement licences is not directly linked to the reviews of financial terms. Each licensee's existing financial terms will carry forward to its new digital licence, in accordance with the Act, and will remain in place until the relevant licensee applies for an optional review of its financial terms and accepts new terms.

1.6 Under the Act, the earliest date on which a licensee can apply for a review of its financial terms is four years prior to the expiry date of its analogue licence. In the June consultation, Ofcom decided to offer Channel 3 licensees the opportunity to align the expiry dates of their analogue licences and, therefore, the dates for their reviews. As a result, all Channel 3 licensees will have the option to apply for reviews from 31 December 2004.

1.7 In order to promote further consistency across all broadcasting licences, Ofcom subsequently proposed in the July Consultation to extend the offer to bring forward the dates of their financial review periods to begin on 31 December 2004 to the Channel 5 and Public Teletext licensees. Without this offer, Channel 5 would have a review period beginning on 31 March 2009 and Teletext would have a review period beginning on 31 December 2007.

---

[4] Ofcom consultation: Digital Replacement Licences to be offered to channels 3, 4 and 5 and public teletext, 14 September 2004

1.8 In the July Consultation, Ofcom proposed that the methodology for the review of the financial terms of the Channel 3 licences should equally be applied for the review of the financial terms for the Channel 5 and Public Teletext Licences. The July Consultation closed on 19 August 2004 and Ofcom has published a separate statement confirming that it will proceed with these proposals.

Definition of qualifying revenue

1.9 In relation to the digital replacement licences, Ofcom's reading of the relevant statute is that the definition of qualifying revenue must include revenue derived from both the analogue and digital terrestrial services[5]. This is because qualifying revenue is defined with reference to the 'licensed service' and the digital licences will cover provision of the service on both analogue and digital terrestrial. Also, Ofcom believes that it is required to consider the value of the full licence, including both the analogue and digital terrestrial elements, when determining the amount that would be bid for the licence in a competitive tender.

1.10 Ofcom is aware that this differs from the approach taken in the past by the ITC in relation to previous licences. The ITC included only revenue earned from the licensed analogue broadcasting service within the definition of qualifying revenue under the Broadcasting Act 1990, for the purposes of calculating PQR licence payments. The ITC also considered only cashflows attributed to the analogue broadcasting service in licence re-valuations. However, Ofcom considers that in relation to the digital replacement licences the statute requires Ofcom to take account of both the analogue and digital terrestrial services.

1.11 This change will not have any effect on the amounts of the payments that licensees make at the point when their digital replacement licences are issued. The change may have an effect (positive or negative) in any subsequent review of the value of the licences. However, as stated at paragraph 35 of the June Consultation, Ofcom's preliminary view is that any such change is unlikely to be significant.

Structure of this document

1.12 The process of setting the financial terms can be considered in two stages;

(i) The valuation of the licence; and

(ii) The setting of the financial terms, based on that valuation.

1.13 The valuation of the licence will need to take account of both the value to the licence holder of the rights and obligations conferred by the licence and the circumstances of the hypothetical auction.

---

[5] Section 19(2) of the Broadcasting Act 1990 defines qualifying revenue as "all payments received or to be received by [the licence holder] or by any connected person in consideration of the inclusion in the licensed service of advertisements or other programmes, or in respect of charges made in that period for the reception of programmes included in that service".

1.14 Section 2 of this statement describes the overall approach that Ofcom intends to take to these reviews.

1.15 Section 3 considers the circumstances of the hypothetical auction and the implications of this for the valuation.

1.16 Section 4 provides a high-level overview of the valuation methodology. This section also discusses the setting of financial terms, through the share of value to be recovered via PQR or via fixed cash sums.

1.17 Section 5 discusses the approach that Ofcom proposes to take to the valuation of particular sets of rights and obligations under the licences.

1.18 Section 6 considers administrative details.

Section 2

Overview of Ofcom's approach

Introduction

2.1 This section summarises Ofcom's approach to setting the PQR and cash bid. Specifically it sets out:

(i) how Ofcom intends to discharge its statutory task at a time of considerable uncertainty in the broadcasting industry; and

(ii) Ofcom's proposals for a consistent methodology for setting the PQR, where Ofcom has significant discretion, and the cash bid, which must be determined in accordance with certain requirements of the Broadcasting Act 1990.

Ofcom's statutory task

2.2 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. Ofcom must determine two elements: (a) a fixed annual cash amount to be paid for the licence i.e. the amount the licence holder would have bid in a competitive tender under section 15 of the Broadcasting Act 1990 (the "1990 Act") and (b) the percentage of qualifying revenue as determined by Ofcom to be payable for each year of the licence, which can vary from year to year.

2.3 In respect of the fixed annual cash amount, 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 made in accordance with" section 15 of the 1990 Act.

2.4 In an auction of a licence under section 15 of the 1990 Act, Ofcom must set out the PQR in the notice asking for 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.

2.5 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 granted afresh.

2.6 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 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 below.

Ofcom's objectives

2.7 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.

2.8 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.

2.9 However, 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.

2.10 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.

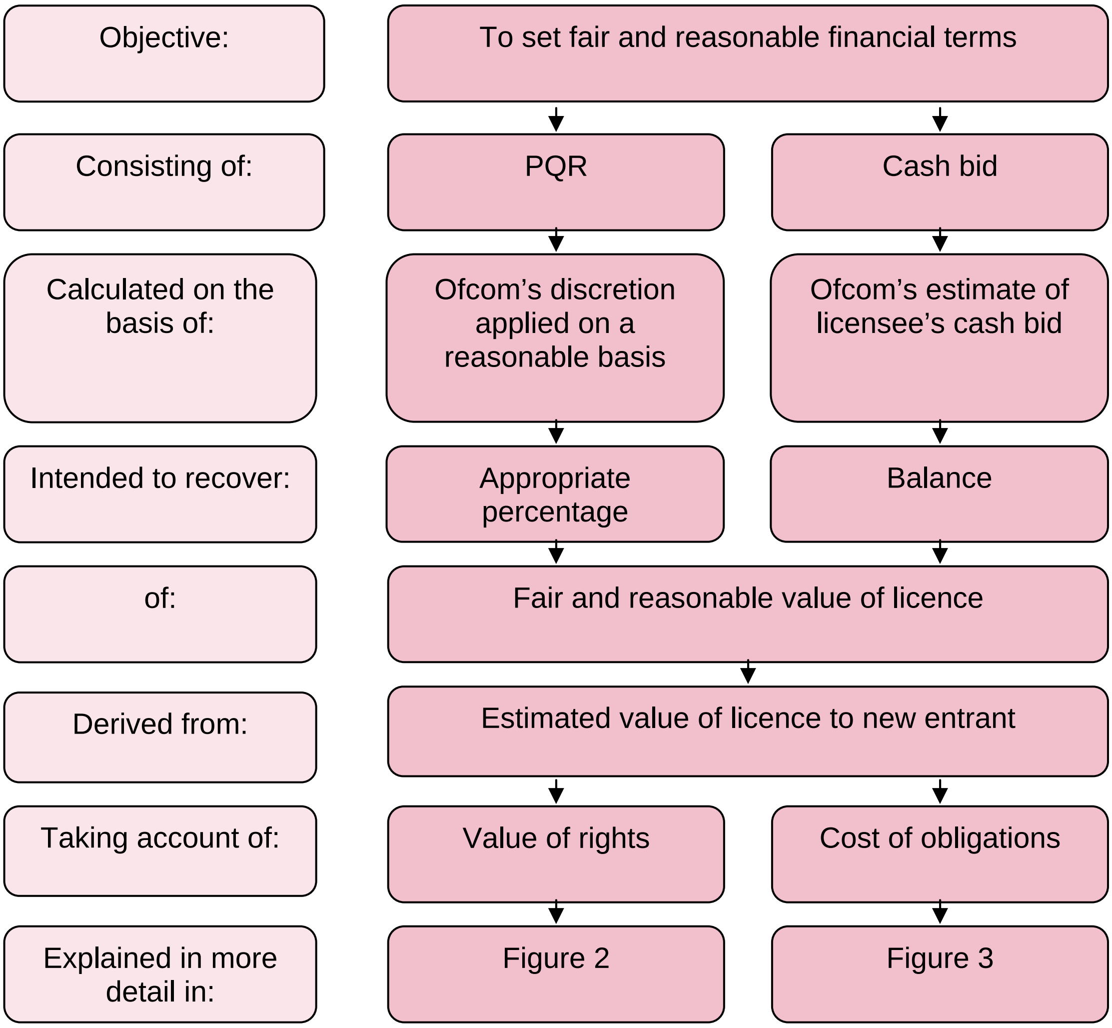
2.11 Ofcom is unable to eliminate these uncertainties. Therefore, in order to fulfil its statutory duty to determine the financial terms, it is necessary for Ofcom to make a series of assumptions on many issues.

2.12 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.

Ofcom's approach

2.13 Ofcom's approach can be summarised diagrammatically, as set out in Figure 1.

Figure 1: Setting financial terms



Section 3

Hypothetical auction process

Introduction

3.1 This section of the statement sets out the circumstances of the hypothetical auction process that Ofcom aims to replicate in the reviews to decide the licence payments and the corresponding valuation methodology.

3.2 Specifically, Ofcom will:

(i) Assume that the licences would be auctioned separately;

(ii) Assume that the incumbent licence holder would win the auction;

(iii) Estimate the cash bid of the incumbent in a sealed-bid auction for the licence; and

(iv) Base the estimate of the cash bid by the incumbent on the expected value of the licence to a new entrant.

3.3 These issues were originally considered in Section 3 of the June Consultation and are considered in more detail below.

Hypothetical auction process

3.4 In the June Consultation, Ofcom proposed that it would design the auction, within the framework of the statute, to recover the maximum possible value consistent with the licensee being able to fulfil all of the programming and other obligations associated with the licence.

3.5 Ofcom proposed in the June Consultation that it would offer as many of the licences as possible simultaneously and would allow contingent bids for multiple licences. Ofcom's proposal to allow contingent bids for multiple licences reflected its view as to what would happen in an actual auction and that this should be replicated as nearly as possible in the hypothetical auction. This would represent a change from the approach taken by the ITC for the last round of licence reviews, which was to value each licence on a standalone basis.

3.6 Several respondents agreed with this approach. One respondent argued that, if the licences were tendered individually, any bidder would seek to bid for multiple licences and would be likely to make its offer conditional on the award of all or a significant number of the licences. Another respondent stated that it would be necessary to carry out the valuation based on the licences being held in common ownership if Ofcom was to satisfy properly the requirement of determining the amount a prospective bidder would bid for the licences. Another argued that, for potential alternative bidders, Channel 3 licences would be most valuable as part of a single broadcaster.

3.7 However, other respondents disagreed with this approach and argued that licences should be valued separately, regardless of the current ownership structure.

3.8 In the June consultation, Ofcom acknowledged that allowing contingent bids for multiple licences in the hypothetical auction process necessitated making an assumption about bidding for multiple licences in groups that mirror the current ownership structure. Ofcom made this assumption on the basis that it considered this to be the least arbitrary approach.

3.9 Responses to the consultation identified a number of other assumptions that would also need to be made in the hypothetical auction as a result of permitting contingent bids for multiple licences. The responses identified a number of difficulties associated with making these assumptions.

3.10 These included the following:

(i) A hypothetical auction in which all licences were offered on a contingent basis would not be practicable, and licensees could deny Ofcom the opportunity to offer them on this basis;

(ii) The assumption that a hypothetical bidder would attempt to mirror the existing licence ownership pattern is unrealistic and arbitrary;

(iii) Taking account of contingent bidding introduces complex questions of auction theory and tactics if contingent multiple bids for different combinations of licences are to be compared; and

(iv) The proposed approach would mean that Ofcom would calculate the financial terms for each individual licence as if auctioned on a multiple and contingent basis with all other licences held in common ownership. Ofcom would therefore have to assume that each licensee would accept the terms calculated on this basis, even if the proposed terms for other licences were not in fact accepted. Ofcom in effect would prejudge that the review terms for all licences under review would be accepted.

3.11 In light of the consultation, Ofcom has given further consideration as to how it should exercise its discretion on this issue when determining the appropriate cash bid under the Act. Ofcom considers that the respondents to the consultation have identified several issues in relation to the conduct of the hypothetical auction that are significant and that would make it difficult to conduct a multiple contingent bid auction within the statutory framework. Ofcom therefore now considers that in exercising its discretion so as to promote the policy and objectives of the legislation as a whole, it should treat each licence individually.

3.12 Ofcom therefore proposes to value each licence on the basis that the licences would be auctioned separately. This therefore represents a change from the proposed methodology and a move into line with the methodology adopted in the past for previous reviews.

3.13 However, while Ofcom does not believe that it can proceed with the valuation of multiple licences through contingent bids in the hypothetical auction, it continues to believe that potential bidders for individual licences would be aware of the potential advantages of winning more than one licence and also of the scope for post-auction transactions to achieve the ownership of multiple licences. This provides further support to Ofcom's view that any auction would be competitive with multiple bidders for individual licences. If appropriate, Ofcom will also take into account the expected costs and benefits of achieving a more efficient cost structure over time in judging the value of the licences.

Estimating the cash bid

Incumbent's bid v winning bid

3.14 Statute requires that Ofcom must decide the amount of the annual cash sum by reference to what would have been the cash bid of the incumbent in a hypothetical auction of the licence if granted afresh, and assume this would also be the highest and winning cash bid.

3.15 Some respondents have argued that the wording of the Act suggests Ofcom is under a duty only to value the cash bid of the incumbent in the hypothetical auction and this need not be the winning bid. One respondent compared the wording of section 227(3) of the Act against the duty placed on the Independent Television Commission to value the cash bid on renewal under section 20(7) of the 1990 Act (now repealed) and argued that the change in wording supports this interpretation.

3.16 Ofcom is satisfied that the difference between the wording of section 227(3) of the Act against the duty placed on the Independent Television Commission to value the cash bid on renewal under section 20(7) of the 1990 Act was intended only to eradicate an ambiguity in section 20(7) and was to make clear Ofcom was to calculate what the incumbent licensee would have bid in the hypothetical auction to win it, as opposed to what a hypothetical bidder would have offered to win.

3.17 Ofcom believes that it is implicit in section 227(3) of the Act that it is required by statute to assume that the cash bid of the incumbent licence holder is the winning bid. The licence holder whose hypothetical cash bid is being determined by Ofcom must be assumed to have their licence granted afresh. It would not make sense to interpret section 227(3) as requiring Ofcom to assume that the person to whom it would be granting the licence (i.e. the incumbent licence holder) does not want the licence enough to make a bid high enough to win it. Therefore, section 227(3) must have as its purpose a requirement for Ofcom to decide what would have been bid had the incumbent made the winning bid. Ofcom does not consider that it is relevant that the outcome of the 1991 Channel 3 auction was that several incumbents prior to the auction did not win the auction.

3.18 It is also clear that a hypothetical auction carried out in accordance with section 15 of the 1990 Act would also need to take account of section 17 of the same statute. Section 17(1) of the 1990 Act places Ofcom under a duty to award the licence to the person making the highest bid, save in exceptional circumstances.

3.19 It is therefore necessary to estimate the incumbent's cash bid on the basis that it is the highest and winning bid.

Estimating the incumbent's bid

3.20 In the June Consultation, Ofcom proposed that the maximum amount an incumbent would be willing to pay for a licence would equal the surplus value of the rights and obligations associated with the licence after an acceptable rate of return. However, Ofcom considered that the value realised in a competitive auction would be closer to the amount that would be bid by the second highest bidder than to the maximum amount the incumbent would be willing to pay. This was because the incumbent would aim to bid the minimum amount necessary to win the auction.

3.21 The incumbent would therefore attempt to beat the bid of the second-highest bidder by the smallest margin possible. In a sealed-bid auction, the exercise would be complicated by the lack of information about who the competitors would be and how they would value the licence.

3.22 Ofcom proposed that the incumbent would estimate the value of the licence to the second-highest bidder by estimating the cost of entry and subtracting that amount from its own valuation of the licence. Then, the incumbent would bid slightly more than that amount to win the licence.

3.23 Therefore, Ofcom proposed to estimate the bid of the incumbent by calculating the present value of the licence to the incumbent, after a reasonable rate of return, and then subtracting a reasonable estimate of entry costs that would be incurred by the second-highest bidder.

3.24 Two respondents agreed that the proposed approach is appropriate.

3.25 Two respondents argued that the proposed approach would understate the value of the licence. One respondent believes that, given the importance of the licences to the incumbents' businesses, the incumbent would set its bid at a level that would guarantee success at an auction.

3.26 On this basis, the respondent argued that it would be inappropriate to value the bid on a conservative basis. Another respondent suggested that rather than bid an amount to beat the second highest bidder, the incumbent would bid up to its maximum valuation of the licence.

3.27 One respondent argued that there is no basis for assuming that the value of the licence to a new entrant would be less than that to the incumbent. The respondent suggested that any auction would be competitive and that alternative bidders could include global media companies with the necessary assets and experience required for entry and an established brand.

3.28 The respondent argued that such bidders would be able to generate greater value from the licence than the incumbent. On this basis, the respondent stated that deducting entry costs to arrive at the incumbent's bid would understate the value of the licence. The respondent concluded that economic theory suggests that the incumbent would bid close to its own valuation of the licence and that the correct approach would therefore be to assess the value of the cash bid based on the present value of the licence to the incumbent after a reasonable rate of return but without making any deduction for the cost of entry.

3.29 The extent to which alternative bidders might expect to generate greater value from the licence than the incumbent (eg, through lower costs or higher revenue) is considered in Section 5 of this statement. Ofcom agrees that in estimating the incumbent's bid, Ofcom should assume that new entrants would expect to operate the licence efficiently. However, regardless of the scope for higher efficiency, Ofcom considers that a new entrant would incur some costs associated with entry, and these should be taken into account in the valuation.

3.30 Other respondents argued that auction theory indicates that the winning bid would be significantly less than the value of the licence to the second highest bidder and that the proposed methodology therefore significantly overstates the value of the licence.

3.31 A respondent used a result from auction theory[6] to argue that only where there is a very significant gap between the valuation of the incumbent and the second highest bidder would it make any sense for the incumbent to match the full valuation of the second highest bidder.

3.32 Instead, the respondent argued that the incumbent's bid would be a function of the incumbent's valuation, the assumed number of bidders and the cost of entry. If there were two bidders, the respondent argued that auction theory suggests that this could lead to a bid as low as 50% of the incumbent's valuation, less costs of entry.

3.33 The respondent also argued that it would be possible that the cost advantage of the incumbent would mean that no entrant would take part in the auction (since they would not think that there was any chance of them winning it). Therefore the incumbent might be able to win the auction for a nominal amount. Ofcom believes that this situation would be more likely to occur in an open auction where the incumbent can react to the entrant's bid and always outbid the entrant. We do not believe that this behaviour is very likely in a sealed-bid auction given the uncertainty about who might bid (particularly given the relaxation of restrictions on who is allowed to bid since the 1991 auction) and the 'one shot' nature of the auction.

Applying auction theory to estimate the incumbent's bid

3.34 In light of the significance attached by two respondents to auction theory, one of which used it to illustrate that the Ofcom approach would understate the value of the licence while the other used it to argue that the approach would overstate the value, Ofcom obtained external expert advice to inform its assessment of whether the approach proposed in the June Consultation was reasonable in the context of the statutory requirements.

3.35 As explained in Section 2, Ofcom recognises that it has more discretion to determine the PQR than the annual cash sum, and that determining the outcome of a hypothetical auction is a complex task requiring Ofcom to deal with a series of uncertainties by making a series of assumptions. Ofcom also recognises that auction theory generally deals with highly simplified auction scenarios and even then does not necessarily provide a single definitive answer to the problem of predicting the incumbent's bid, but suggests that the

---

[6] Maskin and Riley (2000) "*Asymmetric Auctions*" Review of Economic Studies, 67, 413-438

results are very sensitive to the exact assumptions used and that a wide range of outcomes are possible, depending on those assumptions.

3.36 It is clear that neither the incumbent nor the entrant will bid more for the licence than their valuation (since this would mean that it would bid more than it thinks the licence is worth), and each is likely to bid less than their valuation (since if they did not, they would be sure to gain a net surplus of zero). The act of submitting a bid below one's valuation is known as '*bid shading'*. The more a bidder shades its bid, the lower its chance of winning the auction, but the higher its potential surplus from winning if it does win. Therefore each bidder has to trade-off the size of surplus against the likelihood of winning in order to determine its optimal bid.

3.37 Auction theory requires the assumption that there is some uncertainty over each party's valuation of the licence. The incumbent would need to estimate the value of the licence to the highest bidding entrant in determining its own optimal bidding strategy.

3.38 One might expect (and some respondents have argued) that the incumbent would take account of the fact that the entrant would shade its bid and therefore not have to bid the full entrant valuation in order to win the licence. However there are a number of factors that would reduce the amount of bid shading by the different parties and lead to the expected valuation of the entrant being a good proxy for the likely bid of the incumbent.

Risk aversion

3.39 Risk neutrality means that a bidder is indifferent between, for example, a certain surplus of £10m and a surplus of £5m or £15m with a 50% probability of each. On the other hand, a risk averse bidder will prefer the certain £10m to the uncertain £5m or £15m[7]. This means that the trade-off in choosing a bid (between the size of surplus and likelihood of winning) changes. A risk averse bidder will shade its bid less than a risk neutral bidder since it puts more weight on the benefit of increasing the bid and reducing the risk of losing the auction. This means that risk averse players' bids will be closer to their valuations.[8]

3.40 In assessing whether the bidders will be risk averse or risk neutral, one respondent has quoted economic research indicating that people attach a greater weight to losing things that they already own, than winning things that they do not currently own, even if the odds are the same in both cases (known as 'loss aversion')[9] – this would suggest that the incumbent would be likely to

---

[7] Note that risk aversion deals with the bidders attitude to risk (whether they prefer more or less risky outcomes), rather than the different risks faced by different bidders (for example due to different entry and exit costs) which is considered in the section on asymmetric bidder valuation.

[8] Note that even if the incumbent were risk neutral and entrants were risk averse, the incumbent's bid would still be closer to the entrant's valuation. This is because where the incumbent knows that the entrant is risk averse and so will shade their bid less, the incumbent knows that it will have to bid more in order to have the same chance of winning.

[9] See for example Kahneman and Tversky "*Prospect Theory: An Analysis of Decision under Risk*" Econometrica, XVLII (1979), 263-291

be risk averse. There is also evidence from auctions of spectrum capacity of certain companies bidding very aggressively (and significantly more than the next highest bid) in order to be sure of winning the auction, which suggests that in practice some of the incumbent bidders may not be risk neutral in their bidding behaviour.

3.41 In short, Ofcom considers that it is reasonable to assume that incumbent bidders for these licences would not be risk-neutral, and would exhibit some degree of risk aversion. The same may also be true of some new entrants. These effects would lead to the incumbent's bid being closer to the entrant's valuation.

Number of entrants

3.42 If there were only one entrant, the incumbent would seek to bid above the expected bid of the entrant to win the auction. With more than one entrant, the incumbent would need to bid above the expected bid from any entrant (and because of the uncertainty over the valuations, as the number of entrants increases so it is more likely that one of the entrants will have a high valuation). As a result the incumbent will make a higher bid the more entrants there are. In the extreme (with a large number of entrants) the incumbent will bid the upper bound of its estimate of the range of entrants' valuations.

3.43 Given the elimination of restrictions on the ownership of multiple licences and the lifting of the restriction on foreign ownership, Ofcom believes that there could be a potentially large number of bidders for each licence and therefore the incumbent would bid more than would be the case for a single entrant.

Asymmetric bidder valuations

3.44 If one assumes that the incumbent has a significant cost advantage over the new entrant (due to the presence of entry costs), there are reasonable and credible auction theory models[10] that show that the incumbent's best strategy is to bid the upper bound of the entrants' valuations (since it stands to gain so much from winning that it is in its interest to ensure that it does not face even a small chance of being outbid by an entrant).

3.45 There have been a range of views regarding the costs of entry, with some respondents considering them potentially very significant and others suggesting they may be small or non-existent. However, the costs to the incumbent of losing the auction (in terms of the effect on all or a large part of their existing business) is likely to be much higher than the costs to an entrant of losing the auction (primarily bidding costs). Therefore Ofcom believes that it is reasonable to conclude that the parties have significant differences in the potential costs they face, and would therefore have asymmetric valuations. This supports the view that Ofcom's proposed approach is a reasonable basis for estimating the incumbent's bid.

---

[10] Maskin and Riley (2000) "*Asymmetric Auctions*" Review of Economic Studies, 67, 413-438

Results from auction theory

3.46 Ofcom believes that the likely presence of risk aversion, a potentially large number of entrants and the existence of asymmetric bidder valuations all support the view that a fair estimate of the incumbent's bid can be derived from the expected value of the licence to a new entrant.

3.47 It is important to note that Ofcom's approach is based on seeking to make a reasonable estimate of the expected value to a new entrant, and not on estimating the upper bound of any potential range of entrants' valuations. The latter approach would necessarily require Ofcom to make more extreme assumptions in the valuation.

3.48 Ofcom therefore remains satisfied that the overall approach to determine the incumbent's bid proposed in the June Consultation is consistent with its objective of determining a fair value for each licence, within the framework of statute, and to set licence payment terms according to a fair and objective process.

Section 4

Outline of valuation methodology

Introduction

4.1 As explained in Sections 2 and 3, Ofcom will determine the PQR and then the cash bid by reference to the value of the rights and obligations to a new entrant.

4.2 This section sets out how the value of the rights and obligations will be taken into account in the overall valuation of the licence. Section 5 provides the detailed basis for the valuation of these rights and obligations.

4.3 Each licence will need to be valued as a whole, but Ofcom considers that for the purposes of explanation and analysis, these rights and obligations can usefully be grouped into three broad categories: analogue rights, digital terrestrial rights, and PSB obligations.

4.4 Ofcom proposes that, in order to determine the amount that the incumbent would bid for the licence, it will be necessary to determine the present value of each of the rights and obligations. For the purposes of this statement, the rights are considered separately, but they will be valued as a bundle of rights. The valuation will therefore take account of any consequential effect that the presence of one right or obligation has on the value of other rights and obligations. Ofcom will then set payment terms to recover the combined value of the rights and obligations over the duration of the licence.

4.5 Ofcom considers that 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.

4.6 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.

4.7 In general, Ofcom considers that, 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.

4.8 If the right could not be replicated elsewhere, 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.

Valuation of analogue and digital rights

4.9 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 Ofcom's opinion that a licensee would not pay more for the rights via a licence payment than it would need to pay for equivalent rights elsewhere.

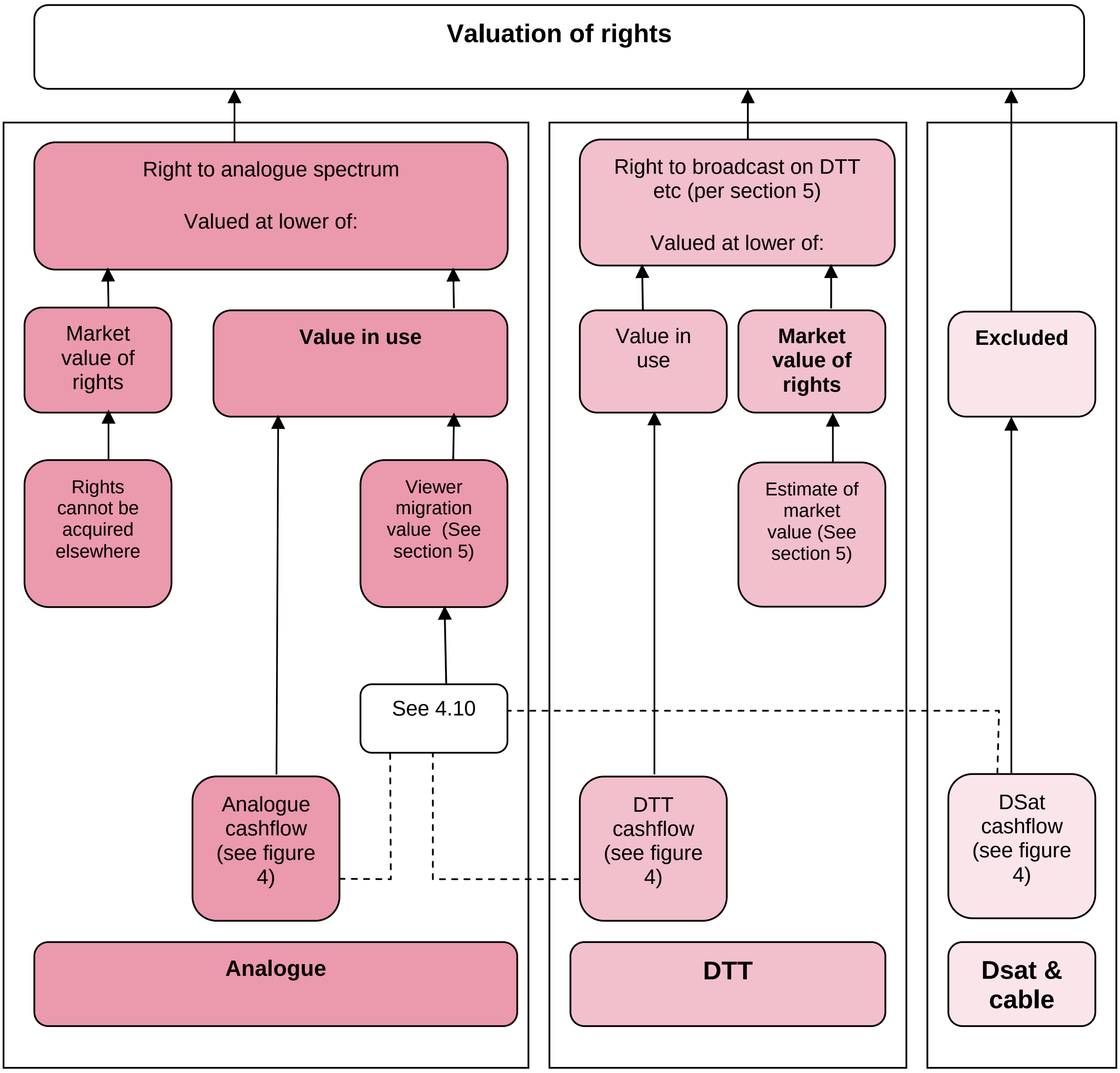
4.10 In practice, Ofcom believes that the analogue element of the licence should be valued by reference to the cashflows that can only be achieved by first acquiring the licence, as there is no other way of acquiring these rights to broadcast on the analogue spectrum. The value of the analogue element 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.

4.11 On the same basis, Ofcom believes that the value of the digital terrestrial television (DTT) rights should be based on the cost of replicating those rights (as the rights conferred by the licence generally can be substituted by equivalent rights acquired elsewhere). The cashflows of the DTT business will not therefore be included in the valuation, except to the extent that there is a causal link as described in paragraph 4.10.

4.12 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 as described in paragraph 4.10.

4.13 This approach can be summarised in a flowchart, as set out in Figure 2 below.

Figure 2: Valuation of rights



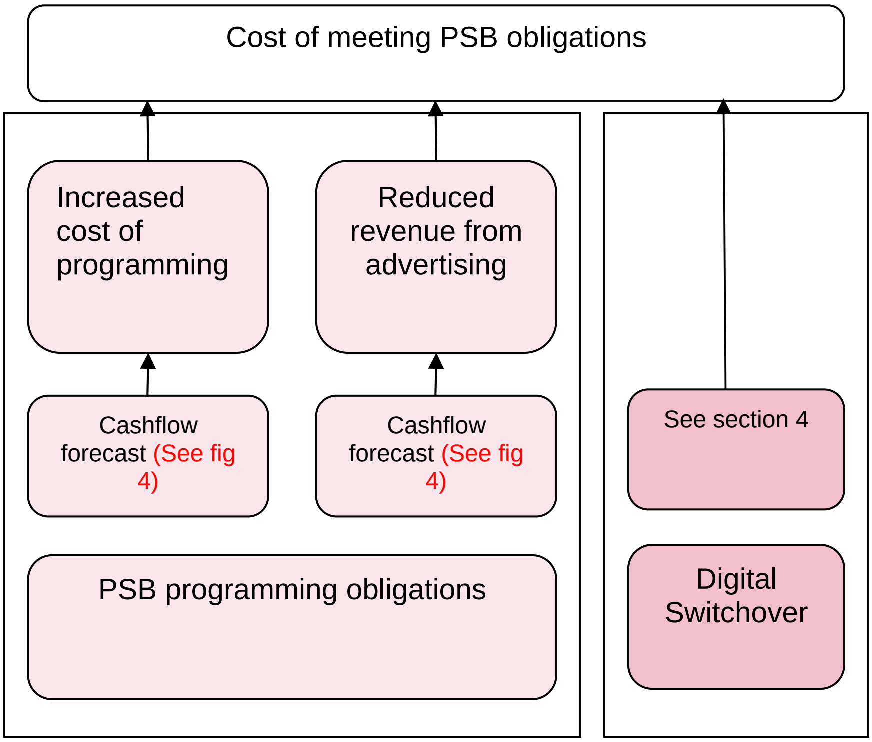
Cost of meeting obligations

4.14 The main obligation to the licensee is the cost of meeting the PSB obligation, consisting mainly of the increased cost of programming and the reduction in advertising revenue. As explained in Section 5, PSB costs will be modelled separately. Ofcom will reduce the value of the licence by the amount of the increased programming costs and the fall in advertising revenues across all platforms.

4.15 The costs and benefits of increasing DTT coverage will also be reflected in the valuation.

4.16 This approach can be summarised in a flowchart, as set out in Figure 3, below.

Figure 3: Cost of meeting obligations



4.17 As explained above, the valuation methodology relies on an assessment and comparison of the cashflows that can be generated as a result of holding the rights conferred by the licence (and meeting the obligations) and the cost of obtaining those rights elsewhere.

4.18 The cost of obtaining the rights is considered in more detail in Section 5. The approach to the cashflow forecasts is summarised below.

Cashflow calculations

4.19 Ofcom will use a discounted cashflow forecast to estimate the present value of the expected cashflows attributed to the analogue and digital terrestrial elements of the licence over the relevant period.

4.20 The approach to preparation of the cashflow forecast can be considered in five stages as follows:

(i) Level 1 base year cashflows;

(ii) Level 1 forecast cashflows;

(iii) Level 2 forecast cashflows;

(iv) Forecast cost of PSB obligations; and

(v) Present value of cashflows.

4.21 The detailed methodology for each of these stages is explained in more detail in Section 5, but is summarised in Figure 4 and described briefly below:

Level 1 base year cashflows

4.22 Licensees will provide a cashflow statement for the year to 31 December 2004.

4.23 The cashflow statement should include only cashflows relating to the broadcasting business (including all costs and revenues across all platforms) and any production activities as required by the terms of the licence.

4.24 The cashflow statement will then be adjusted to remove the impact of meeting PSB obligations. The cost of meeting these obligations will be modelled separately.

4.25 The cashflow statement will then be adjusted to take account of the circumstances of the auction described in Section 3 to give the Level 1 base year cashflow.

4.26 These adjustments include the inclusion of opening and closing assets, start-up costs and an adjustment to remove the benefits of common ownership, as explained in more detail in Section 5.

Level 1 forecast cashflows

4.27 It will then be necessary to forecast the Level 1 cashflows for the period of the licence. Cashflows will be stated in real terms.

4.28 Ofcom must determine a value for each licensee that applies for a review and therefore must develop a separate forecast of advertising revenue for each licence and project programming and operating costs for each licence individually. The starting point for the cost projections will be the normalised expenditure of the incumbent licence holder in the year prior to the review.

4.29 Forecast cashflows will be prepared on the basis that DTT roll-out will be extended and will therefore include the cost and benefits of additional DTT coverage.

4.30 The basis for forecasting future revenues and costs is set out in more detail in Section 5.

4.31 Where appropriate, licensees will be able to include their own assumptions in their forecasts. However, Ofcom will take steps to ensure that licensees' assumptions are realistic and internally consistent and reserves the right to challenge, modify or exclude a licensee's assumptions subject to Ofcom's own review of the scope and reasonableness of the licensee's estimate.

Level 2 forecast cashflows

4.32 To calculate cashflows on a platform level it will be necessary to apportion the Level 1 cashflows between:

(a) Analogue;

(b) Digital terrestrial; and

(c) Digital satellite and digital cable.

4.33 Costs that relate directly to a specific platform should be attributed to the appropriate platform.

4.34 Licensees do not earn revenues separately for broadcasting on analogue, digital terrestrial, cable and satellite. Also, a large proportion of each broadcaster's cost base is common to provision of the service on all platforms. Therefore, in order to value cashflows for each platform separately, it will be necessary to apportion revenues and common costs between the analogue and digital services.

4.35 The basis of apportionment is considered in more detail in Section 5.

Forecast cost of PSB obligations

4.36 As explained above, the costs of meeting PSB obligations will be removed from the Level 1 base year cashflow.

4.37 Under the terms of its licence, a licensee will be required to fulfil public service broadcasting obligations that relate to provision of the Channel 3, Channel 5 and Public Teletext services on both analogue and digital terrestrial.

4.38 Ofcom considers that, when deciding the amount to bid for the licence, a bidder would take account of the cost of meeting these obligations.

4.39 A separate cashflow forecast will be prepared to model the net effect of PSB obligations over the duration of the licence.

4.40 The impact of PSB obligations on the valuation of the licence is considered in more detail in Section 5.

Present value of cashflows

4.41 As explained in more detail in Section 5, Ofcom will use a real pre-tax discount rate of 12% to calculate the present value of the cashflows.

4.42 The process of preparing the cashflow forecasts and the way the information will be factored into the licence valuations is set out in Figure 4, below.

Setting of financial terms

4.43 Ofcom will calculate financial terms that will allow for the recovery of the combined net present value of the rights and obligations associated with the analogue and digital terrestrial elements of the licence.

4.44 As explained above, 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.

4.45 In the past, the ITC aimed to recover approximately 75% of the surplus value of each licence via the PQR payments and the remaining 25% via the annual fixed cash sum payments.

4.46 Several respondents to the June Consultation suggested that the existing 75%:25% split was broadly appropriate. Others suggested that the variable element should be increased, possibly to 100%. Some licensees indicated that they could not comment on the most appropriate split until the methodology and key assumptions were made known.

4.47 One respondent proposed that a higher variable element was appropriate to mitigate the effect of forecasting error. Another respondent highlighted the interrelationship between the financial terms and the costs of the PSB obligations and suggested that collecting financial payments entirely through the PQR would allow greater flexibility in respect of PSB obligations as the value of the analogue spectrum declines.

4.48 Ofcom recognises that there are some arguments in favour of recovering value principally through an annual fixed cash sum. For example, a high PQR may reduce a licensee's incentive to engage in commercial activities that involve low margins. A higher fixed cash sum would also give licensees more certainty about their future payments.

4.49 However, on balance, Ofcom believes that there continue to be strong arguments for recovering a high proportion of the licence fees through a PQR. Indeed, Ofcom considers that it may make sense to recover a greater proportion of the licence fees in this manner, given the particular uncertainties that the sector faces in the period leading up to and after digital switchover. Recovery via the PQR aligns the payments with licensees' revenues and therefore would offer some protection against the risk of revenue downturns. It also helps to mitigate some of the risk of forecasting error. This is particularly important given the high degree of uncertainty associated with forecasting over the next ten years. Also, because the PQR rate is not applied to revenue from cable and satellite services and will most likely be applied to a low or zero-weighting of revenues from the digital terrestrial service, PQR payments will decline as digital penetration increases. Therefore, Ofcom considers that recovering a higher portion of the licence fees through the PQR would be aligned with the objective of promoting digital switchover.

4.50 In light of the above, Ofcom will determine PQR payments to recover between 75% and 95% of the value of the licence with the balance being recovered via the fixed cash sum determined in accordance with the principles set out in statute. The exact proportion of the value of the licence to be recovered via the PQR payments will be determined by Ofcom at a later date. Ofcom's decision as to the appropriate percentage will be informed by the views of the licensees.

4.51 As permitted by the Act, Ofcom may also decide to determine different PQRs for different accounting periods.

4.52 As explained in the June Consultation, Ofcom intends to introduce two categories of qualifying revenue in the digital replacement licences: analogue qualifying revenue and digital terrestrial qualifying revenue. The PQR rate will be applied to both categories of qualifying revenue. However, Ofcom will assign a weighting to each category, for the purpose of calculating licence payments, and the weightings will be based on each category's impact on the licence valuation. For example, if Ofcom determines that the net valuation of the digital terrestrial element of the licence is zero or negative, digital terrestrial qualifying revenue will continue to have a zero-weighting.

Basis for approach

4.53 One respondent agreed that the correct approach to valuing the amount that a potential bidder would be prepared to pay for a licence was to consider the additional profits that could be made as a result of the net effect of having all the rights and obligations associated with holding the licence.

4.54 However, the respondent argued that Ofcom should not seek to value the rights and obligations individually, as described above, but should instead value the rights and obligations conferred by the licences in aggregate.

4.55 Specifically, the respondent argued that attempting to measure the value of each right and obligation individually would not take account of the fact that the value of the rights taken together is very likely to be more than the sum of the values for each of the rights looked at individually. For example, the respondent argued that, without the ability to provide an analogue service, overall reach would be reduced and therefore the revenue per impact across all channels would fall.

4.56 Ofcom agrees that the value of the rights taken together may be greater than the sum of the values for each of the rights valued separately, and has developed the valuation methodology accordingly. As explained in paragraph 4.4, the valuation will take account of the consequential effect that the presence of one right or obligation has on the value of other rights and obligations. Section 5 explains Ofcom's view that the right to provide an analogue service is likely to increase a broadcaster's digital revenues.

4.57 The respondent also suggested that a better approach to the valuation of the Channel 3 licence would be to use the licensees' current and projected future business as the benchmark for examining the profitability of a licence holder and compare it with a counterfactual channel without the rights and obligations associated with the licence.

4.58 The respondent suggested that it would be reasonably straightforward to determine the hypothetical counterfactual; specifically, it would not be necessary to model forecast revenues, because there would be no ability within the counterfactual to earn any excess profits. Specifically, the respondent argued that in the counterfactual, the incumbent would not have the rights conferred by the licence, including the right to use the analogue spectrum, would be operating in a highly competitive market with no market power and would lack the necessary creativity or innovation to sustain excess profits.

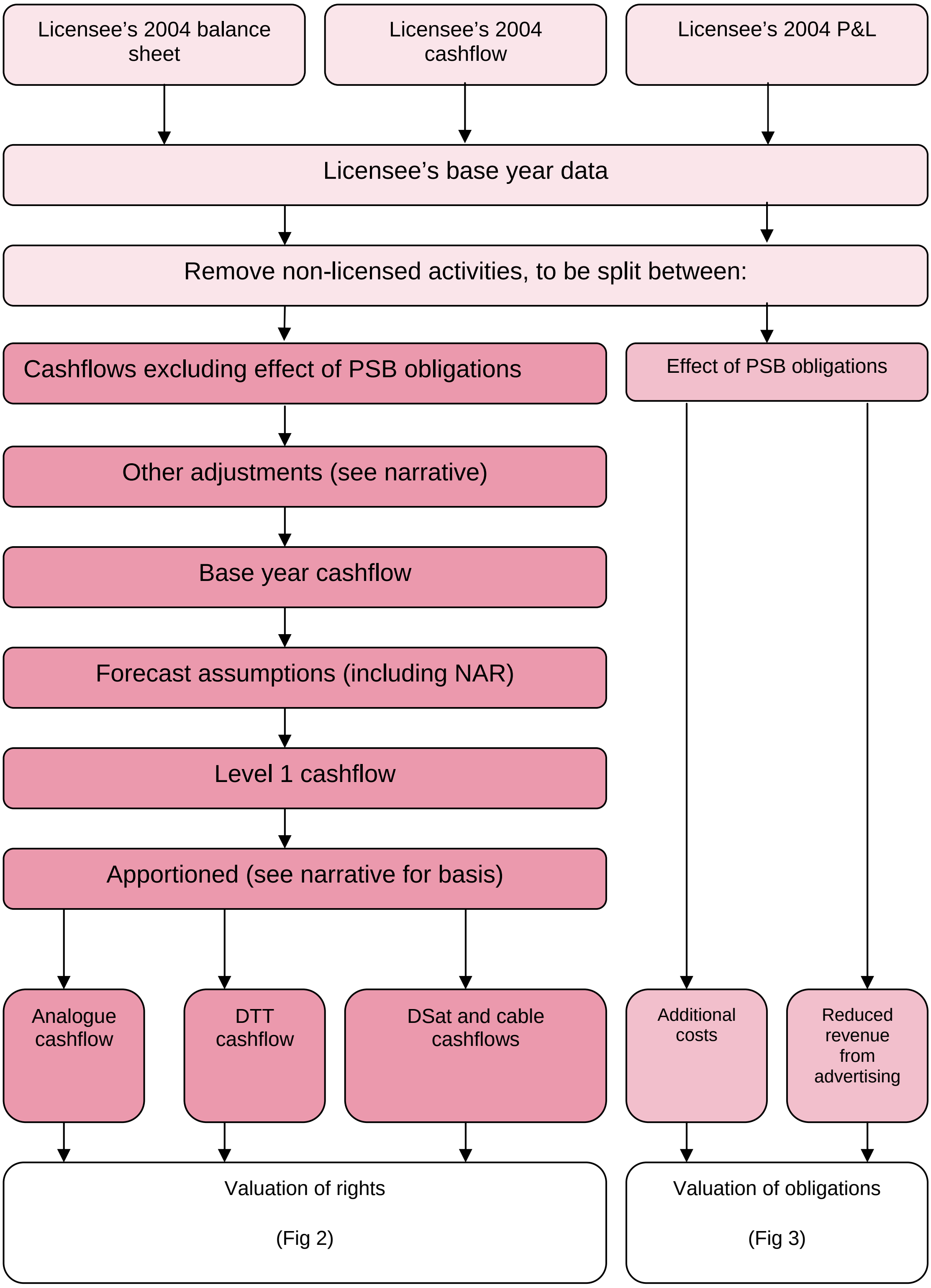
4.59 On this basis, the respondent argued that all excess profits in excess of a reasonable return would be attributable to the rights and obligations conferred by the licence.

4.60 Ofcom recognises that there are some attractions to the counterfactual approach described by the respondent. However, in practice, Ofcom considers that specifying the counterfactual is far more complicated that the respondent suggests. Specifically, Ofcom considers that the assumption that no excess profits could be made without a licence is far too simplistic, unlikely to be correct and, in any event, impossible to demonstrate.

4.61 It would therefore be necessary to model the cashflows of a hypothetical counterfactual broadcaster over the duration of the licence, in addition to those of the incumbent. Such an approach would introduce yet another layer of complexity and uncertainty and would require arbitrary assumptions regarding the likely business plan of a hypothetical new entrant.

4.62 As noted in Section 2, 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 described in this statement is more likely to provide a robust and reliable basis for determining the financial terms for each licence than the counterfactual basis suggested above.

Figure 4: Calculation of level 2 cashflows by platform



Section 5

Approach to licence valuation

Introduction

5.1 This section sets out how Ofcom will value each right and obligation associated with the licence. For convenience, issues are addressed in a similar order to that adopted in Section 4 of the June Consultation.

5.2 Ofcom recognises that some of the general principles described below do not provide an appropriate basis for the valuation of the Public Teletext licence. To the extent that the general methodology needs to be adapted to address the specific circumstances of the Public Teletext licence, this is addressed at the end of this section.

General approach

5.3 Each holder of a digital replacement licence will have the following rights and obligations as a consequence of holding the licence:

(a) Rights

- The right to broadcast on digital terrestrial
- Reserved capacity on a digital terrestrial multiplex
- Appropriate degree of prominence on electronic programme guides
- Must-carry obligation on cable providers
- The right to broadcast on scarce analogue spectrum

(b) Public Service Obligations

- Public service programming obligations
- Digital switchover obligations

5.4 The basis for valuing these rights and obligations will be as set out below.

Right to broadcast on digital terrestrial

5.5 A broadcaster could replicate the right to broadcast on digital terrestrial by obtaining at minimal cost a digital programme service licence from Ofcom. Therefore, Ofcom considers that there is no material value associated with this aspect of the digital licence.

Right to reserved capacity on a digital terrestrial multiplex

5.6 The licensees currently have reserved capacity on a digital terrestrial multiplex. Therefore, each licensee makes payments towards the operation of the multiplex but does not pay any additional carriage fee associated with the market value of capacity. If a broadcaster did not have access to reserved capacity on a multiplex, it would need to negotiate with a multiplex operator for carriage on commercial terms. Therefore, Ofcom considers that the value of the right to reserved capacity equals the difference between the total carriage fees that would be charged by multiplex operators, including the cost of operating the multiplex and the market rate for carriage, and the cost to the broadcaster of operating the multiplex.

5.7 Ofcom considers that the market value of digital multiplex capacity is currently low, but may increase as the analogue switch-off date approaches, depending on available capacity. Ofcom proposed in the June Consultation to estimate the present value of the right to reserved capacity on this basis.

5.8 Respondents to the consultation generally agreed that the value of the reserved capacity should be reflected in the licence valuation. Responses included comments to the effect that, in respect of the Channel 3 licences, the full costs of operating the regional multiplex structure should be taken into account in calculating the net benefit of the gifted capacity, that the value of reserved capacity on Digital 3&4 utilised by channels other than Channel 3 should not be taken into account, and in the case of a view expressed by one respondent, that the value of the right to reserved capacity on the digital terrestrial multiplex will be difficult to determine and may reduce over time.

5.9 The value of the right to reserved capacity reflects the carriage fees and operating costs saved by licensees less any additional costs incurred by licensees as a result of the multiplex's current regional structure that would not be incurred by a broadcaster without a digital replacement licence.

5.10 In forming a view of the future value of digital multiplex capacity, Ofcom will consider likely changes in the costs of acquiring capacity in the future. Ofcom recognises the practical difficulties in doing so but currently does not expect that the value of the rights will fall. In valuing the licence Ofcom will take into account all those rights to reserved capacity that result from holding the digital replacement licence.

Right to appropriate degree of prominence on EPGs

5.11 Although the right to an appropriate degree of prominence on EPGs relates not only to the digital terrestrial service but also to the cable and satellite services, which are covered by a separate licence, broadcasters will have this right as a consequence of holding the digital replacement licence. Therefore, Ofcom proposed that it would consider including the full value of this right in the overall valuation of the digital licence.

5.12 If a broadcaster did not have the right to an appropriate degree of prominence on EPGs, it might have to accept a less prominent position on EPGs. This could mean that the broadcaster would lose market share or that more advertising expenditure would be necessary in order to maintain the same market share. However, the value of the right is unclear and is difficult to estimate.

5.13 Ofcom invited evidence supporting a view as to whether or not this right will have significant value and, views on an appropriate method for valuing it.

5.14 Respondents' views on the value of due prominence ranged from minimal to material although there was a general recognition that providing a robust valuation would be difficult.

5.15 Some respondents pointed out that instances in which the positions of channels on EPGs have been moved should provide evidence of the impact of EPG prominence.

5.16 Ofcom's own analysis suggests that EPG prominence may have short-term value for a new entrant, through a positive impact on viewing share but it is not likely to be a source of sustained and significant value.

5.17 In essence, whilst placement higher up on the EPG might spark short-term interest and an increase in audience share, maintaining this share will not be sustainable if the content does not continue to be attractive to viewers.

5.18 Ofcom recognises that there is an argument that EPG placement is of greater importance if, like Channel 3 and Channel 5, the channel is on the first page of the EPG. However, while this argument is difficult to test, previous research has indicated that people were willing to look below the first page in the genres they were interested in, and frequently remembered the channel numbers of a few channels they watched regularly. Significantly, the EPG is still only one of the sources of information about programming, which include newspapers and TV listing magazines, available to viewers.

5.19 On this basis, Ofcom considers that increased prominence is likely to carry some value, although in some cases it may only have a modest and short term effect. The value of due prominence will be considered by Ofcom alongside the assessment of the viewer migration value, discussed in more detail later in this section.

Must-carry obligation on cable providers

5.20 Under section 64 of the Act, cable providers are required to carry the licensed services, as Ofcom considers appropriate. Although the must-carry right relates to the cable service, which is covered by a separate licence, any benefit to the licensees from the obligation on cable providers will be a consequence of holding the digital licence. Ofcom's preliminary view was that there should be a mutual commercial benefit to broadcasters and cable providers of carriage of these channels on cable and that it is likely that the channels would continue to be carried on cable at minimal or zero charge without the must-carry obligation.

5.21 On this basis, Ofcom proposed that the value of the must-carry obligation on cable providers will be minimal for the licensees.

5.22 There was general agreement amongst the respondents that the must carry-obligation did not have any material value. One respondent noted that this view was supported by the fact that the must-carry obligation in the Broadcasting Act 1996 has never been invoked. One respondent argued that the value was potentially negative since a licensee might be a net recipient of money from the cable operators if it were to carry out a full commercial agreement.

5.23 In light of the comments received in the consultation responses, Ofcom continues to consider that the value of the must-carry obligation is likely to be minimal. In respect of the view that the value may be negative, we have seen no evidence to suggest that the negative value would be material.

5.24 On this basis, Ofcom will not attribute a separate value to the must carry obligation.

PSB obligations

PSB programming

5.25 In the June Consultation Ofcom proposed to deduct the costs of PSB obligations relating to the analogue and DTT services separately and make no deduction in respect of the costs of providing PSB programming on Digital Satellite or Digital Cable. Ofcom proposed that it would model the impact of PSB obligations separately for the analogue and DTT services.

5.26 Ofcom does not propose to amend the fundamental principle set out in the June Consultation that the valuation should include an explicit opportunity cost associated with PSB obligations. As noted by a number of respondents to the consultation, explicit accounting for PSB obligations creates increased transparency, allowing the components of licence value to be analysed separately.

5.27 However, in light of responses to the June Consultation, further investigation by Ofcom and the need for an internally consistent approach, Ofcom will now deduct the full forecast cost of PSB obligations without any reduction in respect of digital satellite or cable. With this in mind, Ofcom will remove the impact of PSB obligations from the Level 1 base year cashflows and model these costs separately.

5.28 The main issues considered below are:

- The main components of the opportunity costs of PSB;
- Separately calculating PSB obligations on a platform-by-platform basis;
- The issue of future obligations and the timings of Ofcom decisions on policy change; and
- Responsibility for calculation.

The main components of PSB opportunity costs

5.29 The main components of the cost of meeting PSB obligations are the increased programme production costs associated with the PSB obligations, and the reduction in advertising revenues as a result of showing PSB programming instead of more commercial scheduling.

Obligations by platform

5.30 In respect of the analogue service, Ofcom recognised that the licensees' costs and revenues already reflected the current PSB obligations and therefore proposed to take account of the costs of meeting public service broadcasting obligations by reflecting in its forecasting forwards the current revenues and costs currently apportioned to the analogue service.

5.31 In respect of the DTT service, Ofcom proposed that it would reflect as an outgoing cashflow, for each year of the licence period, an estimate of the amount by which cashflows to the digital terrestrial service are reduced as a result of the PSB obligations.

5.32 During the consultation process, it was suggested that the assessment of PSB costs should be extended to include digital cable and satellite platforms. A concern was raised that apportioning costs between the different platforms in the manner described in the June Consultation would cause some of the costs of meeting the obligation to fall out of the valuation.

5.33 Specifically, increased costs of programming apportioned to digital satellite would not be reflected in the valuation, despite the fact that those costs were only incurred as a result of the PSB obligation.

5.34 Ofcom accepts that the increased cost of providing PSB programming is incurred as a direct result of the PSB obligations attached to the licence and that cost will be incurred regardless of the platform on which the programme is viewed.

5.35 Further, Ofcom is persuaded that, for a combination of regulatory and commercial reasons, it would not be practicable to provide a second schedule for transmission on the cable and Digital Satellite services.

5.36 Therefore, when considering how much to bid for the licence, Ofcom believes that a new entrant would take account of the increased cost associated with the production of PSB programming and the reduction in revenues across all platforms.

5.37 In light of the above, Ofcom has decided to modify its approach as set out in the June Consultation to assessing the impact of PSB obligations on the value of the licence. As a result, PSB costs will be removed from the Level 1 cashflow forecasts before these cashflows are apportioned between platforms. The cost of PSB obligations will then be forecast and their impact on the value of the licence will be considered separately.

5.38 The PSB cost calculation will include both the increased programming cost and the reduction in advertising revenue caused as a result of showing PSB programmes that attract less advertising revenue than might otherwise have been achieved.

5.39 The loss of advertising revenue due to PSB programming across all platforms will therefore be taken into account.

Expected change in PSB obligations

5.40 In the June Consultation, Ofcom proposed that when forecasting the revenues and programming costs for each licence, it would be necessary for Ofcom to take a view as to the impact of any changes in future PSB obligations as a result of Ofcom's review of public service broadcasting, and reflect these in the licence valuation.

5.41 Some respondents have, however, stated that it would be inappropriate for Ofcom to take this approach, unless the outcome of the PSB Review is known with certainty by the application date of 31 December 2004. If the final outcome of the PSB Review is not known by that date, it has been argued that the cost associated with PSB obligations should be assumed to continue at their current level throughout the lifetime of the licence.

5.42 As explained later in Section 5, Ofcom will take into account information that has a material bearing on the valuation until the date on which it makes a determination of new financial terms.

5.43 Ofcom does not consider that, even in the absence of any formal agreement on future PSB obligations, any new entrant would reasonably expect the obligations to continue at their current level for the duration of the licence. Instead, Ofcom considers that a new entrant would form a view based on the best information available to it on the likely cost of meeting future PSB obligations.

5.44 Ofcom considers that, when forecasting the revenues and programming costs for each licence, it will be necessary for Ofcom to take a reasonable view as to any changes in future PSB obligations over the period of the licence. Some changes are already under active discussion as a result of Ofcom's current review of public service broadcasting, and Ofcom expects to take these changes into account in the valuation The Act provides for Ofcom to undertake a similar review every 5 years, and it is possible that future reviews could lead to further changes in obligations.

5.45 Given the uncertainties involved in long-term forecasts, Ofcom proposes to be cautious about assuming further changes in PSB obligations that might result from quinquennial reviews conducted in the future. Ofcom will however 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.

Responsibility for calculation

5.46 Ofcom recognises that calculating the cost of future PSB obligations will be a difficult task due to the inherent difficulty in calculating both the cost of meeting the current obligations and forming a view on how obligations will change in the years ahead.

5.47 One respondent stressed its view that the calculation is very easy to distort, hence Ofcom should not rely on the licensee's own estimates.

5.48 However, Ofcom is of the view that the licensees have the best visibility of the cost of meeting their obligations. Ofcom therefore proposes that licensees shall provide their calculations of the cost of meeting their PSB obligations. Ofcom will then use these calculations as the starting point for its own analysis to estimate the cost of future PSB obligations in light of the forthcoming PSB review and future developments in the broadcasting environment.

Digital switchover

5.49 In the June Consultation, Ofcom proposed to take account in the valuation of the estimated net costs to licensees of meeting any licence obligations related to digital switchover, such as the roll-out of digital terrestrial coverage or obligations to incur costs to raise public awareness. Most respondents agreed with the general principle that the net cost or benefit of digital switchover obligations should be reflected in the valuation.

5.50 However, some respondents suggested that the full cost of DTT roll-out should be included, and that there would be no benefit to licensees associated with activities such as raising public awareness. Ofcom does not accept these contentions. In particular, Ofcom would expect most or all of these costs to be incurred in any event, irrespective of licence obligations. It is therefore only appropriate to take into account in the valuation any additional costs that would be incurred as a direct consequence of any licence obligations,

5.51 The valuation will also include any benefit that flows to the licensee as a result of meeting its licence obligations. Therefore, the valuation will ensure that the licensee does not receive any financial benefit, or suffer any financial loss, as a result of digital switchover obligations.

5.52 Ofcom recognises that there is still some uncertainty regarding the exact dates of switchover for each region. Some respondents have argued that a rational bidder for any licence would therefore assume that switchover would occur in the relevant region at the earliest possible date (2008) and Ofcom must therefore value each licence on this basis.

5.53 Ofcom accepts that bidders would recognise the possibility that switchover might not occur at the scheduled date. However, this could result in switchover occurring in any region either earlier or later than expected. Ofcom does not accept that the winning bidder in a competitive auction for a licence with a scheduled switchover date of, say, 2011 will have assumed that switchover will occur in 2008.

5.54 Further, in the event that switchover does occur earlier than expected, digital revenues would grow faster than expected, while annual PQR payments would fall, potentially to zero.

5.55 Ofcom expects that by the end of 2004 there will be greater clarity and certainty with regard to the switchover timetable and further refinements to the timetable are likely in early 2005. To reflect the likely approach of the second highest bidder, Ofcom will therefore make a reasonable estimate of the likely switchover date for each licence, and will take account of the latest available information at the date the terms are determined.

Right to broadcast on scarce analogue spectrum

5.56 A digital broadcasting licence will give the holder the right to broadcast on scarce analogue spectrum. There is no alternative method for acquiring this right, and therefore without this licence, a broadcaster would have no access to analogue spectrum and would not be able to provide an analogue service. For this reason, all profits that are a consequence of holding the analogue rights should be attributed to the licence.

5.57 Ofcom proposes to use a discounted cashflow forecast to estimate the incremental value to a new entrant of the analogue rights. Details of the proposed methodology for this forecast are set out below.

Method of determining value

5.58 To determine the value of the analogue licence, it will be necessary to estimate the incremental effect holding the licence will have on a broadcaster's cashflows above those that could be achieved without the licence.

5.59 Ofcom considers that the most appropriate method for estimating this effect is to determine the proportion of each licensee's total cashflows that can reasonably be identified as representing the incremental value of the analogue rights. Specifically, Ofcom will estimate the proportion of the licensee's cashflows that it considers to be the result of holding the right to provide an analogue service.

5.60 Broadcasters do not earn revenues separately for provision of licensed services on analogue, digital terrestrial, cable and satellite. Also, a large proportion of each broadcaster's cost base is common to provision of the service on all platforms Ofcom has considered alternative approaches (such as that discussed in paragraph 4.61) but has concluded that these would provide a less robust basis for estimation and in any event are impractical.

5.61 Ofcom therefore considers that in order to value the right to broadcast on analogue spectrum it will be necessary to apportion revenues and common costs between the analogue and digital services.

5.62 An apportionment of revenue is also necessary for the calculation of PQR payments, as the PQR rate does not apply to revenues earned from the cable and satellite platforms and different weightings are likely to apply to the digital terrestrial and analogue qualifying revenues[11].

5.63 In the June Consultation, Ofcom proposed that the proportion of total viewing on a particular platform would be a closer determinant of revenue earned on that platform than the number of households able to access the service via the platform. On this basis, Ofcom proposed to use regional viewing data based on the BARB viewing panel.

5.64 In the past, this apportionment, for the purposes of both valuing licences and calculating PQR payments, was based on the percentage of households in the licensed area with access to digital services (the so-called "digital homes" basis). However, as explained below, Ofcom now considers that:

(i) there is no reason why the apportionment basis for the valuation needs to be the same as the basis used for collection of the payments;

(ii) viewing data is more appropriate than digital homes as a basis for valuing the licence; and

(iii) while not necessarily reliable enough for calculating the monthly payments, the viewing approach, as described below, is reliable enough for the purposes of estimating the value of the licence.

5.65 Therefore, Ofcom will consider the apportionment methodology in two stages, as follows:

(i) Apportionment of cashflows to estimate the value of the licence; and

---

[11] The current process for calculating and charging PQR payments is set out in the *Qualifying Revenue and Multiplex Revenue: Statement of Principles and Administrative Arrangements (Fourth Edition)*. Ofcom plans to issue a new edition of this document later this year, which will set out its interpretation of qualifying revenue, the process of weighting the two categories of qualifying revenue and the methodology for calculating PQR payments.

(ii) Apportionment of future revenues for the purposes of deciding PQR payments.

Apportionment of cashflows to value the licence

5.66 In the June Consultation, Ofcom proposed that the proportion of total viewing on the analogue platform would be a closer determinant of revenue earned on that platform than the number of households unable to access the digital service.

5.67 Some respondents agreed that the proportion of viewing basis would be a more appropriate basis for the apportionment, and that the use of digital penetration ignores the value of viewing via second sets and via the analogue aerial on digital sets.

5.68 Other respondents raised a number of conceptual arguments against using the proportion of viewing to apportion common revenues and costs for the purposes of valuing the licence. Arguments raised by one or more respondents included the following:

- Licensees make licence payments (and benefit from an advertising premium) to reflect their semi-exclusive access to all UK analogue homes. When a home becomes a digital home, that exclusivity ends and therefore the arguments for licensees continuing to make licence payments in respect of that home are undermined;

- It is too simplistic to say that revenue is determined by viewing; it is a function of the licensee's share of commercial impacts per demographic and the licensee's ability to deliver advertisers' coverage requirements; once a home has digital access, a licensee would be entirely neutral as to whether its service is watched via analogue or digital;

- The demographic profile of viewing is crucial to a channel's revenue earning potential and digital satellite in particular is skewed towards the demographic groups that command the greatest premium in the advertising market. For example, one respondent suggested that, on the basis of cost per thousand data, a viewer in one demographic group (say, 16-34 year old men) is many times more valuable than a viewer in the same region in another demographic group (all adults);

- Television advertisers want to achieve cost-effective "coverage" of their target demographic group. An advertiser will generally prefer four impacts representing four different viewers within their target demographic watching the advertisement once each, rather than the same viewer watching the same advertisement four times over. Each impact delivered in a digital home actually makes a more significant contribution to achieving an advertiser's coverage objectives than an impact in an analogue home; and

- In digital homes, the licensed channels are often viewed more on analogue second or third sets because if anyone in the household wants to watch a digital-only programme, they have to watch on the digital set. Viewing is therefore relegated to the analogue second or third set, even though it could be watched on digital.

5.69 The respondents’ arguments set out above imply that an analogue viewer is less valuable to advertisers than a digital viewer and that there is no value to analogue viewing in digital homes. Ofcom does not accept that either is a reasonable assumption.

5.70 In particular, Ofcom does not accept that licence payments should reflect only semi-exclusive access to analogue homes, and should therefore fall to zero as soon as digital receiving equipment is present in the household. Ofcom considers that there is a positive value for the licensees from analogue viewing in digital households, and that the present digital homes basis is inadequate as it does not reflect this value at all.

5.71 Ofcom recognises that the audience profile on digital satellite is skewed towards the groups that command higher premiums. However, Ofcom considers that the argument that 16-34 year old men are many times more valuable than the adults is misleading as it is based on demographic groups with different universes (i.e. absolute size). The universe of one demographic group is many times greater than another. Ofcom believes that the difference in value between 16-34 year old men and all adults, (based on the cost of buying 100 ratings against the two demographics) is a factor of less than two.

5.72 Ofcom considers that many viewers in analogue homes, especially the sought after young, upmarket males identified by the respondents, are likely on average to watch less commercial television than their counterparts in multi-channel homes. Thus they might be considered to be ‘light’ viewers’ and therefore desirable in terms of adding coverage to advertising campaigns, while multi-channel viewers might be more likely to be considered ‘heavier’ viewers who could be reached more easily by advertisers, on any channel, at less cost than via the licensed service on the digital platforms.

5.73 Ofcom therefore considers that the respondents’ arguments about the reduced or zero value of analogue viewing in digital households are overstated. However, it is important to recognise that, in any event, the objective of the apportionment exercise is not simply to share the cashflows between the platforms. It is instead to estimate the incremental effect of acquiring the licence, and the ability to provide an analogue service in particular, on a broadcaster’s cashflows. This objective is, for example, consistent with the treatment of PSB costs proposed by some respondents and accepted by Ofcom.

5.74 As explained in Section 4, the ability to provide an analogue service is more valuable to a licensee than simply the revenue that might be generated by providing a service to those analogue viewers.

5.75 The licensee would also expect to earn higher revenues via its digital platforms if the same service was distributed on the analogue platform as a result of the increased reach, programme spend and revenue per impact.

5.76 Specifically, Ofcom believes that the advertising premium (or relatively low discount) that licensees can achieve across all platforms is due largely to the ability to offer widespread or universal coverage and high ratings. Ofcom agrees with the point raised by one respondent and noted above that advertisers will generally prefer four impacts representing four different viewers within their target demographic watching the advert once each, rather than the same viewer watching the same advertisement four times over.

5.77 Such ’unique’ coverage is easier to achieve using a balanced weight of impacts, including the analogue channel. Further the ratings across all platforms will depend on the level of investment in programming. The increased audience and revenues achieved with the analogue licence enables the licensee to spend more on programming which benefits viewing and revenues across all platforms.

5.78 A bidder for the licence would recognise this. When valuing the licence, the bidder would consider the incremental effect on revenues across all platforms due to the increased coverage and improved programme economics made possible as a result of the analogue service.

5.79 Ofcom has considered carefully all of the issues raised by respondents and those considered above. Ofcom has concluded that apportionment on the basis of viewing via the analogue platform is a more appropriate and reasonable basis for estimating the incremental value of the licence than the digital homes basis. This method of apportionment does not, however, address the benefits of viewer migration, which are addressed separately below.

5.80 A number of respondents raised questions around the reliability of viewing share data at a regional and platform level. As explained below, Ofcom accepts that the data available on viewing share by licence area and by platform is not an appropriate basis for calculating PQR payments. However, Ofcom considers that forecasts of viewing by platform can be calculated in a way that provides a fair and reasonable basis for valuing the licence.

5.81 The BARB viewing panel reports on 5,100 homes across the UK. In light of responses to the June Consultation, Ofcom accepts that there is a risk that small regional sample sizes might not provide statistically reliable monthly viewing data at an individual platform level.

5.82 Instead, Ofcom will take the regional household penetration of digital television to separate analogue and digital-enabled homes, on the basis of the BARB Establishment data, which is based on 52,000 homes and is statistically robust at a regional level. Ofcom will then use the split in analogue and digital viewing in digital homes at a network level as a weighting factor to take account of the fact that analogue viewing takes place in a digital home and that the digital set is viewed differently from an analogue set. This data will be based on viewing data taken from the BARB viewing panel which is statistically robust at the UK level. Analysis of viewing habits of digital homes across the regions shows the analogue: digital split is broadly similar to the network average, and therefore UK level data can be applied to each of the regions.

5.83 In estimating the share of costs and revenues that should be attributed to the analogue rights, Ofcom will consider the extent to which analogue viewing on digital sets does or does not provide an advantage to licensees compared to digital viewing.

Apportionment of revenues for calculating PQR payments

5.84 For the purposes of calculating the PQR payments the ITC stated in the Qualifying Revenue and Multiplex Revenue: Statement of Principles and Administrative Arrangements (Fourth Edition) that it would be more appropriate to apportion revenues on the basis of relative viewing shares and that it planned to adopt this method if sufficiently reliable information became available to allow it.

5.85 A number of respondents raised questions around the reliability of viewing data at a regional and platform level due to insufficient sample sizes, and a lack of adequate platform controls and weighting at the combined regional and platform levels. Specific concerns were also raised regarding the collection and reliability of viewing share data in respect of certain areas or regions. One respondent also argued that the use of viewing share would be inconsistent with the Government's switchover process

5.86 In light of these responses and further investigation by Ofcom, Ofcom accepts that it cannot yet be confident that the viewing data is sufficiently robust at the regional and platform level to provide a reliable basis for calculating and collecting PQR payments.

5.87 Ofcom therefore proposes that, as a change to the proposed methodology, digital penetration should be used as the basis for the apportionment of revenues in order to determine the PQR payments.

5.88 Consequently, the basis of apportionment for calculating the PQR payments will differ from the basis used to value the licence.

5.89 The valuation of the licence will therefore be calculated using the proportion of viewing basis. This will give a valuation to be recovered via the PQR payments and annual cash sum.

5.90 As explained in Section 4, Ofcom will determine the proportion of this value to be recovered via the PQR. Ofcom will then determine the PQR rate (or rates) necessary to recover this proportion of the value when applied to qualifying revenue forecasts based on forecast digital penetration figures.

5.91 The PQR rate will then be applied to actual qualifying revenue calculated on the digital penetration basis.

5.92 Ofcom has recently made proposals for pricing the spectrum used for analogue broadcasting[12]. Subject to the outcome of this consultation, Ofcom has proposed that spectrum pricing should be applied to the analogue spectrum in line with the timetable for achieving digital switchover, as reflected in the digital replacement licences, as at the end of 2005. Ofcom has also undertaken to ensure that the Channel 3, Channel 5 and Teletext licensees do not pay twice for the right to use the same spectrum. Assuming these proposals are taken forward and the timetable for digital switchover is achieved, Ofcom would not therefore expect spectrum pricing to have a material adverse effect on licensees.

Approach to revenue projection

5.93 Ofcom must determine a value for each licensee that applies for a review and therefore must develop a separate forecast of advertising revenue for each

[12] Spectrum pricing: a consultation for proposals setting Wireless Telegraphy Act licence fees, 29 September 2004.

licence. In respect of the Channel 3 licences, it will be necessary to forecast revenues at a regional level.

5.94 As set out in the June Consultation, Ofcom considered two alternative approaches to this exercise.

5.95 The most detailed method for doing this would be to develop bottom-up forecasts of the share of total television net advertising revenue (NAR) for each licence. Then, the forecast share for each licence would be applied to a forecast of total television NAR to calculate total advertising revenues for each licence.

5.96 The more straightforward method would be to forecast a national NAR for each channel and then, in the case of Channel 3, calculate the regional NAR by applying the shares of total Channel 3 NAR that are currently attributed to each region.

5.97 As stated in the June Consultation, Ofcom believes that the second option would be preferable because it would be simpler and the outcome would most likely not differ significantly. Ofcom invited views as to which approach to forecasting advertising revenue is preferred.

5.98 There was broad agreement among the respondents that the proposed approach allowed a more robust and comparable approach, although some respondents argued that NAR for some of the licensees should be assessed separately from that of the licences held by ITV plc.

5.99 Other respondents made the understandable comment that the forecasts must be made on a sound basis. One respondent suggested the winning bidder would be optimistic in its likely advertising outlook and that therefore an optimistic advertising forecast should be used to value the licence.

5.100 In light of the responses and further consideration of the issues, Ofcom will adopt a top-down approach to the forecasts. This will be informed by external consultants providing econometric modelling expertise and industry insight. Ofcom will also take account of any information licensees wish to provide.

5.101 Ofcom recognises that some licensees derive significantly more of their advertising revenue from the regional marketplace than other licensees. In the case of regional advertising revenues, to the extent that macroeconomic data, demographic data and the likely policy outlook (including DSO) are available, quantifiable and indicate a likely material impact on the licensees' shares of TV revenues going forward, Ofcom will incorporate such adjustments in the forecasts. Apportioning revenues on the basis of current regional and/or licensee shares would be simpler than this revised approach but would ignore the impact of several key drivers of licensee's shares (particularly at regional level) which can be foreseen (e.g. phased DSO by region) and would therefore be insufficiently reliable.

5.102 Some licensees also earn revenues from selling sponsorship. Ofcom proposes to forecast sponsorship revenue by using as a starting figure the sponsorship revenue in the year prior to application and applying a growth rate in each subsequent year which is equal to the forecast growth in the relevant licensee's advertising revenue. None of the respondents disagreed with this approach.

Approach to cost projection

5.103 Ofcom considers that, in order to determine a value for each licence, it will be necessary to project programming and operating costs for each licence individually. Ofcom proposes that the starting point for the cost projections should be the expenditure of the incumbent licence holder in the year prior to the review. Ofcom proposes that it is also reasonable to take account of information submitted by the current licence holders about possible changes in expenditure over the licence period. However, because Ofcom aims to determine the value of the licence to a hypothetical second-highest bidder, Ofcom believes it must assume in its projections that the business will be operated in an efficient manner. Therefore, Ofcom will need to develop its own view about what constitutes a reasonable level of expenditure to operate the licensed business. In assessing the cost projections, Ofcom will also have regard to relevant relationships between expenditure and revenue, for example the relationship between the programming budget and advertising revenue.

Treatment of licences in common ownership

5.104 In the June Consultation, Ofcom proposed that to replicate as closely as possible an actual auction, in the hypothetical auction process licences currently held in common ownership would be auctioned simultaneously and contingent bids for multiple licences would be allowed.

5.105 Ofcom therefore proposed to project, in the licence valuations, a level of costs that reflected common ownership for the relevant licences.

5.106 As explained in Section 2, several respondents agreed that valuing the licences on the basis of shared ownership was appropriate, reflecting the current state of the marketplace and the likelihood that potential bidders would seek to acquire multiple licences in order to maximise both the size and efficiency of the potential business opportunity. However, other respondents disagreed with Ofcom's proposal that it could organise the hypothetical auction process on a contingent and combinatorial basis.

5.107 As explained in Section 3, Ofcom has given further consideration as to the appropriate treatment of this issue. In the June Consultation, Ofcom acknowledged that allowing contingent bids for multiple licences necessitated making an assumption about bidding for multiple licences in groups that would replicate the current ownership structure, on the basis that Ofcom considered this to be the least arbitrary. However, Ofcom recognises that this assumption and various other assumptions which have been identified in the responses to the June Consultation (see above) raise significant issues about the conduct of the hypothetical auction. Ofcom therefore now considers that, to determine the appropriate cash bid in accordance with the statutory procedure it should, in conducting the hypothetical auction, treat each licence individually.

5.108 Ofcom therefore proposes to value each licence on the basis that the licences would be auctioned separately. The licence valuations will therefore exclude the effects of common ownership on costs.

5.109 Ofcom will assume in its projections that the business would operate efficiently over the period of the valuation, and therefore intends to estimate the costs of an efficient bidder.

Treatment of cashflows related to production

5.110 Ofcom considers that, when deciding the amount to bid for a licence, a potential bidder would only take account of expected cashflows from production to the extent that they relate to the broadcasting licence. Therefore, as set out in the June Consultation in respect of the Channel 3 licences, Ofcom proposed that it would be appropriate to take account of the costs and revenues related to programmes produced for one of the regional services to the extent that such costs and revenues were incurred as a consequence of holding the licence, but that it would exclude from the valuation the costs and revenues related to programmes produced for external sale or programmes produced and sold on an arm's length basis to the ITV Network Centre.

5.111 Specifically, Ofcom proposed that, in relation to regional production, the costs of production should be included in the licence valuations. This is because the costs to licence holders of producing regional programmes for transmission on their own channels constitute programming costs for the broadcasting service. The corresponding revenues are the revenues earned by the broadcaster for selling advertising and sponsorship during the programmes.

5.112 Also, Ofcom proposed that any cost associated with producing programmes that are sold to the ITV Network Centre and the corresponding revenues obtained from the sale of the broadcasting rights to the Network Centre should not be reflected in the licence valuations. The reason for this is that Ofcom considers that any transactions between the production arm of a broadcasting licence holder and the ITV Network Centre are completed on an arm's length basis and could be completed whether or not the producer held a Channel 3 broadcasting licence. Network programming costs to the broadcaster are represented by each region's contribution to the network budget.

5.113 In response to the proposal that licences would be valued on a combinatorial basis, one respondent argued that it would not be appropriate to assume schedule continuity in the event that the incumbent lost several licences. However, consistent with the revised approach of valuing the licences as if they were auctioned individually, Ofcom considers that it would be reasonable to assume that the programming currently procured for each Channel 3 licensees via the Network Centre would continue to be available on the same terms to any new entrant holding a licence. Similarly, Ofcom will assume that a new holder of the Channel 5 or Public Teletext licence would be able to obtain similar content to that currently carried by the incumbent. The new entrant would either continue this programming or substitute other programming if it offered a superior revenue/cost relationship.

5.114 Because they do not relate specifically to the broadcasting licence, Ofcom proposed that it would not be appropriate to take account in the licence valuations of any costs or revenues related to production of programmes for external sales to third-parties. Most respondents who commented on this issue broadly agreed with this general principle.

Costs of entry

5.115 Ofcom believes that an incumbent would take account of the estimated costs of entry for potential alternative bidders when calculating its cash bid. Ofcom therefore proposed that it would include, at the start of the licence period, an allowance for the cost of assets required to operate the business or to meet the requirements of the licence. A corresponding figure for closing assets would be included at the end of the licence period. Ofcom believes that the most objective method for determining the amount of this allowance in the valuation would be to use the net book value of assets on the balance sheet. However, Ofcom recognises that the net book value may understate the cost to a new entrant of acquiring the asset and therefore proposed that it would consider submissions from licensees on their views as to the value of modern equivalent assets that would be required to operate the business.

5.116 Most respondents agreed that there should be an allowance for those assets required to operate the licence.

5.117 In respect of the basis of valuation of the opening assets, one respondent suggested that net book value is the appropriate basis for determining the value of the assets. Other respondents believed that the valuation should reflect the full costs to a new entrant of replacing such assets in the market or suggested that, to the extent that net book value does not constitute a sufficiently accurate representation of cost to a new entrant, alternative bases of valuation (e.g. market value or replacement cost) should be used. Views differed as to whether the replacement of these assets should be represented by the market cost of new assets or whether opening assets could be acquired by a new entrant from the departing incumbent.

5.118 One respondent suggested that the appropriate assumption is that the incumbent would bid its full valuation and that the incumbent's (not a potential entrant's) opening asset value should be used. On this basis the respondent proposed that an estimate of the replacement cost of the assets required to exploit the licence (for which a proxy might be an estimate of the replacement cost of the incumbent's asset base) should be used as a measure of opening assets.

5.119 In respect of the assets to be included, one respondent argued that the value of the incumbent's assets is likely to be considerably higher than other potential bidders, who would be likely to utilise less infrastructure. Another suggested that they should not be limited to tangible assets and should include intangibles (such as brand and intellectual capital), stocks, working capital and employees.

5.120 One respondent argued that a new entrant might already possess the necessary assets or would be able to buy many of them from an unsuccessful incumbent, as the incumbent would have little reason to retain them. Conversely, another respondent argued that a losing incumbent bidder would retain many of its assets in order to continue to operate an alternative broadcasting business on a digital platform and a new entrant would have to compete for these resources in the open market, potentially driving up the cost.

5.121 In respect of closing assets, one suggestion received was that an estimate of realisable value at the end of the licence period should be used as a measure of closing assets although respondents disagreed on whether the value of the closing assets would be substantial.

5.122 In light of these responses, Ofcom believes that an incumbent would take account of the estimated costs of entry for potential alternative bidders when calculating its bid for a licence. Ofcom will therefore include in the valuations an opening and closing allowance for the value of assets required for a new entrant to operate the broadcasting licence. This is consistent with our assumptions concerning the circumstances of the hypothetical auction as set out in Section 3.

5.123 While some assets remaining at the end of the licence period may have no value due to their usefulness being restricted to an analogue licence, Ofcom considers that the many of the assets required to operate the analogue licence will have a viable dual use on a digital licence. Therefore, to the extent that the assets are shared between the analogue and non-analogue broadcasting services, the use of these assets in the digital business will be recognised as the proportion of viewing on the digital platforms increases and the return allowed upon them for the purposes of valuing the analogue licence will be reduced accordingly.

5.124 In the absence of a licensee providing adequate additional evidence (as described below), Ofcom will use the net book value of the assets required to operate the broadcasting licence as the opening allowance and closing allowance, as this is the least arbitrary method of estimation. Licensees will be asked to provide the net book value of the assets required for the broadcasting licence as part of the financial information required to apply for the licence.

5.125 To the extent that licensees believe that the value of assets required for a new entrant to operate the broadcasting licences is either higher or lower than this value, licensees are invited to provide evidence of their estimate of the value of assets required for a new entrant to operate the broadcasting licence. Such estimates will be based on the minimum price an efficient new entrant would pay for (and, upon disposal, an estimate of the proceeds recovered from) modern equivalent assets that would be required to operate the licence. Ofcom does not consider that the new entrant would necessarily replicate the existing assets owned by the licensee, nor that the new entrant would buy all assets from new. Where there is considerable uncertainty surrounding the opening and closing values of particular assets, Ofcom may also look at the likely cost to the licensee of leasing the asset for the life of the licence and consider including this in the estimated operating expenditure.

5.126 These estimates will be scrutinised by Ofcom (or its representatives) for reasonableness and scope.

Regional production assets

5.127 In the June Consultation, Ofcom's stated its view that the opening and closing asset figures should include only fixed assets and net working capital that are required specifically for the broadcasting licence. Regional production assets should be included in the valuation, but only to the extent that the licence holder is required by the licence to hold those assets. Otherwise, Ofcom proposed to assume that the regional production assets are not a part of the broadcasting business because the broadcaster would not need to produce its own programmes in order to provide the licensed service.

5.128 Two respondents agreed that the proposal to include production assets only to the extent that the licensee is required by the licence to hold those assets was appropriate.

5.129 Some respondents stated that all production assets are required either directly of indirectly in order to meet the obligations imposed by particular licences. One respondent stated that licensees with the status of "producer broadcaster" licences have a licence obligation to invest in and maintain a regional production infrastructure.

5.130 One respondent argued that Ofcom has underestimated the requirements of the licence in respect of production facilities. In particular the respondent noted that under section 15 of the 1990 Act, applicants are asked to detail the offices, studios and workforce to be employed within the licence area. Specifically, the respondent argued that what it described as “Ofcom’s significant interest” in the changed production arrangements for the post-merger ITV plc demonstrates that Ofcom continues to exercise significant powers in the area of production, whether for regional or network use.

5.131 The respondent also argued that Ofcom had required that regional network production should account for a similar range of genres and should be geographically distributed as diversely as in 2002 and that in the absence of in-house production, a licensee would have to duplicate its investment in order to allow external producers to fulfil the distribution of production requirements. Accordingly, the respondent argued that licensees should be allowed full relief for the value of their regional production assets, as ownership of them is an obligation attached to the analogue licence.

5.132 Having taken account of these responses, Ofcom will include in the estimate of entry costs the value of regional production assets to the extent that they arise as a necessary consequence of holding the broadcasting licence. Ofcom will also take into account submissions from licensees that they are required to hold production assets and will take account of the recent guidance on the definition of regional production provided by Ofcom earlier this year[13].

5.133 However, Ofcom believes that a new entrant would not necessarily choose to undertake an in-house production model. Therefore, to the extent that expenses relating to regional production facilities do not arise as a necessary consequence of holding the licence, they will be treated as any other element of the production business (i.e. excluded from the valuation).

Other start-up costs

5.134 Ofcom recognises that an alternative bidder could have additional start-up expenses, such as marketing costs to establish a viewer base, which would not be included on the balance sheet. However, estimating these costs in a robust way would be difficult. Ofcom invited proposals on the types of costs that should be taken into account and a reasonable method for quantifying these costs.

5.135 One respondent argued that it is not appropriate to make any deduction for any hypothetical costs of entry because the second-highest bidder is likely to be an existing media company with an established brand and significant programme assets. Further, where the potential entrant has access to significant programme assets and production facilities it may have significant advantages such that it may be able to extract more value from the licence than the incumbent broadcaster.

---

[13] Regional Production and Regional Programme Definitions, March 2004

5.136 Another respondent argued that a new entrant is likely to have a more streamlined cost base than the incumbent. However several respondents argued that start-up costs should be defined fairly broadly, to include, among other things: marketing, brand building, systems, transmission, rights and stock acquisition and professional fees, training and recruitment.

5.137 Furthermore, some respondents argued that new entrants would face higher charges for network programming than incumbents and those new entrants would have to assume protracted negotiations over establishing networking arrangements. Some respondents argued that a new entrant would face a "dry run" period prior to commencement of the broadcasting licence as well as a period during which the entrant would take time to reach the level of profitability enjoyed by the incumbent.

5.138 Ofcom considers that a new entrant would take into consideration the likely necessary start-up costs associated with operating the licence and that this would be reflected in its bid. To the extent that these start-up costs would be joint across analogue and digital activities, costs will be allocated between them as appropriate.

5.139 Ofcom will include, in its valuation, reasonable estimates of the costs of entry of a new entrant. The additional costs of entry to a new entrant will be defined as the initial incremental operating expenditure and/or use of working capital that would be incurred by the new entrant but not the incumbent. Such costs are expected to include a period of dry running prior to launching the licence, the holding costs of acquiring programming stock and the costs of staff recruitment. Ofcom does not consider that it is appropriate to incorporate general production overheads, such as an image library or production facilities within the start-up costs for the broadcasting licence, other than to the extent that these are licence obligations.

5.140 Ofcom will invite licensees to submit estimates of start-up costs for a new entrant. Licensees will be required to justify the inclusion of the cost item, the timing of the hypothetical expenditure and the calculation of the cost. These estimates will be scrutinised by Ofcom (or its representatives) for reasonableness and scope.

Viewer migration value associated with analogue licence

5.141 Ofcom believes that, as analogue viewers migrate to a digital service, the providers of the licensed digital service are likely to 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. This benefit occurs primarily due to existing viewers of these services migrating from the analogue service to the digital service.

5.142 The right to broadcast on the analogue spectrum therefore increases the value of the licensee's digital business across all digital platforms (i.e. digital satellite and digital cable, as well as digital terrestrial) either by increasing digital revenues or by saving the marketing costs necessary to acquire the equivalent audience share.

5.143 In the June Consultation, this value was termed the "viewer migration value".

5.144 Several respondents believed that Ofcom should not include a viewer migration value in the valuation process. Arguments against its inclusion included the following:

(i) The success of the licensed channels on digital is a function of programming, rather than the licences. It would be possible for a licensee to transfer its brand and programming to a digital programme service licence (DPSL) without losing any digital viewers, and therefore any benefits from the brand and programming are not within the scope of the analogue licence payments;

(ii) Charging for viewer migration would amount to charging twice for the same benefit; a licensee’s audience has been built up through years of investment in programming and branding, which has already been paid for; and

(iii) Continued provision of the analogue service is likely to depress DTT viewing levels pre-DSO, rather than boosting them, as people with both analogue and DTT will often choose to watch Channel 3 on analogue out of habit.

5.145 While Ofcom accepts that, for example, the quality of the licensee’s programming contributes to its inheritance from the analogue service, Ofcom is not persuaded that these arguments demonstrate that there is no viewer migration value. Ofcom considers that anew entrant would attach considerable value to the analogue licence as a means of acquiring an audience for its digital service (for example, via viewer inertia and cross-promotion of the digital service).

5.146 A number of respondents agreed that Ofcom should include a viewer migration value in the valuation methodology and it was argued that the scope of the benefits covered by the viewer migration value was wider than proposed by Ofcom:

(i) The provider of the services would attract significantly more viewing (and thus advertising revenue) than they could if they were providing a standalone service under a DPSL;

(ii) There is a significant benefit from better programme economics allowed by the operation of the analogue licence; and

(iii) Licensees benefit from scale, reach and viewing habits as a result of the analogue licences, and that they will therefore achieve a higher share of digital viewing than they would if they were providing a standalone digital service under a DPSL.

5.147 Ofcom recognises that the analogue licence will be only one factor in achieving audience share along with others such as brand loyalty and investment in programming. Further, the benefits of viewer migration may be fairly short term. Nevertheless, Ofcom is not persuaded that a bidder for a licence would not attribute any value to the potential for increased digital revenues that might be achieved as result of holding the analogue licence.

5.148 This is consistent with the treatment of PSB costs. As described above, it was argued in response to the June Consultation that apportioning PSB costs between the different platforms in the manner described in the June Consultation would cause some of the costs of meeting the obligation to fall out of the valuation. Specifically, it was argued that, in a bidder's counterfactual, a DTT and Digital Satellite channel would earn more if PSB programmes were replaced with lower cost, higher revenue alternatives.

5.149 In light of respondents' arguments, Ofcom has accepted that the advertising revenue foregone as a result of the PSB obligations across all platforms should be taken into account.

5.150 To the extent that the value of the licence is reduced to take account of any negative impact of the licence on digital revenues, it follows that positive effects of holding the licence, in this case the increased digital audiences and therefore revenues, should also be included.

5.151 Ofcom will therefore include in its valuation a viewer migration value. Ofcom will develop more detailed plans for its approach to this aspect of the valuation over the next two months. Ofcom recognises that the digital service may also benefit from improved programme economics as a result of the increased programme spend supported in part by the analogue revenues, at least in the short term. However, Ofcom considers that this value is captured via the apportionment methodology described above.

Discount rate

5.152 Ofcom considers that the discount rate applied in a net present value analysis should reflect the opportunity cost of an investment to the relevant capital providers. This is generally approximated by a weighted average cost of capital (WACC). As discussed earlier, Ofcom aims to calculate the net present value of the licence to the second-highest bidder in a competitive auction, and assumes that the second highest bidder would be an existing television company. Therefore, Ofcom believes that it is appropriate to use a discount rate in the valuation that reflects a representative opportunity cost of investment faced by a hypothetical entrant.

5.153 As set out in the June Consultation, Ofcom proposed to use a single discount rate in the valuation of all licences. With this in mind, Ofcom calculated the WACC of a hypothetical entrant using the Capital Asset Pricing Model. This calculation was based on Ofcom's own analysis and the discount rates used by equity analysts for UK and European television companies. Based on this analysis, Ofcom proposed to use a real, pre-tax discount rate of 12% in the licence valuations and provided further information on the methodology and assumptions used to arrive at this rate.

5.154 Responses were sought on a number of issues, as follows:

- use a single rate for all licences;
- use a rate that is calculated pre-tax;
- use a rate that is calculated in real terms; and
- calculation of proposed discount rate.

5.155 These issues are considered in turn below.

Use of a single rate

5.156 A number of respondents argued that the rate should reflect the relative levels of risk facing each licensee to reflect the relative size of the licence, or specific circumstances affecting the volatility of licensee's revenue. Others agreed with the use of single rate.

5.157 Ofcom remains of the view that the use of a single rate is appropriate. It is not persuaded that any of the reasons suggested by stakeholders justify departing from this approach which in part is intended to reflects a representative opportunity cost of investment faced by a hypothetical entrant.

5.158 Additionally, no respondent has suggested a manner in which differences in systematic risk resulting from licence-by-license operational differences might be quantified.

5.159 While Ofcom notes that some licensee may have faced more volatile revenues in recent years, it remains less clear that, on a forward-looking basis, they face more systematic risk than other licensees. Similarly, Ofcom notes that smaller licensees will typically have higher levels of operational leverage but considers that the extent to which these would feed through into higher beta estimates is debatable. An important factor is that input data for beta estimation is unavailable on a licence-by-licence basis, and consequently that any licence-specific adjustments would be an inherently imprecise and subjective exercise. Ofcom has based its analysis primarily on data relating to a number of the licensees, together with the newly merged ITV group, and has erred somewhat on the side of using a high estimate in order to compensate for any regional or national variations.

Use of a rate calculated on a pre-tax basis

5.160 Respondents' views varied on whether the cashflow should be prepared on a pre- or post-tax basis.

5.161 There are a number of ways in which the DCF approach can be implemented. The most widely used in practice uses after-tax cashflows and an after-tax discount rate. Following the comments made by some respondents, Ofcom has considered whether the use of a post-tax approach may be more appropriate for the valuation methodology.

5.162 Ofcom's view is that, where results calculated on a pre-tax and post-tax basis are likely to differ materially, and sufficient data is available to enable a robust tax calculation, a post-tax DCF analysis is preferable. This is because, in addition to being in line with current market practice, the post-tax approach will yield valuation results that most accurately reflect the value of future cash flows and tax payments. However, Ofcom's view is that the use of a pre-tax calculation is preferable in this instance.

5.163 The valuation is based on an estimate of the costs and time preferences of a new entrant, relating only to its broadcasting business activities. In order to make a tax calculation on this basis, it would be necessary for Ofcom to make a series of assumptions in respect of variables such as tax rates, the timing of tax payments, interest payments, capital structure, and capital allowances. Ofcom's view is that such assumptions cannot be made with any certainty given that such standalone activities are not currently observable. In such circumstances, the use of a pre-tax approach may be preferable.

5.164 Ofcom has carried out a simple post-tax DCF calculation, based on a central set of forecast assumptions, and compared the results with that of a pre-DCF analysis. The results of this comparison suggest that the difference between the results (NPV calculations and hence future licence payments) derived from the two calculation approaches is likely to be small, and furthermore that the difference between the two can be either positive or negative, depending on the precise set of assumptions that is used. The is because the analysis relates to a relatively long time period, and, in particular, because of the particular nature of this calculation, whereby in each case licence payments are set such that the present value of future cash flows after tax and licence payments is zero.

5.165 In the light of these factors, Ofcom intends to continue with a pre tax approach to modelling and discount rate calculation.

Use of a discount rate calculated on a real basis

5.166 Respondents did not express firm opinions as to whether the discount rate should be calculated on a real or nominal basis.

5.167 Ofcom will therefore require forecasts to be prepared in real terms and accordingly will apply a rate calculated on a real basis.

Proposed rate

5.168 In the June Consultation, Ofcom proposed to use a real, pre-tax discount rate of 12% in the licence valuations and provided further information on the methodology and assumptions used to arrive at this rate.

5.169 A couple of respondents indicated that the proposed rate was too low for the smaller licences. Another respondent argued that the rate quoted by Ofcom was “rather high”.

5.170 One respondent argued that, in offering no return on investment beyond the cost of funding, the methodology reduced the licensees’ ability to commit scarce capital to invest in PSB content. However, as explained above, the return is now calculated after deducting the full cost of providing PSB content.

5.171 Other respondents broadly agreed with the parameter values used by Ofcom, although one stressed its view that cashflow projections should be based on a “credible downside” scenario.

5.172 Ofcom remains of the view that the parameter values that were previously consulted on are appropriate. Ofcom acknowledges that it is possible to make plausible arguments that these parameter values should be lower or higher. None of the respondents supplied alternative estimates. Ofcom has based its analysis on a conservative set of central estimates, parameter estimates being based on the only available data, namely that relating to the existing licensees. Ofcom has therefore decided to use a real, pr-tax discount rate of 12% in the valuations.

Cut-off date

5.173 In the June Consultation, Ofcom proposed that, in order to ensure that its determination of new terms is a fair and accurate reflection of the value of the licence, it should take into account available information that has a material bearing on the valuation until the time the review is concluded.

5.174 However, several respondents commented to the effect that an application could not be withdrawn once submitted and it was therefore unfair to base the financial terms on information that was not known to the licensee at the time it made its application. The licence terms should, in effect, represent the amount the licensee would bid as at the time of its application.

5.175 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. Ofcom accepts that it is a significant commercial decision for holders of digital replacement licences to apply for a review. Ofcom has therefore decided that in order to ensure a fair and equitable process an applicant should have the opportunity to withdraw its application in light of information that becomes available after the date of application but before the determination of new financial terms by Ofcom. An application may only be withdrawn by a licensee up to the date of determination. Any such licensee may reapply within the same review period.

Valuation of Public Teletext Licence

5.176 The Public Teletext Licence is a licence offering reserved capacity to broadcast text based information, advertising and entertainment services, not a licence to broadcast a television programming service.

5.177 A company providing a service under the Public Teletext Licence is therefore subject to very different revenue and cost drivers from companies providing a service under the Channel 3 or Channel 5 licences. Costs of providing the service relate to provision of text services, not programming. The current licence holder has also found that it is able to attract a disproportionate amount of advertising from a far narrower range of industries than is the case with the broader television advertising market. Furthermore, much of the advertising can be described as “below the line” classified advertising, unlike the display advertising seen on the Channel 3 and Channel 5 services. Ofcom views that this is reflective of the particular strengths and weaknesses associated with the Public Teletext medium and that an alternative bidder for the licence would be likely to recognise these characteristics.

5.178 Ofcom considers that in estimating future revenues likely to be associated with the right to operate the Public Teletext licence, it would be inappropriate to apply the same future NAR expectations that will be applied to the Channel 3 and Channel 5 services, as both the nature of the advertising and the drivers of advertising revenue are substantially different. The revenues to be projected are those of Teletext advertising services, not the revenues of TV advertising or of advertising in general. However, given that the Public Teletext licence is almost unique, it would be difficult to establish a robust model for the calculation of Teletext advertising in isolation.

5.179 In forecasting future Public Teletext advertising revenues, Ofcom proposes to examine a cross section of forecasts for traditional UK classified advertising media. Where it is possible to do so, this will then be adjusted for anticipated specific trends in the industries in which the Public Teletext licence currently attracts the majority of its advertising.

5.180 In line with its approach on the Channel 3 and Channel 5 licences, Ofcom will invite the existing licensee to provide evidence of specific factors which affect its likely revenue trend in order to inform its own forecast.

5.181 Ofcom considers that share of viewing is a concept which cannot be easily applied to the measurement of the Public Service Teletext licence. Viewing of the Teletext service is for far shorter durations than viewing for broadcast television services and the relationship between content and advertising is substantially different. Additionally, many homes with an analogue television set and a separate digital receiver will have access to both the digital Teletext and analogue Teletext services on the same set.

5.182 Unlike the Channel 3 and Channel 5 licences, these services cannot reasonably be described as simulcasts, given the different nature of the technology on each platform and given that the scope of content is also different. Ofcom is not currently aware of any reliable research regarding viewer preferences in this matter, or of any robust sampling which could be likened to the share of viewing data for the Channel 3 and Channel 5 licences.

5.183 Accordingly, in the specific case of the Public Teletext licence, Ofcom will apportion shared costs and revenues between the analogue and digital elements of the Public Teletext licence on the basis of digital penetration of homes. Ofcom considers that this is the most appropriate and practical means of estimation in this case and notes that, to some extent, the viewing of Teletext on second sets is likely to be less of a distorting factor than for the Channel 3 and Channel 5 services, as it would appear reasonable to expect that fewer second sets are equipped to view Teletext broadcasts.

5.184 In all other respects, Ofcom considers that in estimating future costs associated with running the Public Teletext licence, it is appropriate to employ substantially the same methodology being applied to the Channel 3 and Channel 5 licences, whilst acknowledging that the actual cost items (and therefore cost drivers) will be different.

5.185 In respect of Public Service Broadcasting obligations on the holder of the Public Teletext service, in line with the methodology being applied to the Channel 3 and Channel 5 licences, Ofcom will invite the existing licensee to provide evidence of the extent of the associated incremental costs and opportunity costs of these obligations, and will take account of them in the valuation of the licence.

5.186 The Public Teletext Licence also faces different challenges in the digital environment compared to the Channel 3 and Channel 5 licences. In the analogue environment, Public Teletext benefits from accessibility which could be likened to a prime EPG position, sitting behind the Text button on Channels 3 and 4. In the DTT environment the Public Teletext operator is no longer associated with these channels and instead sits alone on a separate channel position, albeit one with due prominence. On the Digital Satellite and Digital Cable platforms, the Public Teletext service has no such right. The estimation of the valuation of due prominence and Viewer Migration Value for the Public Teletext Licence will, whilst employing the same methodology as that used for the Channel 3 and Channel 5 services, take account of these significant differences.

Section 6

Administrative details

Timetable for the reviews

6.1 Ofcom consulted on the timetable and general approach to the reviews of financial terms for Channel 3 licensees earlier this year and published a statement on the timetable for the reviews in April. Subsequent to this, Ofcom consulted upon (and has now implemented) an extension of this review to take in the Channel 5 and Public Teletext licences.

6.2 For those licences whose licences expire, or will expire following curtailment of the licence, on 31 December 2008, the key dates in the review timetable for licensees with the earliest possible application date of 31 December 2004 are as follows:

Date	Action
31 December 2004	Earliest date on which relevant licensees could submit applications[14]
By end June 2005	Ofcom plans to determine new financial terms for licensees that submit applications on 31 December 2004
1 January 2005	New fixed annual cash sum backdated to take effect on this date for licensees that submit applications on 31 December 2004
Start of licensee's next accounting period after application date	New PQR rate to take effect

6.3 Each eligible licensee will be allowed to apply for a review at any time during a three-year time period, e.g. between 31 December 2004 and 31 December 2007. As explained in Section 5, a licensee will be allowed to withdraw its application at any time prior to determination of the revised terms by Ofcom and apply again during the same review period. A financial review will consider the remaining period of the licence after the application date, as set out in section 227(8) of the Act. For licensees applying on 31 December 2004, the review will consider a ten-year period.

6.4 Licensees who apply for reviews will have the option to accept or reject the new terms offered. If a licensee accepts the new terms, the terms will take effect retrospectively as set out in the table above. The Act sets out that the new fixed annual cash sum will take effect from the first calendar year after the application date and the new PQR rate will take effect from the next accounting

[14] Reviews of financial terms are optional, and some licensees may have later review periods if they choose not to take up the option to bring forward the dates for their reviews.

period after the application date. Any overpayments made between the effective date and determination date will be refunded to the licensee. The Treasury has agreed to pay interest on any such amounts at the rate of the 3-month Treasury bill.

Application process

6.5 Each licensee wishing to apply for a review of its financial terms must submit the following to Ofcom:

(a) A formal letter of application requesting a review under section 225 of the Act;

(b) A cheque for the application fee of £30,000 per licence;

(c) Financial information in the required format with a supporting statement; and

(d) An auditor's letter opining on the basis of preparation of the financial information submitted.

6.6 The official application date will be the date that Ofcom receives the formal letter of application, accompanied by the application fee and the additional information outlined below. Close of business for Ofcom on 31 December 2004 will be 5pm.

Required information

6.7 Ofcom considers that it will be important to ensure that licensees provide sufficient information to allow Ofcom to develop an informed view about the value of each licence. However, Ofcom does not wish to place undue burden on licensees.

6.8 With this in mind, Ofcom will continue to work with the licensees between now and the application date to agree upon the extent and format of the information request necessary to provide Ofcom with sufficient relevant and reliable information to conclude this review, without requiring disproportionate effort from the licensees.

6.9 In order to achieve these objectives and still give licensees sufficient opportunity to provide their views, Ofcom will require licensees to submit a minimum set of information. The submission of other information will be optional.

6.10 Responses to the June Consultation highlighted two main issues: the nature and extent of the information required and the cut-off date for new information to be reflected in the valuation.

Information requirements

6.11 The June Consultation set out Ofcom's proposed minimum information requirements. During the course of the consultation, Licensees have identified a number of practical difficulties in providing the information proposed and highlighted some requests which they considered were disproportionate to the value of information provided.

6.12 In light of the above, but with regard to Ofcom's need for relevant and reliable information, it is likely that the scope of data required to be presented at the time of application will be reduced compared to the requirements made in the past by the ITC. Instead, applicants will be expected to provide a basic level of information at the time of application and then supplement this as required by Ofcom subsequent to the application being made. In this way Ofcom will ensure that the burden placed on licensees in their submissions is reduced and that the information supplied to Ofcom is appropriate for Ofcom's needs.

6.13 Applicants will be required to provide detailed financial statements and forecasts for the period covered by the licence, reconciling the base year forecast to statutory accounts and the annual Income and Expenditure returns submitted to Ofcom. The format of this submission will be determined by Ofcom and will be uniform across the Channel 3 and Channel 5 licences. The Public Teletext Licence submission will be adjusted to reflect differing cost categories.

6.14 To make submissions more straightforward for licensees and more useful for Ofcom, electronic templates will be provided for licensees to complete with the required information. The exact form of the templates is to be decided but it is likely that the templates will, for example, require licensees to separate costs that are specific to a delivery platform, e.g. transmission costs. Ofcom will endeavour to ensure that the required level of detail is not excessive.

6.15 Ofcom will not require any specific scenario or sensitivity analyses, but applicants will have the option of supplying such additional information if they are of the view that it will assist Ofcom in assessing their application.

6.16 At the time of application applicants will also be required to supply further breakdowns and narrative on a line by line basis in order to assist Ofcom's assessment of the application. Ofcom expects that applicants will provide an appropriate level of detail in each area. (For example, a more detailed justification of revenue forecasts would be expected to highlight the effect of viewing share, share of total impacts, price premium, total revenue and the share that is expected to be attributable to a particular licence.) However, Ofcom will not be prescriptive regarding the extent or format of this area of the application.

6.17 Assurance, in the form of an opinion, will be required from the applicant's appointed auditors on the degree of accuracy of historical data and the reasonableness of the calculation of forecast data. Ofcom will advise licensees further on the exact nature of the opinion required closer to the application date, although it is anticipated that it will be similar to that required in the last round of reviews.

6.18 Subsequent to the application date, applicants must be prepared to provide Ofcom with such further financial breakdowns, narrative and supporting evidence as Ofcom requires in order to conduct its full assessment of the application.

6.19 Ofcom proposes to hold working-level meetings with licensees to assist them in preparing their applications.

6.20 Ofcom intends to conclude the reviews as quickly as possible after receiving applications from licensees and no later than the end of June 2005.

6.21 One respondent suggested that Ofcom should ensure that licensees' applications should be based on forecasts presented in their existing business plans and that financial data should not be prepared specifically for the purposes of Ofcom's financial review. However, Ofcom considers that the process of evaluating the licence applications will be best aided by use of standardised applications by all licensees. The provision of an audit opinion on the data supplied together with Ofcom's own analytical work provides substantial assurance that the data provided is reliable and the assumptions made are reasonable. However, Ofcom acknowledges that there are some merits to the approach outlined by the respondent and, as part of its evaluation of each application, will, as necessary, seek further evidence regarding the basis for the applicants' assumptions and forecasts. This is likely to include reference to both external data and licensees' internal data sources and documentation.

6.22 One respondent suggested that it would be unreasonable to wait until a notification of the new terms before knowing the date Ofcom must set for when the licence would cease to have effect if the re-determined terms are rejected (see section 228(2)(d) of the Act), and that the regulator should provide advance notice of this date. A series of factors may influence how Ofcom would exercise its discretion in setting this date, and it cannot, and would not to wish to, fetter its discretion in this regard. In appropriate circumstances, however, Ofcom will consider informing applicants of the date(s) it intends to set in accordance with section 228(2)(d) before the date of notification.

Timetable for notification and other matters

6.23 Ofcom expects to send a written notification of the determination of new financial terms by the end of June 2005 to any licensee applying for a review on 31 December 2004. The notification will include the following information, as required by section 228(2) of the Act:

- The determination made by Ofcom;
- The modifications of the applicant’s licence that are required to give effect to the determination;
- A date by which the applicant must notify Ofcom whether or not the applicant accepts the determination and modifications; and
- A subsequent date by which the applicant’s licence will cease to have effect if the applicant does not accept the new terms.

6.24 Ofcom proposes to notify the relevant licensees of the new terms on a strictly confidential basis approximately two days prior to announcing its decision. Also, Ofcom proposes that each licensee will be required to notify Ofcom in writing of its decision to accept or reject the new terms within four weeks of the offer date. Any failure to respond by the deadline will be taken as being a rejection of the offer.

6.25 Ofcom recognises that it may be helpful for licensees in deciding whether to apply for a review to have additional information. Ofcom is currently considering what information might be made available, and expects to provide further guidance on this to licensees in due course. Ofcom expects to publish any information that is supplied to licensees subject to confidentiality.