Renewal of the Independent National Radio licences

Methodology for a review of financial terms

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1. Overview

1.1 On 10 December 2020 The Legislative Reform (Renewal of Radio Licences) Order 2020 became law. This allows the licence holders for the three Independent National Radio (INR) licences (Classic FM, Absolute Radio and talkSPORT) to apply for a 10-year licence renewal. These licences are currently due to expire in 2022.

1.2 To renew these analogue licences, the Broadcasting Act 1990 ("the 1990 Act") requires us to set financial terms payable by the licensee in the form of a percentage of qualifying revenue (PQR) and cash bid.

1.3 This document sets out the methodology we will use to determine financial terms.

1.4 We will apply largely the same methodology we used when the licences were last renewed in 2017, as set out in this document, with only minor changes from that used in the 2017 review.[1] The main changes from the 2017 methodology relate to the duration of the renewed licences (10 years vs 5 years in 2017) and the discount rate (9.5% vs 11% in 2017, reflecting more recent market information).

1.5 When we last determined financial terms for these licences in 2017, they were set at a nominal amount of a £10,000 cash bid per annum for each of Classic FM, Absolute Radio and talkSPORT (with a nil PQR).

[1] Renewal of the Independent National Radio licences: Methodology for review of financial terms, 17 August 2016. The determinations of financial terms can be found on this website: Renewal of the Independent National Radio licences.

2. Methodology for determining financial terms

Ofcom's statutory task

2.1 Section 103B of the 1990 Act (as amended by the Legislative Reform (Renewal of Radio Licences) Order 2020) sets out the statutory framework for determining financial terms following an application for renewal made by the holder of a national licence. For the 10-year period of renewal we must determine two elements:

- a fixed annual cash amount ("Cash Bid"), which rises in line with RPI each year.
- the percentage of qualifying revenue (PQR) payable for each year of the (further) renewed licence.[2] The PQR can vary from year to year.

2.2 In respect of the Cash Bid, the 1990 Act requires us to determine the amount that, in our opinion, would have been the Cash Bid of the licence holder were the licence being granted afresh for the period of the (further) renewal on an application made in accordance with section 98 of the 1990 Act (which established the process for the original auction of the national licences), instead of being renewed.

2.3 Under the 1990 Act the procedure we must follow in connection with considering applications for national licences is described in section 99. This sets out certain thresholds an applicant must meet before we may consider its Cash Bid under section 100 of the 1990 Act. Section 100 indicates that the award of a national licence would then be made to the person submitting the highest Cash Bid who has met the section 99 thresholds. On this basis, we must, for the purposes of the further renewals, consider the results of a hypothetical auction and determine what, in our opinion, was likely to have been the level of Cash Bid for the licence.

2.4 Under section 98 of the 1990 Act, we must set out, in a notice inviting licence applications, the PQR that would be payable by an applicant if they were granted the licence. The PQR would therefore be determined before bids are made for the Cash Bid element. No guidance is given in the 1990 Act as to how we should set the PQR or indeed the relative sizes of the PQR payments and Cash Bid. The definition of qualifying revenue is set out in section 102 of the 1990 Act and we are simply required to determine a percentage of it which shall be payable to the Treasury.

2.5 We therefore have a level of discretion in relation to setting the PQR that we do not have in respect of the Cash Bid. However, we consider that to ensure a consistent approach to setting both the PQR and the Cash Bid, it is appropriate to conduct a single valuation according to common principles. This valuation is intended to meet the requirements of the 1990 Act in relation to determining the Cash Bid, and also to provide a robust basis for

[2] The 1990 Act says that the cash bid should be determined for the first complete calendar year falling within the period for which the licence is to be renewed and the PQR for each accounting period.

informing our decision as to the appropriate level of the PQR, taking into account both the objectives and the uncertainties discussed in this document.

Valuation methodology

2.6 To determine financial terms, we will use a methodology consistent with that used for the 2017 reviews.[3] This methodology was established to inform our decision when deciding the PQR and Cash bid for each licence and our statutory task today is comparable to previous reviews.

2.7 We set out the methodology below, which is the same as that used in the 2017 reviews with the following changes:

- The licence duration is for 10 years rather than 5 years (as was the case in 2017);
- We use a discount rate of 9.5% rather than 11% to reflect more recent market information.

2.8 The objectives of the methodology are to set fair and reasonable terms such that they recover, as far as possible, the combined value of the rights and obligations to the licence holder over the duration of the licence, based on a methodology which is consistent with our statutory duties. The methodology should ensure that the taxpayer gets a proper return for the use of the scarce analogue spectrum, and the process should enable us to set terms that are reasonable within the context of the market environment and continue to be reasonable for the renewed period of the licence.

Overarching principles

2.9 In principle, we consider that the value of a licence to any potential bidder will 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).

2.10 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. We consider that alternative bidders with the highest valuations are likely to be existing media companies, either from the UK or abroad, that wish to have a presence in the UK national radio market. We consider that other media companies, and in particular other radio companies, would be likely to have lower costs of entry and greater cost and revenue synergies with the new services than companies without prior media interests which would allow them to extract more value from the licence, making it more likely that existing media companies would be the second highest bidder.

2.11 Our approach to valuing the rights and obligations associated with the licence is as follows:

[3] See Renewals of the Independent National Radio Licences on our website. Similar methodologies were also used in the 2006 review and 2010 review.

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

Circumstances of the hypothetical auction

2.12 The hypothetical auction will assess the overall value of the licence by replicating the circumstances set out below:

- The auction would be designed, within the framework of the legislation, to recover the maximum possible value consistent with the requirement that the successful bidder is also able to fulfil programming and other obligations associated with the licence.
- Each licence would be offered individually on a non-contingent standalone basis in a single round, sealed bid auction.
- 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.

2.13 To determine the amount of the second-highest bid in an auction, we will estimate the net present value of the rights and obligations associated with the licence from the point of view of a new entrant. In order to win the auction, the incumbent would need to bid slightly more than the new entrant.

Valuing the rights associated with the licences

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

2.15 The principal rights associated with the INR licences are i) the right to broadcast radio using analogue spectrum with UK-wide coverage (FM for Classic and AM for Absolute Radio and talkSPORT) and ii) the right to reserved capacity on the national radio multiplex service, the licence for which is held by Digital One Limited.

Right to broadcast on analogue spectrum

2.16 We will estimate the value of the right to broadcast on analogue spectrum by reference to the cash flows that can only be achieved by acquiring the licence, since there is no other way of acquiring rights to broadcast on national analogue spectrum.

2.17 The underlying approach to setting financial terms is to assess the incremental value of a licence to a new entrant which does not currently own the national analogue licence. We cannot directly observe the additional cashflows that would be available to an operator as a result of owning the analogue licence, so we need to find a means of estimating the value of the national analogue licence to a new entrant. We consider that such an approach should be objective, transparent and practicable.

2.18 To forecast cashflows for the analogue service, we will allocate forecast revenues and costs of the incumbent licence holder that are common to simulcasts across multiple platforms to services based on the hours of listening expected to be achieved on each platform. This approach will reflect the changing importance of the platform mix over time and is based on observable data on listening hours. Where revenues and costs relate wholly to the analogue licence (e.g. analogue transmission costs) they will be directly allocated to the analogue service. We consider this approach is objective, transparent and practicable.

2.19 A new entrant bidding for the analogue licence is also likely to take account of the costs of entry in its valuation. We consider that these entry costs will include i) prelaunch costs such as capital expenditure, marketing and 'dry-running' costs and ii) post-launch revenue effects which may mean the new entrant is not able to generate the same revenue as the incumbent from launch. We will include an allowance in the valuation for the reasonable cost of entry of a new entrant. As with other cash flows, start-up costs that would be common across different platforms will be apportioned across those platforms to reflect their relative value to each.

2.20 In relation to capital expenditure, we do not consider that a new entrant would necessarily replicate all existing assets owned by the incumbent licensee and may consider that leasing an asset for the 10-year duration of the licence would be preferable to purchasing it. As with our approach to other costs facing a new entrant, we will place weight on evidence provided by applicants. For example, where the applicant provides evidence of purchasing rather than leasing studio equipment for new station launches, we will take account of this in the valuation. However, there may be other assets, for example transmission equipment, where it may make sense for the applicant to lease rather than buy the equipment, or vice versa. Again, we will place weight on evidence provided by the applicants of previous station launches when considering the treatment of assets in the valuation.

Right to reserved capacity on the Digital One multiplex

2.21 INR licence holders have the right to reserved capacity on the Digital One multiplex, as well as an obligation to take up this right and deliver a DAB simulcast. The licence holder must agree a commercial fee for the capacity with the multiplex owner.

2.22 While the right to reserved capacity could confer benefits to the licence holders in terms of reduced contracting costs or guaranteed access where capacity is difficult to secure, the benefit only relates to a single service such that the benefit is likely to be limited.[4] Consistent with our approach in 2017, for the purpose of valuing the INR licences to

[4] In 2017 we contrasted this with Channel 5, which has reserved capacity for around five services on DTT multiplexes (where carriage fees are also higher than for radio multiplexes).

determine financial terms, we will not attach a value to the right to reserved capacity on Digital One.

Cost of meeting obligations associated with the licences

2.23 The principal obligation is the requirement to simulcast the analogue service nationally on DAB. We intend to treat that as follows.

2.24 Where the proportion of revenues associated with the DAB simulcast, as determined through apportionment based on listening hours, is such that it exceeds the costs of providing the DAB service (where costs comprise costs specific to DAB broadcasting plus a share of common costs determined through apportionment based on listening hours), then this amount will be excluded from the valuation of the analogue licence since it will be assumed to indicate that the decision to simulcast on DAB can be justified on a commercial basis, distinct from ownership of the analogue licence. That is, in the counterfactual, the new entrant would choose to provide a DAB service whether or not it also owned the analogue licence.

2.25 However, if the revenues associated with the DAB simulcast are less than the costs associated with providing the DAB service (calculated in the same way as set out above) then it will be assumed that the decision to simulcast on DAB cannot be justified on a commercial basis and that the decision to simulcast is due to the obligations which result from ownership of the INR licence. That is, in the counterfactual, the new entrant would not choose to provide a DAB service and is only required to do so as a result of holding the analogue licence. In such circumstances, the net cost associated with the DAB simulcast will be included in the valuation.

2.26 In the case of start-up costs apportioned to DAB, these will be taken account of in the valuation to the extent that they are higher, or occur sooner, than would otherwise have been the case. That is, if the decision to simulcast during the licence period was being made on a commercial basis.

2.27 Simulcasts of the service on other platforms (e.g. satellite, digital TV or internet) are not part of the licensed service. They are therefore not included in the valuation except to the extent that there is a causal link to profitability. Where costs and revenues for such simulcasts are shared with the licensed service, they will be apportioned based on listening hours.

Dealing with uncertainties for the purposes of the review

2.28 Valuation of licences on a forward-looking basis involves taking account of uncertainties. These uncertainties include:

- future trends in listening to the INR services;
- future trends in the proportion of listening that is digital;
- future trends in revenue and costs of the INR licences;
- start-up costs of the new entrant; and

- the duration of the licence period.

2.29 The requirement for us to consider 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. We are unable to eliminate these uncertainties. Therefore, to fulfil our statutory duty to determine the financial terms, it is necessary for us to make a series of assumptions on these issues to achieve a fair and reasonable outcome for the licence valuation.

2.30 In general, our view will be informed by several sources, such as:

- Evidence presented by licensees, such as forward-looking financial projections and pre-existing business plans;
- Market reports and externally generated analysis of cost, revenue and listening trends;
- Public policy developments and statements;
- Findings from our work and research in relevant and related fields.

2.31 Below we set out our approach to dealing with the specific uncertainties identified above.

Future trends in listening to the INR services

2.32 Trends in listening could affect revenues and hence the valuation of the INR licences. We will use listening forecasts from applicants and place weight on forecasts that have been prepared and utilised for business planning purposes. Where these are not available, we will place weight on forecasts based on projecting forward historical listening trends. We will take account of any developments that could impact on the level of listening, where this is supported by evidence.

Future trends in the proportion of listening that is digital.

2.33 Digital listening to the INRs has increased since the 2017 reviews which, other things being equal, will have reduced the value of the analogue licences.

2.34 We will use forecasts of digital listening from applicants where these have been independently prepared or are being used for business planning purposes. Where this is not the case, we will place weight on average growth rates in digital listening since 2016. We will also take account of any forecasts made by the applicants that depart from historic trends where these are supported by evidence or where they reasonably consider the possible impact of the factors that could impact digital listening in future.

Future trends in revenue and costs

2.35 We will use revenue and cost forecasts from applicants in determining the licence valuation and place weight on forecasts that are prepared and utilised for business planning purposes.

2.36 Where these are not available, we will have regard to short term Advertising Association forecasts in relation to revenue, although we recognise these only extend to two years.[5]

2.37 We also recognise that all forecasts will be subject to views about how the advertising market will recover from the impact of COVID-19.

2.38 We will seek to check applicants' forecasts against available external forecasts to take a reasonable view of the amount of advertising a bidder could expect to generate from the licensed service.

2.39 In relation to costs, we will also have regard to external forecasts of inflation and any contractual price increases (e.g. transmission arrangements).

Start-up costs of the new entrant

2.40 We will include an allowance in the valuation for the reasonable cost of entry such as:

- Pre-launch costs like capital expenditure, marketing and dry-running costs
- Post-launch costs such as marketing required to attract comparable audiences to the incumbent licence holders
- Post-launch revenue effects which may mean the new entrant is not able to generate the same revenue as the incumbent from launch (e.g. a 'revenue dampener').

2.41 As with other cash flows, start-up costs common to different platforms will be apportioned across those platforms to reflect their relative value to each.

2.42 We will use start-up cost estimates from applicants and place weight on evidence from the applicants' own experiences in launching stations (e.g. in relation to marketing costs or how listening or revenue at relaunched stations compared to the previous station).

2.43 In the 2017 reviews, we explained that we did not consider that the costs of sales teams facing a new entrant would be significantly higher than the incumbent as the second-highest bidder was likely to be another media company with radio operations.[6] We will base sales costs on forecasts provided by the applicants but will take account of any evidence that these costs could be higher for a new entrant compared to the incumbent.

2.44 We also said that we did not consider a new entrant would need to establish standalone back-office infrastructure as we would expect an existing media company to have these functions. We will include a reasonable allowance for central functions in the valuation, and these could be based on the group recharges currently made by incumbent operators to parent companies. Where applicants provide evidence that these would be higher for a new entrant, we will take that into account in the valuation.

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[5] The Radiocentre website includes details of the most recent Advertising Association forecasts.
[6] Paragraph 3.56, 2016 Statement on the methodology

Duration of the licence period

2.45 The 1990 Act makes statutory provision for a possible future digital switchover, whereby the Secretary of State can nominate a date on which specified analogue services must cease being provided in analogue form.

2.46 The legislation further provides that, if a digital switchover date is so nominated, we must amend the duration of all relevant analogue licences, which would otherwise run beyond the nominated switchover date, so that they do not run beyond that date, provided the licensee is given two years' notice.

2.47 The effect of this statutory provision is to make the duration of a renewed INR licence uncertain, in that it may be terminated with two years' notice. This means that a bidder may not expect the licences to run to their full 10-year duration. There are a variety of different durations which might be possible depending upon the actions of the Secretary of State, which in turn would likely be influenced by external events. It might be desirable for a bidder to consider the likelihood of a range of different end dates, assign an appropriate percentage probability to each possible outcome and weight them accordingly. However, there is relatively little evidence available to determine what the reasonable weightings should be.

2.48 The most recent statements by Government on digital switchover were made in the July 2020 announcement on radio renewals.[7] In that announcement the Government said that a 10-year renewal may "in essence amount to an end date for analogue commercial radio, and as such may in practice supersede the provisions in the Digital Economy Act 2010 (DEA) allowing for a two-year notice period prior to licence termination". It also said that if, following the digital radio and audio review[8], Government decides to set firm dates for digital switchover, the two-year provision in the DEA would enable a common end date for all licences to be set.

2.49 These statements indicate that analogue radio is expected to continue for the next decade. Given the order allowing a further 10-year renewal has just been made, we consider a potential bidder for an INR licence would attach a relatively low weight to the possibility of switchover prior to the expiry date of the renewed licences.

2.50 We will therefore assume that the renewed licence endures for the full 10-year term. However, we will take account of any further announcements regarding digital switchover from Government or the digital radio and audio review where these are made before we determine financial terms.

[7] Further Renewal of Analogue Commercial Radio Licences - Consultation Response, 2 July 2020

[8] This review was announced in February 2020 and aims to publish a report in March 2021. See Government announces details of new review to protect the future of radio

Discount rate

2.51 We will use a discount rate of 9.5%, as explained in Annex 1 to estimate the net present value of the licence to a hypothetical new entrant.

Cut-off date

2.52 We consider that it is necessary for us to be able to take account of any information relevant to deciding the revised licence payments that is, or becomes, available up to the date of determination.

Setting financial terms

2.53 We will calculate financial terms that will allow for the recovery of the combined net present value of the rights and obligations associated with the licence. However, as explained above, no guidance is given in the 1990 Act as to how we should set the PQR or indeed the relative sizes of the PQR and Cash Bid.

2.54 Qualifying revenue is defined in section 102 (2) of the 1990 Act 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 in that period of advertisements or other programmes, or in respect of charges made in that period for the reception of programmes included in that service".

2.55 For the purposes of setting the PQR, we will use the guidance relating to qualifying revenue set out in our 2006 statement of principles document.[9] In that document, qualifying revenue for INR services is defined by reference to the advertising and sponsorship amounts received in connection with the licensed analogue service. It appears to us that these remain the principal sources of revenue of the services consistent with the definition in the 1990 Act. Where advertising and sponsorship revenue relates to programmes broadcast on multiple platforms, this revenue will be apportioned to analogue based on listener hours for the purpose of deriving qualifying revenue.

2.56 In terms of the relative sizes of any PQR payments and Cash Bid, recovering more of the licence value from PQR would align the payments with the licensees' revenues, offer some protection against the risk of revenue downturns and mitigate some of the risk of forecasting error. Therefore, consistent with the 2017 methodology, the PQR will be calculated to recover as close to 95% of the value of the licence as possible, without exceeding this proportion and consistent with setting the PQR as an integer. The Cash Bid would then be set to recover the balance of the value of the licence.

2.57 When converting the net present value of the licence into PQR and/or cash bids, we intend to use the discount rate of 9.5%, but we may consider the risk associated with the PQR and

[9] Computation of qualifying revenue and multiplex revenue for radio licensees, 26 October 2006

cash bid payments (and adjust the discount rate accordingly) where this could have a significant impact on the size and profile of payments.[10]

2.58 Where our review indicates that a new entrant would assign a relatively small value to the licence, we may, for administrative convenience, recover the value of the licence solely through the Cash Bid, with the PQR set to zero. This would also give licensees certainty about future payments.

2.59 If our review indicates that a hypothetical new entrant would not be prepared to bid for the licence based on our assessment of the value of the rights and obligations associated with the licence, we will conclude that the incumbent licence holders could retain their licences in a hypothetical auction for a nominal amount. If this were the case, we would set the Cash Bid at £10,000 consistent with previous reviews.

Outcomes of previous reviews

2.60 The table below shows the financial terms previously determined by Ofcom and the outcome of the actual and hypothetical auctions.

Table 3.1: Financial terms history

	Classic FM		Absolute Radio		talkSPORT	
	PQR	Cash bid	PQR	Cash bid	PQR	Cash bid
2017 review	0%	£10k	0%	£10k	0%	£10k
2010 review	0%	£10k	0%	£10k	0%	£10k
2006 review	6%	£50k	0%	£100k	0%	£100k
1999-01 review	14%	£1m	12%	£1m	6%	£500k
1991-94 auction	4%	£670k	4%	£1.8m	4%	£3.8m

Note: Cash bid increases by RPI each year. PQR applies to analogue revenues only

2.61 The table shows that over time the PQR and Cash Bid associated with the INR licences have reduced, and that each licensee has been making nominal financial payments since the 2010 reviews. This reflects the fact that the profits associated with the right to broadcast nationally on analogue have reduced over time as digital listening has increased and that, in more recent reviews, entry costs for a new entrant were considered likely to outweigh the potential analogue profits available. Consequently, recent reviews concluded that a new entrant would not be prepared to bid for the licence under our methodology and the incumbents could retain their licences in a hypothetical auction for a nominal amount.

[10] For example, when turning a lump sum value into a stream of payments for Annual Licence Fees for mobile operators, we considered that the appropriate discount rate would sit between the cost of debt and the cost of capital, depending on how much risk in the value of the licence was borne by government. See for example Annex 2 of Annual Licence Fees for UK Broadband's 3.4 GHz and 3.6 GHz spectrum, 7 June 2019.

A1. Discount rate

A1.1 The discount rate is intended to reflect the opportunity cost of investment faced by a hypothetical entrant that is assumed to be an existing media company with radio operations.

A1.2 We have estimated a pre-tax nominal discount rate of 9.5% which is meant to reflect the weighted average cost of capital (WACC) of a hypothetical entrant.

Estimating discount rates

A1.3 The discount rate applied to the forecast cash flows in an NPV analysis should reflect the opportunity cost to the relevant capital providers, weighted to their relative contribution to the company's total capital base. This is approximated by calculating the firm's WACC.

A1.4 The WACC combines the cost of funding from debt (Kd) and equity (Ke), each weighted by their relative share of enterprise value (i.e. the sum of the value of debt and equity). The value of debt relative to enterprise value (gearing) is denoted by g in the formula below and the rate of corporation tax is denoted by t. The pre-tax WACC is obtained by scaling the post-tax cost of equity by 1/(1-t), the cost of debt already being pre-tax:

$$pre - tax\ WACC = \frac{Ke * (1 - g)}{1 - t} + Kd * g$$

A1.5 We have estimated the cost of equity using the Capital Asset Pricing Model (CAPM), where the cost of equity is a function of the risk-free rate (RFR), the expected return on the equity market as a whole above the risk-free rate (i.e. the equity risk premium, or ERP) and the systematic risk of the company (i.e. equity beta, βequity):

$$\mathrm{Ke} = RFR + ERP * \beta equity.$$

A1.6 We have estimated the cost of debt by considering the cost of new debt issued for the period of the licence for a firm with an investment grade rating.

A1.7 There are several parameters that we must estimate to calculate the WACC for a hypothetical entrant. Some of these parameters reflect economy-wide factors that affect all firms. We considered some of these economy-wide factors as part of the January 2020 Wholesale Fixed Telecoms Market Review (WFTMR Consultation).[11] We have adopted the same values for these economy-wide parameters, specifically:

- Nominal risk-free rate (RFR) of 1.5%
- Nominal equity risk premium (ERP) of 7.4%

[11] Consultation: Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-26. See Annex 21.

A1.8 We have used a tax rate of 19%, consistent with the latest information from HMRC.[12]

A1.9 Other parameters that influence the WACC calculation are firm-specific, such as gearing ratios, equity and asset betas, and the cost of debt.

A1.10 As in previous reviews, we will apply a single discount rate in our NPV analysis for each of the licences. Where possible, we have used data on existing broadcasters to support our calculations.

Asset beta, equity beta and gearing

A1.11 The value of a company's equity beta measures the movements in returns from its shares relative to the movement in the return from the equity market. The equity beta includes the effect of capital structure on the systematic risk of the company, so an asset beta is often calculated to remove financial leverage effects from the equity beta to more easily compare the betas of different companies (which may have different levels of gearing).[13]

A1.12 In the 2017 methodology, we used an asset beta of 0.9, gearing of 15% and an equity beta of around 1. This was informed by data on UK and European broadcasters and the equity beta of the FTSE 350 Media index.

A1.13 In the 2017 methodology, we put weight on data from broadcasters involved in operating radio stations and whose shares were relatively liquid, in particular Wireless Group plc, which at the time was the only UK listed company with significant radio assets. Several of those benchmarks, including Wireless Group plc, have since delisted, leaving us with few reliable indicators as to the beta and gearing of a new entrant in the UK radio market.

A1.14 We have considered whether more recent evidence would support a change to the beta and gearing assumptions used in the 2017 methodology. The table below shows 2- and 5-year asset beta and gearing estimates for four European broadcasters with radio interests and ITV as the main listed UK broadcaster. Assets betas have been calculated by reference to a local and global index.[14]

[12] The gov.uk website says, "At Budget 2020, the government announced that the Corporation Tax main rate (for all profits except ring fence profits) for the years starting 1 April 2020 and 2021 would remain at 19%.". See Rates and Allowances for Corporation Tax.

[13] Asset betas are calculated using the following formula. Our calculations assume a debt beta of 0.1, consistent with the 2020 WFTMR Consultation, but this does not materially affect the WACC calculation.

$$\beta\ asset = Gearing * \beta\ debt + (1 - Gearing) * \beta\ equity$$

[14] Each of the four European broadcasters operates radio stations and their shares are liquidly traded (measured by reference to a bid-ask spread of less than 1%). While ITV has no radio interests, it is the main listed UK broadcaster.

Table A1: Asset beta and gearing estimates

	2 - year			5 - year		
Company	**βA - local**	**βA - global**	**Gearing**	**βA - local**	**βA - global**	**Gearing**
Antena 3 (Spain)	0.53	0.52	27%	0.76	0.76	13%
Mediaset (Italy)	0.59	0.56	31%	0.80	0.79	27%
RTL (Luxembourg)	0.77	0.86	15%	0.67	0.85	11%
Metropole (France)	0.70	0.76	9%	0.67	0.80	4%
ITV (UK)	0.99	0.96	20%	1.03	1.11	14%
Average	**0.72**	**0.73**	**20%**	**0.79**	**0.87**	**14%**

Note: 2-year and 5-year betas use daily data. Source: Bloomberg, betas calculated as at 31 August 2020. Local betas derived against the FTSE All World – Europe index for European companies and the FTSE All Share for UK companies. Global betas derived against the FTSE All World index. βA = asset beta.

A1.15 The data presented in Table A1 indicates that an asset beta for a hypothetical entrant would be in the broad range 0.50 – 1.1, depending on the averaging period (2-year or 5-year) and reference index (local or global) used. The asset beta for ITV is higher than those of European comparators whichever averaging period or reference index is used. When averaging across broadcasters, the asset beta range is (rounded) 0.7 to 0.9, with 5-year averages higher than 2-year averages.

A1.16 We consider the data would support a lower asset beta than the 0.9 used in 2017, as no comparator company with radio interests has an asset beta this high. However, we place weight on the fact that the asset beta for the only listed UK broadcaster is the highest in the sample, which provides support for using an asset beta towards the top of the range since we are interested in the value of a UK licence. We have used an asset beta of 0.85, which is within the asset beta range presented above and reflects the evidence on asset betas from European companies with radio interests (where the highest asset beta is around 0.85) and evidence from the UK (where ITV's asset beta is the highest in the sample).

A1.17 In order to estimate an equity beta, we need to consider the forward-looking gearing associated with the hypothetical entrant. In the 2017 review we assumed forward-looking gearing of 15%. The data in Table A1 would tend to support gearing of 10% - 30%. We have used the midpoint of this range, 20%, as the gearing rate for a hypothetical new entrant. The choice of gearing level in this range does not have a significant impact on the WACC calculation.

A1.18 An asset beta of 0.85 is equivalent to an equity beta of 1.04 at our assumed forward-looking gearing rate of 20%.[15] An equity beta of around 1 is broadly consistent with the equity beta for the FTSE 350 Media Index[16], providing further support that our asset beta and forward looking gearing assumptions provide a reasonable estimate of the equity beta of a hypothetical entrant.

[15] Using the formula β equity = (β asset - β debt * g)/1-g gives (0.85 – 0.10*20%)/80% = 1.04.

[16] As at 31 August 2020, the equity beta for the FTSE 350 Media index was 0.95 on a 2-year basis and 0.92 on a 5-year basis, measured against the FTSE All Share index.

Cost of debt

A1.19 Of the comparators in Table A1, only ITV has rated corporate bonds. These are rated at BBB-, which is consistent with our 2017 methodology where we said it was reasonable to assume that the debt of a hypothetical new entrant would be BBB- rated.

A1.20 We consider that bonds with a 10-year maturity would be consistent with the 10-year duration of the licence.

A1.21 In the year to August 2020 yields on 10-year BBB-rated bonds ranged from 1.5% to 3.5% and averaged 1.9%.[17] As we assume a hypothetical entrant would be BBB- rated, its cost of debt is likely to be higher than average yields on a BBB index.[18] On this basis, we consider a rate of 2.3% would be a reasonable approximation of the cost of debt of a hypothetical new entrant considering bidding for the licence.

Conclusion

A1.22 Applying the parameters discussed above, we have estimated a pre-tax nominal WACC of 9.5% and will use this as the discount rate in the licence valuations. A summary of the WACC calculation and related assumptions is shown below

Table A2: WACC parameters

WACC component	Estimate	Source
Nominal RFR	1.5%	2020 WFTMR Consultation
Nominal ERP	7.4%	2020 WFTMR Consultation
Debt beta (β debt)	0.1	2020 WFTMR Consultation
Asset beta (β asset)	0.85	Ofcom estimate
Gearing (forward looking) (g)	20%	Ofcom estimate
Equity Beta (β equity)	1.04	= (β asset - β debt * g)/1-g
Cost of equity (post-tax) (Ke)	9.2	= Nominal RFR + ERP * βequity
Cost of equity (pre-tax)	**11.4%**	= Ke / (1-t)
Corporate tax rate (t)	19%	Ofcom estimate based on HMRC
Cost of debt (pre-tax) (Kd)	**2.3%**	Ofcom estimate based on yields on BBB bonds
WACC (pre-tax nominal)	**9.5%**	=(Ke*(1-g))/(1-t)+Kd*g

[17] Source: Bloomberg

[18] A BBB index includes bonds that are rated BBB+, BBB and BBB-. A BBB- bond is likely to have a higher cost of debt than a BBB or a BBB+ bond.