A8. EPG slot price modelling and interpretation

Introduction

- A8.1 This Annex explains how we have estimated the price of EPG slots and the inferences we have drawn from these about the potential impact of our proposals. Specifically, we have sought to quantify the potential impact of our proposals and of alternative options that we considered, on: (i) commercial channels' profitability as a result of moving down the EPG; and (ii) EPG providers' ability to monetise their EPG slots (where applicable).¹
- A8.2 Our estimates (described in paragraph A8.4 below) are only a proxy for the likely impact on commercial channels' profitability and on EPG providers, as there are a number of other factors affecting an individual broadcaster's financial position that we cannot reasonably model. We have had to make a number of modelling assumptions, as did Expert Media Partners ("EMP") when generating the price estimates for EPG slots that underpin our calculations (see paragraph A8.3 below). Our estimates of the potential impact on commercial channels' profitability and on EPG providers' ability to monetise their EPG slots are therefore only indicative in nature. As explained in paragraph 5.12 of our consultation document,² they are just one factor in a range of considerations in determining appropriate prominence for the designated channels. We have published our model alongside this consultation.³
- A8.3 We commissioned EMP to examine and report on the market for EPGs, specifically the market price of EPG slots in the Entertainment, News and Kids sections on the Sky and Virgin Media platforms.⁴ From EMP's less granular data, we have estimated the price of individual EPG slots.
- A8.4 We have estimated the difference between the expected transaction prices of the slot that a broadcaster currently occupies and the slot that it moves down to.
 - a) On the Sky EPG, we have used this to estimate the loss in profits that a commercial broadcaster might suffer as a result of being moved down from slot X to slot X+1 (say). In other words, the asset (i.e. the slot) that the commercial broadcaster uses would become less valuable.

¹ The calculations in this Annex do not estimate all the potential impacts on channels or EPG providers. We discuss other impacts (for example, disruption costs for channels, such as marketing spend to inform viewers of their new slot) qualitatively as part of our assessment in Annex 7. See Ofcom, Consultation on proposed changes to the linear EPG Code and future of the regime, 24 July 2018, <u>Annex 7</u>.

² Ofcom, Consultation on proposed changes to the linear EPG Code and future of the regime, 24 July 2018, <u>Section 5</u>.

³ We have published <u>our model</u> alongside this consultation on the dedicated Ofcom <u>webpage</u>.

⁴ Expert Media Partners, <u>Report on the UK Market in EPG Positions</u>, July 2018. We have published EMP's report alongside this consultation on the dedicated Ofcom <u>webpage</u>.

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- b) On the Virgin Media EPG, and assuming in future Virgin Media continues to allocate EPG slots in the form of auctions (as it did for the sale of slot 106 in 2017)⁵, we have used this to estimate the loss in EPG charges that Virgin Media might suffer from a channel being moved down (from slot X to slot X+1) to accommodate a designated channel moving up (from slot X+1 to slot X). This also represents the cost saving to broadcasters from lower EPG fees, although they would also suffer a loss in revenues from being moved down the EPG.⁶
- A8.5 The remainder of this Annex is structured as follows:
 - a) First, we outline the modelling approach we have followed to calculate our estimates;
 - b) We then describe the key assumptions used in our modelling; and
 - c) We conclude by presenting our estimates of the potential impact of our proposals (as well as alternative options we considered) on commercial broadcasters and EPG providers.

Modelling approach

- A8.6 Under our proposals, designated channels would move up the EPG on some platforms while other channels would have to move down to accommodate this. As noted in paragraph 4.2 of our consultation document, moving a channel down the EPG is likely to decrease that channel's viewing. For commercial channels, this may to lead to a decline in their advertising and/or sponsorship revenues and hence in their profitability. On Virgin Media's EPG, this may in turn lead to a fall in the amounts it can charge channels for EPG slots.
- A8.7 We consider the potential impact of our proposals separately for the Sky and Virgin Media EPGs, and for individual UK nations in the case of the Sky EPG where relevant.

Overview of Sky EPG and implications for our modelling approach

- A8.8 The Sky EPG market has been in operation for about fifteen years and has evolved into a formal market place with broadcasters trading EPG slots with one another.8 When a broadcaster buys a slot on the Sky EPG, it is buying the right to broadcast its channel under a TLCS (Ofcom) licence in that slot with a dedicated Logical Channel Number (LCN).
- A8.9 The only way a broadcaster can launch an SD channel on Sky's platform is to either purchase another broadcaster in its entirety or purchase an EPG slot (or, more accurately, the rights and obligations associated with an EPG slot) from an existing broadcaster. If a

⁵ Slot 106 became available when BBC Three became an online only channel. As a result of the auction E4 moved to this

⁶ If instead we assumed that in future Virgin Media charges a flat (uniform) fee for slots on its EPG, then our estimates would be a proxy for the loss in profits that a commercial broadcaster would suffer as a result of being moved down from slot X to slot X+1.

⁷ Ofcom, Consultation on proposed changes to the linear EPG Code and future of the regime, 24 July 2018, Section 5.

 $^{^{8}}$ Expert Media Partners, $\underline{\text{Report on the UK Market in EPG Positions}},$ July 2018, page 3.

⁹ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, pages 3-4.

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broadcaster wishes to launch an HD channel, it can apply to Sky for a listing and join the HD launch queue. Broadcasters can buy and sell EPG slots from each other. Sky is not involved in the commercial transaction and does not gain financially from any slot trades between broadcasters, other than a small administrative levy known as a transfer fee.

- A8.10 We recognise that there are a variety of ways in which our proposals could be implemented on the Sky EPG (in terms of how channels move up and down and the arrangements for achieving this). We consider that the following assumptions provide a reasonable basis for producing estimates of the potential impact on broadcasters. For the purposes of our modelling analysis, we assume that, if a broadcaster was moved down the Sky EPG as a result of our proposals, it would lose the slot it previously used (receiving no compensation for the loss of this slot) and be gifted the slot it would move down to (i.e. it would not be required to pay a fee or other form of compensation to the previous user). We also assume that a designated channel that moves up the EPG as a result of our proposals would lose its previous lower slot and be gifted its new higher slot.
- A8.11 Based on our assumptions, the loss a commercial broadcaster would suffer if it was moved down the Sky EPG as a result of our proposals would be the difference between the profits it would expect to earn in its current slot and the slot that it would be moved down to.¹⁰
- A8.12 We have estimated the loss in profits that a channel would suffer from being moved down from slot X to slot X+1 (say) on the Sky EPG by estimating the difference in the predicted sale price of those two slots. We consider this is a reasonable approach. If there is effective competition for slots on the Sky EPG, then the price paid by a broadcaster for a slot on the Sky EPG would be expected to reflect the profits it would expect to earn from being in that slot.¹¹
- A8.13 As noted above, given that Sky only receives an administrative payment from the sale of a slot between broadcasters, we consider there would not be a material impact on Sky's ability to monetise its EPG slots as a result of our proposals.¹²
- A8.14 We have estimated the price of slots on the Sky EPG using: (i) a methodology similar to that adopted in a report prepared by Technologia for DCMS in 2012;¹³ and (ii) estimates from EMP of predicted 'sale prices' of EPG Slots on the Sky EPG.¹⁴

¹⁰ For example, if a channel expects to earn profits of £1.5m in its current slot and is moved to a lower slot where it expects to earn profits of £1m, then it would suffer a loss of £0.5m.

¹¹ We recognise that there are limitations associated with using channel prices as a proxy. For example, the price of a slot would only equal the profits a broadcaster earns from that slot if slots are scarce, competition between broadcasters for them is strong and if broadcasters are very similar.

¹² According to Sky's current price list, where a broadcaster has one or more channels listed on the Sky EPG, that broadcaster pays Sky a flat EPG listing charge of £21,000 per channel per annum. We note that broadcasters are also required to pay Sky a platform contribution charge for some individual channels. See <u>BSkyB and SSSL Published Price List</u>, pages 1-2.

¹³ <u>Technologia</u>, The value and optimal management of channel position and prominence on electronic programme guides: A report for DCMS, 4 July 2012, Appendix F.

¹⁴ EMP provided estimates of what market value it believes an EPG slot would achieve if it were marketed under normal trading conditions, i.e. these are estimates of predicted 'sale prices', not 'asking prices'. See Expert Media Partners, Report On the UK Market in EPG Positions, July 2018, page 10.

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- A8.15 Technologia obtained estimates of values of the top and bottom slots for all genre sections on the Sky EPG from Canis Media.¹⁵ It then interpolated the value of all other slots on the Sky EPG by making the assumption that the relative value between any two adjacent slots is always the same (i.e. by assuming the ratio of the value of slot 1 to slot 2 to be the same as the ratio of the value of slot 2 to 3, and so on).¹⁶
- A8.16 EMP has provided us with more recent estimates of: (i) the predicted 'sale price' of the top slot; and (ii) the average predicted 'sale price' of a slot on each page for the Entertainment, Children's and News genres on the Sky EPG across the whole of the UK.¹⁷
- A8.17 We have used these more recent estimates of predicted sale prices on the Sky EPG from EMP (instead of the estimates previously provided by Canis Media) together with a methodology similar to the one described above to estimate the predicted sale price of all slots in the Entertainment, Children's and News genres on the Sky EPG.¹⁸
- A8.18 In some cases, our proposals would lead to a channel being moved down the Sky EPG only on an individual nation's EPG rather than throughout the UK. In such cases, the channel would only be affected in the individual nation in question. Hence, we apply the same methodology as for UK-wide channel moves on the Sky EPG, but we adjust our estimates of the predicted sale prices of the relevant slots in proportion with the total viewing minutes on Sky in the individual nation as a share of the total viewing minutes on Sky across the UK.¹⁹

¹⁵ Technologia commissioned a report from Canis Media Ltd, the UK's leading broker of EPG slot sales and transfer on the Sky platform, on the factors affecting the value of EPG positions and the operation of the market in the UK. See Technologia report, Annex E.

¹⁶ Technologia used a geometric series (value of slots declining from top to bottom of a genre section by a fixed ratio – often called the common ratio – which is denoted by r), noting that the sum of a geometric series is $a \frac{1-r^n}{1-r}$ where r is the ratio of the adjacent terms and n the number of terms. It then solved for total value of a genre section where there is a total of n channels, T is the value of the top slot and B the value of the bottom slot in the genre section, i.e. $r = \left(\frac{T}{B}\right)^{\frac{1}{n-1}}$ and the sum = $B \frac{1-r^n}{1-r}$.

¹⁷ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, Tables 1, 3 and 5.

¹⁸ Technologia assumed that all slot values in a given genre on the Sky EPG were part of a single geometric progression and computed a single common ratio for how slot values changed across the entire genre. EMP has provided estimates of the predicted sale price for the top slot, as well as the average predicted sale price for each page on the Entertainment, Children's and News genres on the Sky and Virgin Media EPGs. We have used a set of geometric progressions – one from the top slot to the middle of the first page, another from the middle of the first page to the middle of the second page (and so on) – calculated (potentially different) common ratios for each of these geometric progressions, in order to estimate the predicted sale price of all slots in the Entertainment, Children's and News genres on the Sky and Virgin Media EPGs.

¹⁹ To estimate the effects of our proposals on an individual nation EPG on Sky, we have applied individual nation weights. Each individual nation weight is calculated as the average of: (i) total TV viewing minutes on Sky in that individual nation as a share of total TV viewing minutes on Sky across the whole of the UK during 2017; and (ii) BBC One viewing minutes on Sky in that individual nation as a share of BBC One viewing minutes on Sky across the whole of the UK during 2017. Source: BARB. Sky viewing of individuals by ITV areas.

Overview of Virgin Media EPG and implications for our modelling approach

- A8.19 We note that Virgin Media's approach to allocating EPG slots is in the process of evolving.²⁰ Virgin Media made changes to its EPG methodology effective from July 2017 which enabled Virgin Media to offer channels a chance to make financial offers for EPG positions in a way that did not exist before.²¹ To date, Virgin Media has only allocated one slot (slot 106 to Channel Four Television Corporation) in an auction, after inviting offers on the open market. Prior to that, it is understood that EPG slots were taken into consideration by Virgin Media and broadcasters when negotiating carriage fees.
- A8.20 Unlike the Sky EPG market, and using the allocation of slot 106 as a precedent, broadcasters agree commercial terms related to the EPG slot directly with Virgin Media (as the EPG provider) and not between themselves. Proadcasters commit to paying a fee, over and above their existing carriage fee, but with Virgin Media retaining ownership of the slot. Intuitively, this can be thought of as the broadcaster 'renting' the slot from Virgin Media. If in future Virgin Media continues to allocate EPG slots in the form of auctions (as it has done for the sale of slot 106), then the rental fee that the winning broadcaster would pay Virgin Media for the EPG slot will be determined by its winning bid.
- A8.21 For the purposes of our modelling analysis, we assume that, if a broadcaster is moved down the Virgin Media EPG from slot X to slot X+1 (say) as a result of our proposals, its agreement for the rental of slot X would be terminated and the broadcaster would stop paying the rental fee for that slot. Instead, the broadcaster would enter into a new agreement with Virgin Media for the rental of slot X+1 and would pay a new (likely lower) rental fee for this slot. In addition, we have assumed that the charges levied on public service channels do not change as a result of the implementation of our proposals. Hence, the difference in the rental fee of the two slots (X and X+1) would reflect the loss in rental income to Virgin Media as a result of our proposals. It would also reflect an equivalent cost saving to the broadcaster that is moved down the EPG.²³
- A8.22 In certain circumstances, the rental fee paid by a broadcaster for a slot on the Virgin Media EPG would be expected to equal the profits it would expect to earn from being in that slot.²⁴ In this case, the loss in profits to a broadcaster from being moved down would be fully offset by the cost savings, so there would be no impact on the commercial broadcaster as a result of our proposals on the Virgin Media EPG. In practice, the expected profits from being in a slot are likely to exceed the rental fees. As a result, the loss in profits that a commercial broadcaster would suffer from being moved down the Virgin Media EPG could be offset to a greater or lesser extent by the cost savings the broadcaster would

²⁰ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, pages 5-6.

²¹ Virgin Media's EPG Policy, 14 July 2017.

²² Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, page 6.

²³ If instead we assumed that in future Virgin Media charges a flat (uniform) fee for slots on its EPG, then our estimates would be a proxy for the loss in profits that a commercial broadcaster would suffer as a result of being moved down from slot X to slot X+1.

²⁴ If slots are scarce, competition between broadcasters for them is strong and if broadcasters are very similar.

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- achieve on rental fees. However, due to a lack of information about the expected profits that could be generated from a given EPG slot, we have not quantified the scale of this impact on commercial broadcasters on the Virgin Media EPG.
- A8.23 EMP has provided us with recent estimates of: (i) the predicted 'sale price' for the top slot; and (ii) the average predicted 'sale price' for a slot on each page of the Entertainment, Children's and News genres on the Virgin Media EPG for the whole of the UK, under the assumption that EPG slots on Virgin Media are allocated in the same way as slot 106.25 We have interpreted the predicted sale price for a slot as being the sum of charges (or rental fees) that a broadcaster would pay Virgin Media for using the slot over the period of the agreement between Virgin Media and the broadcaster.
- A8.24 As described above for the Sky EPG, we have used these recent estimates of predicted sale prices on the Virgin Media EPG together with the methodology described above to estimate the predicted sale price of all slots in the Entertainment, Children's and News genres on the Virgin Media EPG.

Freeview and Freesat EPGs

A8.25 Our proposals would also lead to some changes on the Freesat and Freeview EPGs in Wales (see paragraph 5.29 of our consultation document). There is no market for EPG slots on Freeview or Freesat. On these platforms, a channel is allocated a logical channel number (LCN) at the bottom of the relevant genre at launch and if slots become available above the channel's slot over time, the channel is moved up in line with the platforms' respective EPG methodologies. In light of this, EMP has not provided any estimates of the predicted 'sale price' of EPG slots on these two platforms. Therefore, we have not sought to quantify the potential impact of our proposals in relation to the Freesat or Freeview EPGs.

²⁵ Expert Media Partners, <u>Report on the UK Market in EPG Positions</u>, July 2018, Tables 2, 4 and 6.

²⁶ Ofcom, Consultation on proposed changes to the linear EPG Code and future of the regime, 24 July 2018, section 5.

²⁷ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, page 23.

Key assumptions used in our modelling

- A8.26 For the purposes of our modelling analysis, we have made a number of modelling assumptions, which are set out below.
 - a) **Counterfactual.** We need to identify a counterfactual (i.e. how the main EPGs would look absent any regulatory intervention), against which we can measure the potential effects of our proposals. We consider the appropriate counterfactual is not the situation as it looks today, but the situation as it would look in the foreseeable future, when our proposals might come into effect. In particular, the BBC has announced the launch of a new BBC Scotland channel in Scotland in February 2019.²⁸ Latest public information indicates that the new channel would take the place currently occupied by BBC Four on the EPGs of all platforms in Scotland and, as a result, BBC Four will move down the EPG to a less prominent slot on the EPGs of all platforms in Scotland.²⁹ We therefore consider our counterfactual should reflect the expected changes to the EPG positions of the BBC channels in Scotland following the launch of BBC Scotland.

For each platform, we have taken as a starting point the published channel positions, accessed on 8 June 2018³⁰ and we have then applied the expected changes to the positions of BBC Four and BBC Scotland.³¹

We have also made assumptions about the number of slots displayed on each page on the Sky EPG (eight) and the Virgin Media EPG (seven).

b) Implementation of our proposals for designated channels. We have assumed that, where designated channels are moved up the EPG as a result of our proposals, they would be moved up by the minimum amount required to be compliant with our proposals.

²⁸ BBC, Proposals for the launch of a new BBC Scotland TV channel, <u>Submission to Ofcom</u>, November 2017 ("BBC Public Interest Test"); and https://www.bbc.co.uk/news/uk-scotland-44126219.

²⁹ BBC Scotland <u>Public Interest Test</u>, Table 3, page 26.

³⁰ Source: https://www.sky.com/tv-guide/ for Sky channels [accessed 8 June 2018],

https://my.virginmedia.com/content/dam/virgoBrowse/docs/VirginMediaTVChannelGuide.pdf for Virgin Media channels [accessed 8 June 2018] (note, this sets out the EPG positions for May 2018).

³¹ We have based this on the information set out in the BBC's Public Interest Test for the launch of the new BBC Scotland channel. See BBC Scotland <u>Public Interest Test</u>, Table 3, page 26.

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- c) Implementation of our proposals for channels being moved down. We recognise there are a variety of ways in which EPG providers could implement our proposals and therefore a number of ways in which channels may be moved down. For the purposes of our modelling analysis, we have assumed that EPG providers would implement our proposals by moving channels down by one slot in order to accommodate the designated channels moving up (with the exception of the best placed variant of a given BBC channel, which we assume would not move down).³² Our assumption has the effect of spreading the potential impact across a larger number of channels (thereby diluting the effect on any single channel).
- d) EMP estimates of predicted sale prices of EPG slots. As noted above, we commissioned EMP to provide estimates of the predicted sale price of EPG slots. EMP have set out an overview of their methodology.³³ In summary, they have used market intelligence gathered while conducting sales and transfers on the Sky and Virgin Media platforms together with forecast audience data likely to be generated by a channel in a particular EPG slot. They have considered incremental revenues that a broadcaster could achieve by moving its channel up or down an EPG, how much of such incremental revenues a broadcaster may be willing to pay to secure a slot, and the minimum bid that may be required to secure a particular slot. EMP also noted that, while it is widely acknowledged by broadcasters and platforms that higher EPG positions (lower LCNs) have a positive impact on viewing levels, there are other factors which need to be taken into account when evaluating the price of an EPG slot (e.g. the type of channel, proximity to high or low performing channels, proximity of other channels in the same portfolio, memorable channel number and position on a page).³⁴
- e) Estimating the predicted sale prices of other EPG slots. As explained in paragraphs A8.15 to A8.17 above, in order to estimate the predicted 'sale price' of all other slots in the Entertainment, Children's and News genres on the Sky and Virgin Media EPGs, we have assumed a specific functional form for how EPG slot prices vary within a genre.

We have sought to check our approach for estimating the price of individual EPG slots by comparing the estimate of the total value of each genre provided by EMP with the total value of each genre implied by our modelling, and have found that these are very similar.³⁵

³² We assume that if a variant of a given BBC channel (within the range across which channels are being moved down to implement our proposals) happens to be the best placed variant of that BBC channel on the EPG, then the EPG provider would leave the position of that BBC channel variant unchanged (i.e. it would not move it down by one slot). In such a case, the EPG provider may have to move some channels down by more than one slot. However, we assume it would still move each individual channel down by the minimum possible amount as a result of our proposals.

³³ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, pages 6-8.

³⁴ Expert Media Partners, Report on the UK Market in EPG Positions, July 2018, pages 8-9.

 $^{^{35}}$ With the exception of the last page (page 16) of the Virgin Media Entertainment EPG and the last page (page 2) of the Virgin Media News EPG (both of which we discuss below), our estimates of the total value of each page on each genre EPG (which are based on our estimates of the prices of individual slots on the EPG) are within \pm 10% of the corresponding EMP estimates. Likewise, our estimates of the total value of each genre EPG are also within \pm 10% of the corresponding EMP estimates, with the exception of the Virgin Media News EPG. This is because EMP estimates the price of any slot on the last

- f) Estimating predicted sale prices for individual nation EPG slots. Where our proposals only affect an individual nation EPG on Sky (e.g. the Sky EPG in Scotland), we have estimated the share of the predicted UK-wide sale price for a given slot on the Sky EPG that is attributable to an individual nation. As described in paragraph A8.18 above, we have estimated this by scaling down our estimate of the predicted UK-wide sale price of an EPG slot. Thus, for a given slot on the Sky EPG, we have assumed that the sum of prices for that slot in England and Northern Ireland, Scotland and Wales is equal to the predicted UK-wide sale price provided by EMP.
- g) Cumulative impacts of our proposals. The estimated cost of some of our proposals are affected by other aspects of our proposals. Where more than one proposal leads to channels being moved down on a given EPG, for ease of exposition we have estimated the cost of the proposals in the order in which they are presented in Annex 7. For example, we have first estimated the financial impact of our proposals relating to BBC Four on UK-wide EPGs.³⁶ We have then estimated the financial impact of our proposals relating to nation and area specific channels (i.e. S4C, BBC Alba, BBC Scotland and Local TV) on UK-wide EPGs, assuming we would adopt our proposal for BBC Four on UK-wide EPGs (i.e. we have estimated the incremental impact of our proposals relating to nation and area specific channels, over and above the impact of our proposal for BBC Four on UK-wide EPGs).³⁷

page of the Virgin Media Entertainment and News EPGs to be 0. By contrast, we have assumed in our modelling that the prices of slots on the last page of any EPG do not abruptly fall to 0, but instead decrease as per a geometric progression. Hence, our estimates of the total value of the last page of the Virgin Media Entertainment and News EPGs (and consequently of the entire two-page Virgin Media News EPG) differ considerably from the corresponding EMP estimates. However, neither our proposals nor the alternative options we considered affect channels located on the last page of the Virgin Media Entertainment and News EPGs. Hence, the difference between our and the EMP estimates in these two cases has no effect on our estimation of the potential cost to commercial broadcasters and Virgin Media resulting from our proposals.

³⁶ In assessing the financial impact of our proposals relating to BBC Four on UK-wide EPGs, we have assumed that other designated channels (located within the range across which channels would be moved down to implement these proposals) do not move down the EPG.

³⁷ If instead we assumed we would not adopt our proposal for BBC Four on UK-wide EPGs (i.e. if we assumed BBC Four is at slot 163 after the launch of BBC Scotland on the Virgin Media EPG), the financial impact of our proposals relating to nation and area specific channels on UK-wide EPGs would be the same or lower.

Estimates of financial impact of our proposals on commercial broadcasters and EPG providers

- A8.27 In this section, we present the results of our modelling of the potential impact of our proposals (as well as alternative options we considered) on commercial broadcasters' profitability and EPG providers' ability to monetise EPG slots in the Entertainment, Children's and News sections of the Sky and Virgin Media EPGs. Our proposals and the alternative options we considered are set out in Annex 7.38 Our results can also be found in our model.
 - a) Table A8.1 below presents the estimated impact of our proposals on commercial broadcasters' profitability on the Sky EPG;
 - b) Table A8.2 below presents the estimated impact of our proposals on Virgin Media's ability to monetise slots on its EPG;
 - c) Table A8.3 below compares the estimated impact of our proposals and alternative options we considered on commercial broadcasters' profitability on the Sky EPG; and
 - d) Table A8.4 below compares the estimated impact of our proposals and alternative options we considered on Virgin Media's ability to monetise slots on its EPG.
- A8.28 Our estimated prices for all EPG slots in the Entertainment, Children's and News sections of the Sky and Virgin Media EPGs are set out in our model. The estimated prices from EMP that underpin our calculations are relatively high on the Virgin Media EPG compared to those on the Sky EPG, given the relative number of subscribers on each platform.
- A8.29 Our estimates of financial impact represent the lump sum costs to commercial broadcasters and/or EPG providers (rather than the cost per year, say).³⁹

³⁸ Ofcom, Consultation on proposed changes to the linear EPG Code and future of the regime, 24 July 2018, Annex 7.

³⁹ We have not taken into account the impact on BBC channels that move down the EPG as a result of our proposals.

Table A8.1: Estimated impact of our proposals on commercial broadcasters' profitability on the Sky EPG

Genre	UK-wide / Nation	Proposal	Current positions in our counterfactual*	Number of commercial channels moving down**	Indicative cost to commercial broadcasters (£m)
Entertainment	Wales	 C4 moves to page 1 (i.e. within first 8 slots); S4C stays in position 4 	S4C: 4 Channel 4: 17 Local TV: 34	7	0.4
		 Local TV within first 3 pages (i.e. within first 24 slots); assuming C4 moves to page 1, S4C stays in position 4 		10	0.2
		Sub-total			0.6
	England & NI	 BBC Four and Local TV within first 3 pages (i.e. within first 24 slots) 	BBC Four: 16 Local TV: 17	0	0
	Scotland	 BBC Four, BBC Alba, BBC Scotland and Local TV within first 3 pages (i.e. within first 24 slots) 	BBC Scotland: 16 Local TV: 17 BBC Alba: 41 BBC Four: 43	19	0.9
News	UK-wide	 BBC News and BBC Parliament within first page of News genre (i.e. within first 8 slots) 	BBC News: 3 BBC Parliament: 4	0	0
Children's	UK-wide	 CBBC and CBeebies within first page of Children's genre (i.e. within first 8 slots) 	CBBC: 13 CBeebies: 14	6	1.4
Total***					3.0

Notes: * Based on our counterfactual described in paragraph A8.26a) above. ** Based on our assumption that EPG providers will implement our proposals by moving channels down by one slot to accommodate the designated channels moving up (as described in paragraphs A8.26b) and A8.26c) above). *** Total may not sum due to rounding.

Table A8.2: Estimated impact of our proposals on Virgin Media's ability to monetise slots on its EPG (UK-wide)

Genre	Proposal	Current positions in our counterfactual*	Number of commercial channels moving down**	Indicative cost to Virgin Media (£m)
Entertainment	BBC Four within first 3 pages (i.e. within first 21 slots)	BBC Four: 62	38	5.8
	BBC Alba, BBC Scotland, S4C, Local TV within first 3 pages (i.e. within first 21 slots); assuming BBC Four within first 3 pages (i.e. within first 21 slots) Sub-total	BBC Scotland: 7 Local TV: 58 BBC Alba: 60 S4C: 65	43	19.3 25.1
News	BBC News and BBC Parliament within first page of News genre (i.e. within first 7 slots)	BBC News: 1 BBC Parliament: 5	0	0
Children's	 CBBC and CBeebies within first page of Children's genre (i.e. within first 7 slots) 	CBBC: 2 CBeebies: 3	0	0
Total***				25.1

Notes: * Based on our counterfactual described in paragraph A8.26a) above. ** Based on our assumption that EPG providers will implement our proposals by moving channels down by one slot to accommodate the designated channels moving up (as described in paragraphs A8.26b) and A8.26c) above). *** Total may not sum due to rounding.

Table A8.3: Estimated impact of our proposals and alternative options on commercial broadcasters' profitability on the Sky EPG

Genre	UK-wide / Nation	Proposal	Current positions in our counterfactual*	Number of commercial channels moving down**	Indicative cost to commercial broadcasters (£m)
Entertainment	Wales	 C4 moves to page 1 (i.e. within first 8 slots); S4C stays in position 4 C4 moves to position 4; S4C within page 1 (i.e. within first 8 slots); 	S4C: 4 Channel 4: 17 Local TV: 34	7	0.4
Englan & NI		 assuming C4 has already been moved up to page 1 Local TV within first 3 pages (i.e. within first 24 slots); assuming C4 moves to page 1, S4C 		10	0.2
		 Local TV within first 4 pages (i.e. within first 32 slots); assuming C4 moves to page 1, S4C stays in position 4 		2	0.04
	& NI	 BBC Four and Local TV within first 3 pages (i.e. within first 24 slots) 	BBC Four: 16 Local TV: 17	0	0
		 BBC Four and Local TV within first 4 pages (i.e. within first 32 slots) 		0	0
		 BBC Four, BBC Alba, BBC Scotland and Local TV within first 3 pages (i.e. within first 24 slots) 	BBC Scotland: 16 Local TV: 17 BBC Alba: 41	19	0.9
		BBC Four, BBC Alba, BBC Scotland and Local TV within first 4 pages (i.e. within first 32 slots)	BBC Four: 43	11	0.5

Genre	UK-wide / Nation	Proposal	Current positions in our counterfactual*	Number of commercial channels moving down**	Indicative cost to commercial broadcasters (£m)
News	UK-wide	BBC News and BBC Parliament within first page of News genre (i.e. within first 8 slots)	BBC News: 3 BBC Parliament: 4	0	0
Children's	UK-wide	CBBC and CBeebies within first page of Children's genre (i.e. within first 8 slots)	CBBC: 13 CBeebies: 14	6	1.4
		 CBBC and CBeebies within first 2 pages of Children's genre (i.e. within first 16 slots) 		0	0

Notes: * Based on our counterfactual described in paragraph A8.26a) above. ** Based on our assumption that EPG providers will implement our proposals by moving channels down by one slot to accommodate the designated channels moving up (as described in paragraphs A8.26b) and A8.26c) above).

Table A8.4: Estimated impact of our proposals and alternative options on Virgin Media's ability to monetise slots on its EPG (UK-wide)

Genre	Proposal	Current positions in our counterfactual*	Number of commercial channels moving down**	Indicative cost to Virgin Media (£m)
Entertainment	BBC Four within first 3 pages (i.e. within first 21 slots)	BBC Four: 62	38	5.8
	BBC Four within first 4 pages (i.e. within first 28 slots)		31	4.0
	 BBC Alba, S4C, Local TV, BBC Scotland within first 3 pages (i.e. first 21 slots); assuming BBC Four within first 3 pages BBC Alba, S4C, Local TV, BBC Scotland within first 4 pages (i.e. first 28 slots); assuming BBC Four within first 3 pages 	BBC Scotland: 7 Local TV: 58 BBC Alba: 60 S4C: 65	43 36	19.3 12.9
News	BBC News and BBC Parliament within first page of News genre (i.e. within first 7 slots)	BBC News: 1 BBC Parliament: 5	0	0
Children's	 CBBC and CBeebies within first page of Children's genre (i.e. within first 7 slots) CBBC and CBeebies within first 2 pages of Children's genre (i.e. within first 14 slots) 	CBBC: 2 CBeebies: 3	0	0
			0	0

Notes: * Based on our counterfactual described in paragraph A8.26a) above. ** Based on our assumption that EPG providers will implement our proposals by moving channels down by one slot to accommodate the designated channels moving up (as described in paragraphs A8.26b) and A8.26c) above).