



Expert | Media | Partners

Report on the UK Market in EPG Positions

July 2018

1. Introduction

Ofcom is undertaking a review of the EPG Code which, amongst other things, regulates the position of PSB channels on the various UK linear platforms. Expert Media Partners (EMP) has been asked by Ofcom to examine and report on the market for EPGs, specifically the market value of EPG slots in the Entertainment, News and Kids sections on the Sky and Virgin platforms.

2. EMP Credentials

EMP is the UK's leading specialist EPG broker. The team based at EMP has been responsible for managing the swap or sale of almost all the 'premium' slots that have changed hands over the last 15 years on Sky, and at least 75% of 'entry-level' slot sales. EMP also provides EPG slot valuations to broadcasters, banks and administrators.

EMP is a privately-owned independent broadcast consultancy and it has no vested interest in any individual EPG slots on any platforms.

EMP has worked with all the UK's major broadcasters, including the BBC, ITV, C4, Viacom, Discovery, Fox, Sony and Turner, as well as Sky. We have also worked with the Irish State Broadcaster, RTE.

Most recently, EMP was appointed to represent the BBC in the sale of 3 'premium' EPG slots during Sky's EPG review and we also worked with ITV, Viacom and Sony to dispose of EPG slots which were surplus to their requirements as a result of Sky's changes to the EPG.

Last year, we were appointed to manage the sale of EPG slot 106 on Virgin's platform which had recently been vacated by BBC3's move online. In addition to managing the successful sale of the slot, EMP was appointed to carry out an evaluation of the Entertainment genre on Virgin's platform prior to going to market.

The team at EMP has managed the swap or sale of around 200 EPG slots on Sky, and it has an in-depth understanding of how broadcasters and broadcast groups approach such opportunities and the value they attribute to EPG slots under normal trading conditions. The depth and breadth of experience in EMP's senior management team, and up-to-date market intelligence gives EMP an unrivalled in-depth knowledge of the value that broadcasters place on EPG prominence.

3. History of the Sky EPG market

The Sky EPG market has been in operation for about fifteen years and there are now 534 channels available to the 10M+ households that have Sky.

What began as an informal market with channels launching, closing-down and jostling privately for position on Sky's platform evolved over time into a more formal market-place with broadcasters trading slots using Sky's new 'Listings Methodology'. This is a set of rules and guidelines devised by Sky to ensure the smooth transfer of EPG slots from one broadcaster to another. Broadcasters usually, but not always, secure the services of an intermediary such as EMP to ensure compliance with Sky's Listings Methodology when buying or selling an EPG slot and to ensure they access the widest possible current database of potential purchasers.

From the moment that the existence of an EPG market became public knowledge, the valuation of positions also became a matter of commercial interest. When a broadcaster buys a slot on Sky, they are buying the right to broadcast their channel under a TLCS (Ofcom) licence in that slot with a dedicated Logical Channel Number (LCN). Thereafter, that broadcaster has the right to sell that slot, with its associated LCN to another broadcaster.

This market exists because broadcasters quickly realised that different slots delivered different audiences and therefore had different values; a prominent position at the top (Page

One) of a genre delivered greater audiences than those further down and a slot could be re-sold at any point after purchase. Those same principles apply today.

4. The Sky EPG market – how it works

The only way a broadcaster can launch a Standard Definition (SD) channel onto 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 you want to launch a High Definition (HD) channel, you can apply to Sky for a listing and join the HD launch queue.

The market for buying and selling Sky EPG slots operates at two levels ('entry-level' and 'premium') and most transactions involve an EPG broker marketing an existing slot to interested parties who then, having demonstrated that they are able to launch a channel into that slot within a given timeframe, will make financial proposals. That proposal is to the broadcaster who 'owns' the slot; Sky is not involved in the commercial transaction and does not gain financially from any third-party slot trades, other than from a small administrative levy known as a Transfer Fee.

It is usual that the highest financial bid for the slot will win, although vendors may take other factors into consideration when deciding who to enter into a sale agreement with.

An 'entry-level' slot is a slot that doesn't have any intrinsic additional value as a result of its position in a specific genre. For example, if a broadcaster with a channel at the bottom of the International section on Sky (e.g. Page 12) were to put that slot on the market, it would not command any additional increase in price by virtue of its position in that genre. The slot would be regarded as 'entry-level' and, Sky would be happy for a broadcaster to purchase it and then move it to the bottom of another section, assuming Sky's programming criteria were met. The determination of genre is at Sky's discretion.

An EPG slot is defined as a 'premium' slot if it commands a greater price than an 'entry-level' slot by virtue of its better position in a particular genre. A major broadcaster looking to launch a new channel into Page One of the International section will pay many times the value of an 'entry-level' slot to secure a high-profile EPG position adjacent to other high-profile popular channels where footfall is likely to be high.

The market for 'entry-level' slots is generally much more active than the market for 'premium' slots. In recent years, and across all sections, whilst there may have been in the region of 15-20 'entry-level' trades per annum, there may only have been 3 or 4 'premium' trades each year.

Prices for 'entry-level' slots on Sky are currently around £150,000 whilst 'premium' slots can command millions of pounds depending on the slot, and who is in the market for buying.

5. History of the Virgin Media EPG market

The Virgin EPG market is very much in its infancy. At time of writing there are a total of 319 channels available to the 3.5M+ Virgin households that take the service in the UK but there has never, until 2017, been a market in EPG positions.

To date, only one slot has been 'sold' or, more accurately, 'allocated' after inviting offers on the open market. Prior to that, it is understood that EPG position and/or prominence was taken into consideration by Virgin and broadcasters when negotiating carriage fees.

When the BBC decided that BBC3 should cease linear broadcasting and go online only, Virgin Media appointed EMP to undertake a valuation study to determine the value of individual EPG slots (and specifically 106). Virgin conducted a public consultation on changes to its EPG Methodology and those changes enabled the platform to offer channels a chance to make financial offers for EPG positions in a way that did not exist before.

EMP assisted Virgin Media with the process of managing the allocation of EPG slot 106 to E4. That is the only 'sale' that has taken place to date, however, Virgin Media is currently

reviewing its platform and is consulting with broadcasters, so it is possible that there may be more slots available in the future.

6. The Virgin EPG market – how it works

Unlike the Sky EPG market, and using the allocation of 106 as a precedent, the Virgin EPG Methodology broadcasters requires channel operators to agree commercial terms related to the EPG value directly with the platform owner and not between themselves.

The allocation process outlined in the Methodology asks broadcasters to commit to paying a fee, over and above their existing carriage fee, but with Virgin Media retaining ownership of the slot.

7. Evaluation Methodology

Access to audience data over time, and market knowledge of the value of historical trades form the basis of EMP's evaluation methodology. We take a twin-track approach to valuations, conducting what we describe as a top-down market intelligence and data-led approach, and then combining that with a bottom-up evaluation of the revenue benefits to broadcasters of moving EPG slots. The valuation of an EPG slot is generally found to be between those two numbers, and the average of those two methods is the benchmark that we use in generic valuations.

The market-led element is dependent on a reasonably active trading environment, and this has certainly been the case on Sky in recent years, in particular in the Entertainment Section. In the News and Kids sections there has been little or no trading activity.

In addition to using market intelligence gathered whilst conducting sales and transfers on both platforms, we try and validate our estimates using an in-house EPG evaluation model which has proved itself accurate in forecasting the size of offers made in sales. By assessing

forecast audience data likely to be generated by a channel in a particular EPG slot, this also helps us to determine the value of individual EPG slots to particular broadcasters.

The model provides this additional data to benchmark the value of different EPG slots by looking at the *incremental revenues* that a broadcaster could achieve by moving its channel up (or down) the EPG.

There are a number of elements which go to make up the model:

- The percentage average uplift in share of viewing (SOV) and share of commercial impacts (SOCI) per EPG slot moved. This is estimated via statistical analysis of historic EPG moves on Sky over the last 8- 10 years. (Clearly, this element of the methodology cannot be applied to new channels with no audience history who are looking to purchase a 'premium' slot, and in that instance, we seek to agree relevant comparators)
- The current advertising revenues of an existing channel are estimated using National Advertising Revenue (NAR) data and forecasts, SOCI data, estimations of the power ratio of a channel, (i.e. its relative ability to monetise its audience), and assumptions on sales house commissions
- Scenario analysis is carried out on potential moves of channels to higher or lower EPG slots, including any secondary channel moves that might accompany the main move (i.e. the secondary channel in the groups portfolio would move to the old slot of the channel that makes the primary move)
- Valuation of the incremental advertising revenues based on the above data over a reasonable evaluation period e.g. five years
- Estimate of the *bid margin*; in other words, what percentage of any incremental revenues that a broadcaster might achieve would they be willing to pay to secure the slot. For example, if a higher position is going to generate an extra £5M over 5 years, does the

broadcaster bid 50% of this? Or 80%? Factors to consider here include overall strategy; the broadcaster may be thinking defensively and looking to block a competitor from securing a more prominent EPG slot; there may be corporate imperatives to consider, or there may simply be a company policy on margins that all channels adhere to within a broad channel portfolio.

- Finally, the most obvious consideration for potential buyers of an EPG slot is estimating the minimum bid required to secure the slot where the sale is being conducted in an auction. This is sometimes difficult to get right. There are instances over the years where broadcasters appear to have paid significantly more than they needed (based on our model) in order to secure a slot when auctions have taken place.

8. Other contributing factors

Whilst widely acknowledged by broadcasters and platform operators alike 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 looking at the value of an EPG slot:

- The type of channel. It is generally accepted that broad appeal entertainment channels are more likely to attract 'footfall' as viewers surf up and down the EPG. Smaller niche or specialist channels, particularly those that appeal to ethnic minority groups, are less likely to see as significant an uplift in viewing figures as a result of moving to a higher EPG position.
- High profile neighbours can help increase 'footfall' to a particular area or page of the EPG, and therefore have a positive impact on the value of an adjacent EPG slot. Of course, being located next to poorly performing channels can have the reverse effect.

- Major broadcasters sometimes pay a premium to have a cluster of their own channels in a group on the EPG, believing that cross-promotion is more effective if channels are bundled together.
- A memorable channel number can be attractive to some broadcasters.
- Position on a page can have a positive impact on the price of an EPG slot, locating a channel at the top of a page is perceived to be a benefit, however, it should be noted that Sky's Q Box and Virgin's Tivo 6 box both show the bottom channel on any given page again at the top of the next page when scrolling down and this factor may be less important than it was historically.
- Supply and demand – ultimately, these are the two key determinants in establishing what an EPG slot is actually worth and we can only know that when a buyer and seller formally agree a price. This caveat applies to all theoretical valuation models.

9. Sky EPG consultation

On 9 August 2017, Sky published a consultation paper which proposed changes to its EPG.

The three main proposals that Sky put forward were:

- to find a new number range for Timeshift (+1) channels
- to find a new number range for Secondary channels
- to merge the Documentary and Entertainment sections

Sky then created a four month 'trading window' between 17 November 2017 and 16 March 2018, during which time existing broadcasters in Entertainment and Documentaries could swap and sell slots to each other.

Major broadcasters with Timeshift and Secondary channels could either 'shuffle-up' channels from their existing channel portfolio into these soon to be vacated slots or sell/lease them. However, they could only be swapped or sold to broadcasters who already had a channel in either Entertainment or Documentaries.

Thus, a 'closed market' was created, and a 'once-in-a-decade' opportunity to secure high profile EPG slots presented itself to all the larger well-established broadcasters with channels in Entertainment and Documentaries.

EMP represented the BBC in selling three sought after slots, 141, 142 and 143. All the other major broadcasters bought, swapped and sold slots over the four-month trading period and on the 26 March 2018, Sky announced a new smaller combined Entertainment and Documentary number range (101 to 199). Timeshift channels now have their own dedicated number range in the 200s and Secondary channels occupy the 800s.

The 'new look' Sky EPG went live on 1 May 2018.

10. Base Assumptions

For the purposes of this report, we have had to make some assumptions in order to try and 'normalise' the basis upon which we put a value, or value range, on the EPG slots in each of the genres.

Firstly, our estimates are based on what we believe a slot would actually achieve if it were marketed under normal trading conditions; these are not 'asking prices' but predicted 'sale prices'.

Secondly, estimates for EPG slots on Page 1 of each genre (Entertainment, News and Kids) on both Sky and Virgin are somewhat hypothetical. Most of these top slots are currently occupied either by PSB channels, or by commercial channels who are unlikely to sell. The only circumstances which might change that would be a forced sale (which, no doubt, would result in regulatory and legal challenge in most cases), or if one of the large multinational media or

technology giants came in with an offer that was too large to refuse, although perhaps the more likely scenario is that the company would just buy the broadcaster in its entirety with no clear value placed on the EPG).

We discuss the individual circumstances associated with each genre on each platform in turn below.

11. Sky Entertainment Section

The Sky Entertainment Section comprises a total of 103 channels, 99 of which are in the number range 101-199. The definition of the genre is defined by Sky in the Methodology. Channel operators have traditionally assumed that the EPG is scrolled up-and-down without a genre selection when valuing channels, although as we have stated elsewhere, there is little post-Sky-reshuffle data to enable a reassessment of this. For example, channel 125 (Discovery HD) does not appear in the Entertainment filter, despite a channel number in the entertainment genre. The valuation model assumes people are flicking up or down using 'All Channels'.

In the All Channels section, when you click up from 199, it goes into the 200s (Tomeshoft channels), then the 300s (Movies and Music), then the 400s (Sports and Overspill), then 500s (News, Specialist) then the 600s (Kids and Shopping), then the 700s (International), only now do you reach the 800s (Secondary channels) and finally the 900s (Adult and Regional variations).

The 'new look' Entertainment genre comprises 12 pages (with 8 channels per page*) and is made up of both Entertainment and Documentary channels. There are no Timeshift or Secondary channels in the Entertainment Section. **(See Appendix 1).**

This new section is now seen as prime real estate on Sky's platform and this is partly because it is already full. There now exists an 'overspill' section on the Sky EPG which isn't labelled, but which exists with the number range 450-489. Any new Entertainment channel will have two options; either to buy an 'entry-level' slot and go into the 450s or pay a premium price

and buy an existing slot (or channel) currently in the number range 101-199. EMP is of the view that the 'overspill' section will evolve into a section where 'niche' channels, (those channels whose audiences will find them wherever they are), will happily reside.

In Table 1 below, we have assigned average guideline pricing per EPG slot by page to Sky's new Entertainment Section.

TABLE 1. Sky Entertainment Section Valuation

SKY ENTERTAINMENT SECTION*			
LCN	Page No	Average Value (£M)	Total Value (£M)
101 - 108	1	22.5	180
109 - 116	2	15.5	124
117 - 124	3	10	80
125 - 132	4	8	64
133 - 141	5	5.5	44
142 - 149	6	4	32
150 - 157	7	3	24
158- 165	8	2	16
166-173	9	1.5	12
174-182	10	1.0	8
183- 192	11	0.75	6
193 - 199	12	0.5	3
Total			593

*N.B. Excludes 4 channels in the 'overspill' section of the EPG (LCNs 450 to 453)

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

12. Sky Entertainment Section Valuation - Assumptions

- Our estimates have been guided by our knowledge of the market prior to the Sky Consultation, in addition to our knowledge of trades that took place during the recent Sky 'trading window'.
- We have had to consider that the number range is now much smaller, therefore channels are likely to be more 'high profile' within Sky's most visited section of its EPG.
- We have also had to consider that most of the major broadcasters will have taken their 'once-in-a-decade' opportunity to re-organise and optimise their channel portfolios during the recent trading window.
- We have assumed that the slots currently occupied by the PSBs at the top of Page 1 are unlikely to be put up for sale in the near future. So, whilst the true value of, say, 103 to ITV versus a slot in 'overspill' might be tens of millions, (or even more than £100M if we rely on the bottom-up valuation), we haven't included this hypothetical valuation in our calculations.
- We have assumed relatively stable market conditions over the coming months, without a major multinational company aggressively entering the UK linear TV market.
- We have assumed no 'firesale' scenarios, nor multiple slots coming onto the market at the same time.
- It should also be noted that since the new Entertainment Section launched on 1 May, there have been no trades in the Entertainment genre at time of writing, although we believe that will change in the coming weeks

- Similarly, it is too early to tell how audiences will respond to the new EPG, and how that will impact on viewing figures

*N.B. for the purposes of our research, we have used the Sky+ HD set-top box EPG format as our benchmark as the Sky + HD box is still the most common set-top box in Sky households.

13. Total value of 'new' Sky Entertainment Section

When we produced a similar report in 2012, we looked at the total value of Sky's Entertainment genre and estimated it to be in the region of £465M. It should be noted that in 2012 the Entertainment genre consisted of 113 channels; there was no 'overspill' section, so slots on the last three or four pages commanded 'entry-level' prices and Lifestyle (26 channels) and Documentary (31 channels) were separate genres with separate number ranges.

If you add the values we assigned to the Lifestyle and Documentaries genres to the Entertainment genre in 2012, then you are making a more accurate comparison. That brings the value of the combined genres in 2012 to £500M, versus the £593M that we are estimating in 2018. However, that comes with the caveat that the EPG slot value of Timeshift channels and Secondary channels are now excluded from the new Sky Entertainment genre valuation.

Broadly speaking and trying to compare like with like, it is fair to conclude that there hasn't been any great dramatic shift in market prices for Sky EPG slots in 'Entertainment' over the last 6 years. Slot values are probably marginally higher than in 2012, based on recent trades. Stable pricing over this period might well be expected as there hasn't been any significant increase in Sky homes penetration over the same period either.

That all said, it is worth re-iterating that this is an artificial valuation, for all the reasons stated, but based on the data we have we estimate a total valuation of the new Sky Entertainment Section as being in the range between **£500M and £700M**.

With regards to the top slot in Entertainment, LCN 101 currently occupied by BBC1, we would estimate that the market value for this would be around £25M.

Some industry experts may argue for a higher valuation for the top ten EPG slots, but our valuation model for the top ten positions in the Sky EPG is based on the 'bottom-up' approach which takes account of the additional revenue available to channels moving up the EPG, it does not take account of the market factors that would probably come into play in such an event as we think the events are extremely unlikely, and there are so many non-EPG factors related to a purchase of (for example) ITV, Channel 4 or the BBC.

Our valuation of these slots should therefore be viewed as at the lower end of market expectations should the BBC choose to, and be entitled to sell, 101 and 102 as businesses in their own right. This methodology has proved accurate in several recent high value EPG purchases.

14. Virgin's Entertainment Genre

The Virgin Entertainment genre comprises 112 channels in the number range 101 to 244. The Tivo 6 Box displays 8 channels per page, but it duplicates the last channel of the previous page on the next page. For the purposes of our valuation, we have assumed 7 different channels per page and there are 16 pages in total. The genre currently includes Timeshift channels and Secondary channels, but Virgin is consulting with broadcasters about changing this at time of writing. **(See Appendix 2).**

TABLE 2. Virgin Entertainment Genre – Valuation

VIRGIN ENTERTAINMENT GENRE				
LCN	Page No	Average Value (£M)	Total Value (£M)	
101-107	1	18	126	
108-114	2	11	77	
115-121	3	8.5	59.5	
122-128	4	6.5	45.5	
129-135	5	5	35	
136-142	6	3	21	
143-150	7	2.5	17.5	
151-157	8	2	14	
158-164	9	1.8	12.25	
165-171	10	1.5	10.5	
172-178	11	1.25	8.75	
179-185	12	1.0	7.0	
186-194	13	0.5	3.5	
195-201	14	0.4	2.8	
202-209	15	0.25	1.75	
210-216	16	0	0	
Total			442.05	

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June

15. Virgin Entertainment Genre Valuation – Assumptions

- In order to put a value on Virgin’s Entertainment genre, we have had to assume there is, or will be, a market. To date, Virgin has successfully ‘sold’ one slot (106) in an auction.
- For the purposes of this report, we have assumed that further to the consultation with broadcasters, Virgin Media will allocate a new dedicated area for Timeshift (+1) channels, and slots that are subsequently vacated in the Entertainment genre will be made available to existing broadcasters
- We have assumed, as per Virgin’s consultation letter to broadcasters, that slots will be ‘sold’ in tranches of, perhaps, two or three at a time
- We anticipate that major broadcasters will see this as an opportunity to re-order and optimise their channel portfolios on a smaller, new and cleaner looking Entertainment genre, and have factored that in accordingly
- As with Sky, we have assumed that the slots currently occupied by the PSBs at the top of Page 1 are unlikely to be put up for sale in the near future
- Again, we have assumed there won’t be a global or multinational cash-rich company aggressively entering the UK linear TV market.
- We have assumed no ‘firesale’ scenarios, nor multiple (as in 4 or more) slots coming onto the market at the same time
- Finally, we have put a zero value on what would be the equivalent of an ‘entry-level’ slot on Sky. We have assumed that there is a small value on slots above the last page in a genre which could, theoretically, be negotiated over and above the standard terms of a 5-year carriage agreement deal.

Once again, the valuation model for the top ten positions in the Virgin EPG is based on the 'bottom-up' approach which takes account of the additional revenue available to channels moving up the EPG, it does not take account of the market factors that would probably come into play in such an event as we think the events are extremely unlikely, and there are so many non-EPG factors related to a purchase of (for example) ITV, Channel 4 or the BBC. Our valuation of these slots should therefore be viewed as at the lower end of market expectations should the BBC choose to, and be entitled to sell, 101 and 102 as businesses in their own right. This methodology has proved accurate in several recent high value EPG purchases.

16. Total Value of Virgin Entertainment Genre

Based on the assumptions above, and including Timeshift channels, our estimates suggest that Virgin's Entertainment Section might have a total valuation of £440M.

Again, we believe it would be prudent to present any valuation as a range, say **£400M to £500M**.

With regards to the top slot in Entertainment, LCN 101 currently occupied by BBC1, we would estimate that the market value for this would be around £20M.

17. Sky News Section

The Sky News section consists of 22 channels on three pages in the number range 501-539.

(See Appendix 3).

18. TABLE 3. Sky News Section Valuation

SKY NEWS SECTION			
LCN	Page No	Average Value (£M)	Total Value (£M)
501 - 508	1	1.0	8.0
509 - 516	2	0.25	2.0
518 - 522	3	0.15	0.9
Total			10.9

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

19. Sky News Section Valuation – Assumptions

- There is no history of any trades taking place in the News section on Sky in recent years, although EMP has had conversations with broadcasters who have expressed an interest in moving up from Page 3 to Page 2 or Page 1, and our estimates have been guided by these conversations
- Our methodology is difficult to apply to the News section as news channels don't necessarily sell commercial impacts in the same way as other channels; indeed, some news channels aren't BARB-rated, and some rely more on branded content and sponsorship, or other revenue sources to fund their news gathering operations
- There is a view that EPG positions are not quite so important, relatively speaking, to news channels as audiences know what news outlet they prefer and know where to find it

With regards to the top slot in News, LCN 501 currently occupied by Sky News, we estimate that the market value for this would be around £2.0M.

20. Virgin News Genre

The Virgin News genre consists 13 channels on two pages in the number range 601-625

(See Appendix 4).

21. TABLE 4. Virgin News Genre Valuation

VIRGIN NEWS GENRE			
LCN	Page No	Average Value (£M)	Total Value (£M)
601-609	1	0.75	5.3
613-625	2	0	0.0
Total			5.3

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June

22. Virgin News Genre Valuation – Assumptions

- There is no history of any trades taking place in the News section on Virgin. We have been guided by the estimates we have assigned to Sky’s News section.
- As with Sky, our methodology is difficult to apply to the News genre as news channels don’t necessarily sell commercial impacts in the same way as other channels

- Again, as with Sky, audiences know where to find the news channels they want to watch

With regards to the top slot in News, LCN 601 currently occupied by BBC News, we would estimate that the market value for this would be around £1.0M.

23. Sky Kids Section

The Sky Kids section consists of 39 channels on five pages in the number range 601-631.

The two PSB channels, CBBC and CBeebies, are on Page 2. **(See Appendix 5)**

TABLE 5. Sky Kids Section Valuation

SKY KIDS SECTION			
LCN	Page No	Average Value (£M)	Total Value (£M)
601 - 608	1	2	16.0
609 - 616	2	0.75	6.0
617 -625	3	0.25	2.0
626 - 644	4	0.15	1.2
645 - 648	5	0.15	0.6
Total			25.8

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

24. Sky Kids Section Valuation – Assumptions

- There is no history of trades taking place in recent years, although we are aware that large commercial kids broadcasters have modelled EPG values.
- We don't anticipate any slots becoming available to buy in the near future.
- We have assigned values to slots based on modelling one or two channels moving up from Page 3.
- We are of the view that kids know what they want to watch and where to find it.

With regards to the top slot in Kids, LCN 601 currently occupied by Cartoon Network, we would estimate that the market value for this would be around £2.5M.

25. Virgin Kids Section

- The Virgin Kids Genre consists of 26 channels on four pages in the number range 700-739.
- The two PSB channels, CBBC and CBeebies, occupy slots 701 and 702 on Page 1.
(See Appendix 6).

TABLE 6. Virgin Kids Section Valuation

VIRGIN KIDS GENRE			
LCN	Page No	Average Value (£M)	Total Value (£M)
700-706	1	1.5	10.5
707-714	2	0.75	5.25
715-730	3	0.25	1.75
731-737	4	0	0
Total			17.5

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June

26. Virgin Kids Valuation – Assumptions

- As with Sky, there is no history of trades taking place in recent years.
- We don't anticipate any slots becoming available in the near future.
- We have been guided by the estimates we have assigned to Sky's Kids section.
- Again, we are of the view that kids in Virgin households know what they want to watch and where to find it

With regards to the top slot in Kids, LCN 701 currently occupied by CBBC, we would estimate that the market value for this would be around £1.75M.

Freeview and Freesat

There is no market for EPG slots on Freeview or Freesat. You are allocated an LCN at the bottom of the relevant genre at launch and if slots become available above your slot over time, you are moved up in line with their respective Methodologies.

There have been a small number of trades that have taken place in order to secure better LCNs on the Freeview platform, but these are complex and require corporate transactions as the EPG slot is not in itself tradeable.

DISCLAIMER: This report and the valuations contained therein are for information purposes only. Under no circumstances will EMP, or any person representing EMP, be liable to any third party using this valuation for any loss of damage of any nature whatsoever and howsoever arising (including due to our negligence) out of or in connection with this valuation, whether due to inaccuracy, error, omission or any other cause and whether on the part of EMP or its advisors and consultants.

Appendices

Appendix 1.

SKY ENTERTAINMENT SECTION			
Page No	LCN	Channel	Broadcaster
1	101	BBC One London	BBC
1	102	BBC Two HD	BBC
1	103	ITV HD	ITV
1	104	C4 HD	CHANNEL 4
1	105	C5	VIACOM
1	106	Sky 1	SKY
1	107	Sky Living	SKY
1	108	Sky Atlantic	SKY
2	109	W	UKTV
2	110	Gold	UKTV
2	111	Dave	UKTV
2	112	Comedy Central	VIACOM
2	113	Universal	NBCU
2	114	Syfy	NBCU
2	115	BBC 1 HD	BBC
2	116	BBC 4	BBC
3	117	Local TV	VARIOUS
3	118	ITV 2	ITV
3	119	ITV 3	ITV
3	120	ITV 4	ITV
3	121	Sky Sports Mix	SKY
3	122	Sky Arts	SKY
3	123	Sky 2	SKY
3	124	Fox	FOX
4	125	Discovery	DISCOVERY
4	126	MTV	VIACOM
4	127	Comedy Xtra	VIACOM
4	128	5 Star	VIACOM
4	129	Nat Geo	FOX
4	130	History	AETN
4	131	ITVBe	ITV
4	132	alibi	UKTV
5	133	Good Food	UKTV
5	134	S4C	CHANNEL 4

SKY ENT CONT'D			
5	135	E4	CHANNEL 4
5	136	More4	CHANNEL 4
5	137	4 Seven	CHANNEL 4
5	139	4 Music	CHANNEL 4
5	140	TLC	DISCOVERY
5	141	5USA	VIACOM
6	142	Really	UKTV ROI
6	143	Drama	UKTV
6	144	QUEST	DISCOVERY
6	145	Challenge	SKY
6	146	CBS Reality	AMC
6	147	CBS Drama	AMC
6	148	CBS Action	AMC
6	149	Quest Red	DISCOVERY
7	150	5 Spike	VIACOM
7	151	E!	NBCU
7	152	Pick	SKY
7	153	5 Select	VIACOM
7	154	ID	DISCOVERY
7	155	Yesterday	UKTV ROI
7	156	Crime + Inv	AETN
7	157	Sony Crime	SONY
8	158	Home	UKTV
8	159	Together	MEDIA TRUST
8	160	PBS America	PBS
8	161	Disc Turbo	DISCOVERY
8	162	Animal Planet	DISCOVERY
8	163	H2	AETN
8	164	Lifetime	AETN
8	165	Nat Geo Wild	FOX
9	166	Eden	UKTV
9	167	Disc Science	DISCOVERY
9	168	Yourtv	FOX
9	169	BBC Alba	BBC
9	170	Real Lives	SKY
9	171	Disc History	DISCOVERY
9	172	Discovery Shed	DISCOVERY
9	173	BET: BlackEntTV	VIACOM
10	174	VH1	VIACOM

SKY ENT CONT'D			
10	175	BEN	JADER GROUP
10	177	Home & Health	DISCOVERY
10	178	DMAX	DISCOVERY
10	179	True Ent	SONY
10	180	tru tv	TURNER
10	181	Sony Crime 2	SONY
10	182	GNTV	GNTV
11	183	Viceland	VICE
11	184	Horse & Country	H&C TV LTD
11	185	Propeller	CIBN
11	186	AMC from BT	AMC
11	187	Blaze	AETN
11	189	Property Show	PROPERTY TV
11	191	mytv	RECORD MEDIA GP
11	192	Showcase	INFORMATION TV
12	193	Vox Africa	VOX AFRICA
12	194	AIT Int'l	DAAR COMMUNICATIONS
12	195	ABN	ABN Ltd
12	197	Food Network	SCRIPPS
12	198	Travel Channel	SCRIPPS
12	199	Holiday+Cruise	JAN MEDIA LTD
OVERSPILL SECTION			
1	450	Forces TV	SSV
1	451	Insight TV	TERN
1	452	FAME TV	OHTV
1	453	YANGA!	AFRICA MEDIAWORKS

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

Appendix 2.

VIRGIN ENTERTAINMENT GENRE			
Page No	LCN	Channel	Broadcaster
1	101	BBC One	BBC
1	102	BBC Two	BBC
1	103	ITV	ITV
1	104	Channel 4	C4
1	105	Channel 5	VIACOM/C5
1	106	E4	C4
1	107	BBC Four	BBC
2	108	BBC One HD	BBC
2	109	Sky One HD	SKY
2	110	Sky One	SKY
2	111	Sky Living HD	SKY
2	112	Sky Living	SKY
2	113	ITV HD	ITB
2	114	ITV+1	ITV
3	115	ITV2	ITV
3	116	ITV2+1	ITV
3	117	ITV3	ITV
3	118	ITV4	ITV
3	119	ITVBe	ITV
3	120	ITVBe+1	SKY
3	121	Sky Two	SKY
4	122	Sky Arts	SKY
4	123	Pick	SKY
4	124	Gold	UKTV
4	125	W	UKTV
4	126	alibi	UKTV
4	127	Dave	UKTV
4	128	Drama	UKTV
5	129	Really	UKTV ROI
5	130	alibi+1	UKTV
5	131	W+1	UKTV
5	132	Comedy Central	VIACOM
5	133	Comedy Central+1	VIACOM
5	134	MTV	VIACOM
5	135	SYFY	NBCU
6	136	SYFY+1	NBCU
6	137	Universal	NBCU
6	138	Universal+1	NBCU

VIRGIN ENT CONT'D			
6	139	Challenge	SKY
6	140	Sky Living+1	SKY
6	141	Channel 4 HD	C4
6	142	Channel 4+1	C4
7	143	4Seven	C4
7	145	E4 HD	C4
7	146	E4+1	C4
7	147	More4	C4
7	148	CBS Reality	AMC
7	149	Horror Channel	AMC
7	150	Channel 5 HD	VIACOM/C5
8	151	5 STAR	VIACOM
8	152	5Select	VIACOM
8	153	5 USA	VIACOM
8	154	5 SPIKE	VIACOM
8	155	Channel 5+1	VIACOM
8	156	E!	NBCU
8	157	FOX	FOX
9	158	FOX+1	FOX
9	159	Regional Channels	
9	160	Real Lives	SKY
9	161	BBC Alba	BBC
9	162	BBC Two HD	BBC
9	163	BBC Four HD	BBC
9	164	Universal HD	NBCU
10	165	SYFY HD	NBCU
10	166	S4C	C4
10	167	TLC	DISCOVERY
10	168	TLC HD	DISCOVERY
10	169	TLC+1	DISCOVERY
10	170	Investigation Discovery	DISCOVERY
10	171	Investigation Discovery+1	DISCOVERY
11	172	Quest	DISCOVERY
11	173	Quest+1	DISCOVERY
11	174	ITV3+1	ITV
11	175	ITV4+1	ITV
11	176	ITV2 HD	ITV
11	177	ITV3 HD	ITV
11	178	ITV4 HD	ITV
12	179	ITVBe HD	ITV
12	180	Challenge +1	SKY

VIRGIN ENT CONT'D			
12	181	Comedy Central HD	VIACOM
12	182	Comedy Central Extra	VIACOM
12	183	MTV HD	VIACOM
12	184	BET	VIACOM
12	185	5 USA+1	VIACOM
13	186	5 STAR+1	VIACOM
13	189	True Entertainment	SONY
13	190	Gold+1	UKTV
13	191	W HD	UKTV
13	192	CBS Action	AMC
13	193	Sony Crime Channel	SONY
13	194	Dave HD	UKTV
14	195	More4 HD	C4
14	196	More4+1	C4
14	197	CBS Drama	AMC
14	198	YouTube	Youtube
14	199	FOX HD	FOX
14	200	alibi HD	UKTV
14	201	CBS Reality+1	AMC
15	202	Horror Channel+1	AMC
15	203	4Seven HD	C4
15	204	Netflix	NETFLIX
15	206	Sky Arts HD	SKY
15	207	Real Lives+1	SKY
15	208	Lifetime	AETN
15	209	Lifetime HD	AETN
16	210	hayu	HAYU
16	211	Dave ja vu	UKTV
16	212	truTV	TURNER
16	213	DMAX	DISCOVERY
16	214	DMAX+1	DISCOVERY
16	215	Quest Red	DISCOVERY
16	216	Blaze	AETN

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June

Appendix 3.

SKY NEWS SECTION			
Page No	LCN	Channel	Broadcaster
1	501	Sky News HD	SKY
1	502	Bloomberg HD	BLOOMBERG
1	503	BBC News HD	BBC
1	504	BBC Parliament	BBC
1	505	CNBC	NBC
1	506	CNN	TURNER
1	507	NHK World HD	JAPAN BROADCASTING CORPORATION
1	508	Euronews	DISCOVERY
2	509	CGTN	CHINA CENTRAL TELEVISION
2	510	NDTV 24x7	NEW DELHI TELEVISION LIMITED
2	511	RT HD	RUSSIA TODAY
2	512	FRANCE 24 Eng	FRANCE 24
2	513	Al Jazeera Eng	AL JAZEERA MEDIA NETWORK
2	514	CNC World	CNC
2	515	TVC News	CONTINENTAL BROADCASTING SERVICE NIGERIA
2	516	TRT World	TRT
3	517	Oireachtas TV	OIREACHTAS COMMISSION
3	518	Channels 24	CHANNELS TELEVISION
3	519	Times Now	TIMES GROUP
3	520	News 18	CNN
3	521	RTE News Now	RTE
3	522	Arirang TV HD	KOREA INT'L BROADCASTING FOUNDATION

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

Appendix 4.

VIRGIN NEWS GENRE			
Page No	LCN	Channel	Broadcaster
1	601	BBC News	BBC
1	602	Sky News	SKY
1	603	Sky News HD	SKY
1	604	BBC News HD	BBC
1	605	BBC Parliament	BBC
1	607	CNN	TURNER
1	609	Bloomberg	BLOOMBERG
2	613	CNBC	CNBC INTERNATIONAL
2	620	Euronews	EURONEWS
2	621	NDTV 24X4	NEW DELHI TELEVISION LIMITED
2	622	Al Jazeera English	AL JAZEERA MEDIA NETWORK
2	624	France 24 English	FRANCE 24
2	625	NHK World HD	JAPAN BROADCASTING CORPORATION

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June 2018

Appendix 5.

SKY KIDS SECTION			
Page No	LCN	Channel	Broadcaster
1	601	Cartoon Net HD	TURNER
1	602	CN +1	TURNER
1	603	Boomerang HD	TURNER
1	604	Nickelodeon HD	VIACOM
1	605	Nickelodeon +1	VIACOM
1	606	Nicktoons	VIACOM
1	607	Disney Junior HD	DISNEY
1	608	Disney Junior +1	DISNEY
2	609	Disney Chnl HD	DISNEY
2	610	Disney Chnl +1	DISNEY
2	611	Disney XD	DISNEY
2	612	Disney XD +1	DISNEY
2	613	CBBC HD	BBC

SKY KIDS SECTION CONT'D			
2	614	Cbeebies HD	BBC
2	615	Nick Jr HD	VIACOM
2	616	POP	SONY
3	617	Tiny Pop	SONY
3	618	Boomerang +1	TURNER
3	619	Cartoonito	TURNER
3	620	Nick Jr Too	VIACOM
3	621	CITV	ITV
3	622	BabyTV	FOX
3	623	RTEJr (ROI)	RTE
3	624	Tiny Pop +1	SONY
3	625	POP+1	SONY
4	626	POP Max	SONY
4	627	POP Max +1	SONY
4	628	Nick Jr +1	VIACOM
4	640	Cartoon Net HD	TURNER
4	641	Boomerang HD	TURNER
4	642	Nickelodeon HD	VIACOM
4	643	Disney Jnr HD	DISNEY
4	644	Disney Chnl HD	DISNEY
5	645	Disney XD HD	DISNEY
5	646	CBBC HD	BBC
5	647	Cbeebies HD	BBC
5	648	Nick Jr HD	VIACOM

Source: Sky box EPG Listing and May 1st Sky EPG line-up document

Source date: 5 June 2018

Appendix 6.

VIRGIN KIDS GENRE			
Page No	Channel No	Channel	Broadcaster
1	700	Virgin TV Kids	Virgin
1	701	CBBC	BBC
1	702	Cbeebies	BBC
1	703	Baby TV	FOX
1	704	Cartoon Network	TURNER
1	705	Cartoon Network+1	TURNER
1	706	Cartoonito	TURNER
2	707	Disney XD	DISNEY
2	708	Disney XD+1	DISNEY
2	710	CBBC HD	BBC
2	711	Cbeebies HD	BBC
2	712	Nickelodeon	VIACOM
2	713	Nick+1	VIACOM
2	714	Nick HD	VIACOM
3	715	Nick jr	VIACOM
3	716	Nick Jr Too	VIACOM
3	717	Nicktoons	VIACOM
3	724	Disney Channel	DISNEY
3	725	Disney Channel+1	DISNEY
3	727	Disney Junior	DISNEY
3	730	Boomerang	TURNER
3	731	Boomerang+1	TURNER
4	732	Cartoon Network HD	TURNER
4	734	CITV	ITV
4	736	POP	SONY
4	737	Tiny Pop	SONY

Source: PDF Virgin Channel Guide May 2018

Source date: 5 June 2018