

Agenda

Advancing economics in business

Unscripted drama: vertical issues raised in European pay-TV mergers

A number of European mergers in the telecoms sector, including *Liberty Global/Corelio/W&W/De Vijver Media* and *Liberty Global/Discovery/All3Media*, have led to the convergence of traditional pay-TV and Internet service providers with TV channel providers and content producers. What vertical competition issues have these transactions raised with respect to the creation and distribution of content by production houses and channel providers?

Consider the stylised value chain for pay-TV broadcasting shown in the box overleaf. Channel providers aggregate individual audio-visual works into programming bundles for linear TV broadcast, earning revenues from advertising, subscription fees, and—depending on the contract—carriage fees paid by pay-TV retailers.¹ The types of channels produced varies, but competition authorities often draw a distinction between:

- **premium-pay channels:** these typically carry the highest-quality content—such as blockbuster movies, hit series and premium sports—with fewer commercial breaks. The primary revenue source for these channels is usually an additional subscription fee paid by consumers, with a more limited amount coming from advertising; and
- **basic-pay/free-to-air (FTA) channels:** these carry content such as general entertainment, news or minor sports, and are included as part of a basic pay-TV subscription, or offered free of charge over open-access platforms. These channels generally rely on a combination of advertising and carriage fees for their revenues, with the different business models of the broadcasters determining the ratio between these. Alternatively, in the case of public service broadcasters (PSBs) such as the BBC, revenues can be obtained from licence fees in return for public service obligations (typically including a universal service remit and certain cultural/social programming requirements).

Pay-TV platforms are critical distributors for channel providers. In order to attract advertisers, basic-pay/FTA channels require a large reach across TV viewers. Similarly, to maximise revenues from subscription fees, premium channels must be widely accessible. At the same time, pay-TV platforms rely on carrying a wide selection of

channels to make their offerings attractive to subscribers—and may even vie for exclusivity over the most popular channels and content.

However, some channel providers (especially basic-pay/FTA) also choose to make themselves available via competing OTT platforms, either using their own web-based services (such as ITV Player) or via existing/emerging OTT providers (such as Stieve or FilmOn). Although this parallel distribution strategy by channel providers often means that their paid-for content is also available for free online, the additional reach that this generates can mean that the channel is more socially prominent, more viewed, and thus more valued by advertisers.

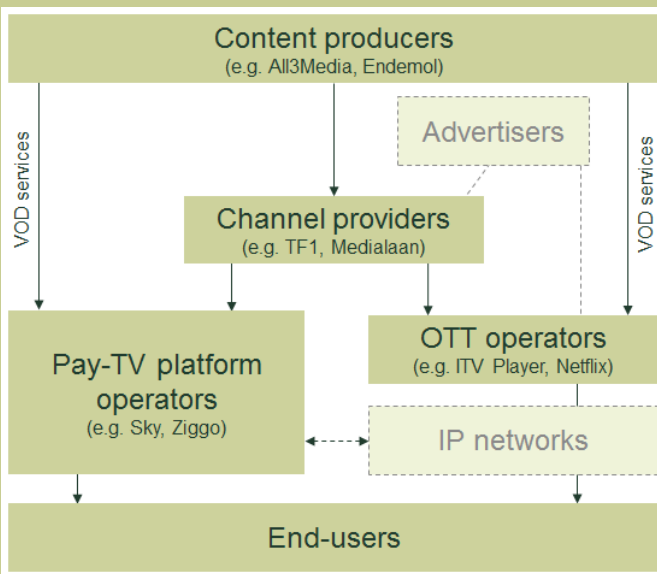
Economic assessment of vertical concerns

In its non-horizontal merger guidelines (NHMGs),² the European Commission outlines two forms of foreclosure that could result from vertical integration—i.e. the merger of two or more entities operating at different levels of the supply chain:

- input foreclosure, in which the merged entity can raise the costs or reduce the quality of rivals' downstream offerings by restricting access to important upstream inputs;
- customer foreclosure, in which the merged entity can deny upstream rivals access to a sufficient consumer base.

Separately, the NHMGs also raise the possibility that the merged entity could gain access to commercially sensitive information from its upstream/downstream rivals, by virtue of having become a buyer/supplier to those rivals. This

Stylised broadcasting value chain



Source: Oxera.

At the top of the value chain sit the content producers, creating new works to be supplied to channel providers, or directly to pay-TV and over-the-top (OTT) operators for inclusion in their video-on-demand (VOD) offers.¹

Next are the channels, pay-TV platforms and OTT operators that are seeking TV content for distribution. Original (un-aired) content can be obtained through in-house 'captive' production, or external commissioning.² Alternatively, content distributors can opt to acquire licences to older, pre-aired 'library' content, or sporting and entertainment events.

As well as licensing linear TV channels, both pay-TV platforms and OTT providers often acquire individual content directly from content producers for use in their VOD services. VOD services can operate on an 'all-you-can-eat' subscription basis (SVOD), as in the case of Netflix and Amazon Prime, or a 'pay-as-you-go' transactional basis (TVOD), as in the case of Blinkbox and iTunes. Historically, a large proportion of SVOD content has been lower-value, old and pre-aired content, while the most recent content has been available only on TVOD services (generally before its release on pay-TV). However, with changing consumer habits and the growing strength of some OTT providers, new content is being offered sooner (or even first) on SVOD—making this an increasing threat to traditional linear pay-TV.

Finally, while pay-TV platform operators (such as Sky, Ziggo and Numericable) have direct access to the end-users subscribing to their services, OTT operators must rely on a third-party IP network to connect with their subscribers. In many cases—particularly with respect to cable TV providers—this IP network is controlled by (one of) the competing retail pay-TV platforms.

Note: ¹ OTT refers to services providing end-users with content over the Internet rather than by traditional means. Other examples of OTT operators are BBC iPlayer, iTunes, Spotify, TuneIn Radio and Stieve. VOD refers to the 'what you want, when you want' offers from both traditional pay-TV operators and OTT providers. Unlike linear broadcasts, VOD programmes are not shown according to a set schedule, but are offered as a library of content that the viewer can pick from, start and pause at their own convenience. ² Additionally, if the channel/distributor already owns the licence to a format or event (e.g. sports or concerts), a 'production-for-hire' company might create the content on its behalf. This is distinct from commissioning in that it is the commissioning party—not the producer—that owns the format/event rights.

might offer the merged party an unfair advantage, as it can pre-empt competitive actions and innovations.

In recent merger assessments concerning the consolidation of pay-TV platforms and channel or content providers, the Commission has raised concerns around these vertical effects. In particular, this has included the risk of input foreclosure by the merged entity by:

- denying access to, or raising the cost of licensing, important TV channels and/or content for rival pay-TV or OTT operators;
- denying rival pay-TV or OTT operators access to advertising space on key TV channels.

It has included the risk of customer foreclosure by:

- denying, or raising the cost of, access to the pay-TV platform for rival TV channels;
- denying, or degrading, access to the pay-TV operator's IP network access for rival OTT operators.

It has also included the possibility of commercially sensitive information being shared by:

- passing details of rival channels' upcoming programming and service innovations from the pay-TV platform to the vertically integrated, upstream channel provider.

The principles of assessing foreclosure issues are discussed below, based on a consideration of the factors that determine the likelihood of each of these theories being realised.

Ability, incentive and effect

For any foreclosure theory, the Commission will consider both the ability and the incentive of the merged entity to undertake the foreclosure, as well as the likely effect of the foreclosure on end-consumers.

The ability of the merged entity to undertake a foreclosure is contingent on the market power of that firm in one or both of the relevant upstream and downstream markets. A first indicator of market power might be the market share of the

merged entity in each of the markets. The NHMGs indicate that, if the merged entity has a share of 30% or less in each market, foreclosure issues are unlikely to arise.

The incentive for the merged entity to engage in foreclosure depends on the expected gains from such a strategy. These can be assessed quantitatively using a *margins analysis*, which would compare the expected total earnings (wholesale plus retail) after foreclosing rivals with total earnings under the no-foreclosure counterfactual. However, it is also important to factor in a number of more qualitative elements, such as the specifics of the merged entity's offerings (e.g. local language content), its overall business strategy, and likely market developments.

Ideally, a margins analysis would incorporate an estimated downstream demand response as a result of the foreclosure (e.g. increased demand in the case of input foreclosure, or reduced demand following customer foreclosure). However, this would require quantified demand elasticities with respect to the provision of specific channels. While it is possible that, in some cases, a suitable estimate might be obtained from market research or the academic literature, or might be calculated from the available data, in many instances a reliable demand elasticity will not be available. In such cases, the margins analysis can be used to calculate the critical threshold for the level of subscriber switching that is required to make the foreclosure strategy profitable. However, it remains a subjective judgement as to whether this threshold could be expected to be reached.

Finally, where the Commission finds both an ability and an incentive to foreclose, it will consider whether this is likely to have any *effect* on end-consumers. For both input and customer foreclosure, the impact of an effective strategy is likely to be consumer harm through reduced choice and/or increased prices.

Input foreclosure concerns

The Commission has considered the risk of both complete input foreclosure—an outright refusal to supply the downstream rival; and partial foreclosure—supplying the input, but at a higher price so as to disadvantage that rival.

Foreclosure of access to channels/content from pay-TV and OTT operators

After a transaction, the merged parties might decide to restrict the access of competing pay-TV or OTT operators to key channels and/or content, with the objective of driving subscribers to the parties' own pay-TV platform through exclusive, or better-value, content offers. The effectiveness of this strategy depends on a number of factors, including:

- the desirability of the content: highly viewed content that drives pay-TV uptake (such as premium sports or movie content) is more likely to be subject to a foreclosure strategy than general entertainment offerings;

- the reach of the retail pay-TV platform: if some proportion of the rival's subscribers are *unable* to switch to the vertically integrated platform—even if they wish to—the potential gains from the strategy will be muted. The incentive for the merged parties to undertake such a strategy depends on the relative upstream losses from forgone wholesale revenues and reduced advertising revenues (as the channel's reach declines). These are weighed against the expected gains from increased downstream retail revenues, as customers of rival platforms/OTT providers switch to the merged parties in order to continue accessing the restricted content.

To fully capture the expected retail gains, the analysis should include all retail revenues expected as a result of the foreclosure strategy. This might include a reasonable expectation of other service uptake (e.g. calls, broadband) that results from subscribers switching, alongside pay-TV revenues. Table 1 below contains an example margins analysis for input foreclosure.

Foreclosure of advertising space from pay-TV and OTT operators

Another important input bought by pay-TV platforms and OTT operators is advertising space, which is used to

Table 1 Hypothetical margins analysis for input foreclosure

	Amount per month (£)
A Revenues from wholesale supply of channels to rival platforms	1m
B Avoidable costs ¹ of wholesale channel supply to rival platforms	250k
C Wholesale margin A - B	750k
D ARPU ² for retail pay-TV services	20
E Variable cost ³ of providing retail pay-TV services	7
F Retail pay-TV margin per subscriber D - E	13
G ARPU for additional retail services (phone, broadband, etc.)	15
H Variable cost of providing additional retail services	7
I Additional retail services margin per subscriber G - H	8
J Total retail margin per subscriber F + I	21
K Critical threshold of additional subscribers to break-even C ÷ J	35.7k

Note: ¹ Avoidable costs include all additional costs that are incurred in supplying the channel on a wholesale basis to rival platforms, but exclude any costs that would be incurred anyway for the captive use of the channel (e.g. content production costs). ² ARPU (average revenue per user): total retail pay-TV revenues divided by total user base. This measure evens out price fluctuations due to promotions, package mix, etc. ³ Variable cost includes all additional costs for providing one additional pay-TV subscriber (e.g. net installation cost, net set-top-box cost).

Source: Oxera.

promote service offerings to potential subscribers. If the merged parties have control of a strategically important advertising channel, they might be able to restrict rivals' ability to reach the most relevant potential customers.

The effectiveness of this foreclosure depends on factors such as the importance of advertising to the rival operators' business, and the significance of the merged parties' channel as an advertising medium. Numerous alternative advertising mediums are likely to be available to operators. However, if the parties' channel is particularly effective, or reaches a particular consumer segment, it may be difficult to replace with other forms of advertising.

Customer foreclosure concerns

The Commission has also considered the risk of both complete and partial customer foreclosure strategies.

As well as foreclosing downstream rivals by restricting the supply of upstream inputs, the merged parties might have the ability and incentive to foreclose upstream rivals by restricting their access to end-customers.

Foreclosure of platform access from rival channels

Channel providers rely on pay-TV platforms as an important means of distributing their content. For premium content producers, this provides access to a large potential subscriber base, while for basic pay-TV and FTA channels, a wide viewership increases the scope for advertising revenues.

By restricting rival channels' access to its pay-TV platform, the merged entity stands to gain from an increased viewership of its own channel(s), resulting in either increased subscription fees, in the case of a premium-pay channel; or increased advertising revenues, in the case of a basic-pay/FTA channel. However, this gain is likely to be offset (at least in part) by a loss of subscribers due to the reduced channel offering.

While a complete foreclosure would mean denying rival channels *any* access to the merged parties' pay-TV platform, a partial foreclosure could mean a worsening of terms for carriage (such as lower electronic programme guide, EPG,³ positions, or reduced carriage fee payments to the channel). This might harm consumers through worsened access to the rivals' offerings (e.g. if they become difficult to find), or through reduced quality and competition as the rivals' revenues fall.

Foreclosure of IP network access from OTT operators

Similarly, if the merged parties provide a large proportion of their subscribers with broadband services as well as pay-TV, they might have the ability and incentive to

restrict the activity of OTT operators on their IP network. In principle, by blocking or degrading the OTT data transmission, the merged parties could benefit from an increased uptake of their own retail pay-TV services.

However, as well as facing technical challenges in blocking OTTs, network operators face a reputational risk in undertaking this strategy. Demand for broadband services can be thought of as a derived demand. Broadband has no utility to consumers in its own right, but rather provides access to a large number of online services that consumers value—including OTT services. By limiting the provision of certain services, the network operator is degrading the value of the Internet service to its subscribers.

Information-sharing concerns

Aside from foreclosure concerns, the Commission has considered whether the merged parties' upstream entities could gain unfair access to rivals' commercially sensitive information as a result of the vertical integration.

To be included in a platform operator's pay-TV portfolio, channel providers must supply in advance a range of information about their programming schedule. This information—including a detailed description, target audience profile, expected 'value add' to the operator's offerings, and EPG data—is required by the platform operator in order to:

- prepare compelling bundles of varied and complementary channels for its retail subscribers;
- ensure that the technical needs of the channel operator (such as 'red-button' features) are met;
- present accurate information on the EPG.

While there is no concern about sharing such information with a distribution partner, this detailed overview of future scheduling would be considered commercially sensitive with respect to a competing channel provider.

Channel providers compete for viewership and, ultimately, for advertising/subscription revenues. They can do this through innovations in:

- content (e.g. new formats, or high-profile drama);
- viewer services (e.g. second-screen content, or red-button features); and/or
- advertising services (e.g. more targeted advertising).

This may mean enhancing an existing channel offering, or introducing a completely new channel. By sharing the advance information provided, the merged parties' downstream platform operator could confer an advantage on its own upstream channel provider by helping it to pre-empt the competitive innovation.

However, the potential gains to the merged parties from sharing this advance information are likely to be small, given the time required to develop and launch a channel innovation compared with the advanced notice period. Any gains achieved could also be offset by the diminished trust between the platform operator and its third-party channel providers. This could result in those channel providers favouring alternative operators for the introduction of new channels and services—thus worsening the merged parties' retail offering.

Concluding remarks

There has been a persistent trend over recent years towards consumers purchasing telecoms and media services in bundles. With triple-play and quad-play offerings combining fixed-line telephone, Internet, pay-TV and even mobile services, providers must look for new ways to differentiate themselves. One way to do this could

be by offering exclusive, high-quality content such as premium movies, drama series or sports.

With growing competition for the best content, this could spark a further wave of consolidation between pay-TV platforms and their channel/content suppliers. This article has examined some of the competition concerns that this might raise with the European Commission, but further questions are arising as the unregulated content market converges with the regulated broadband and telecoms markets. How should content be treated if it becomes a new source of market power for platform operators? Can vertically integrated network operators use their position to disadvantage competing content providers to the detriment of consumers? Or will competition between large, vertically integrated firms to offer users the best range of communication and entertainment services be sufficient to ensure a well-balanced market outcome without the need for regulation?

Oxera advised Liberty Global in the course of these and other merger filings before the European Commission. All details used in this article are taken from the public Decisions. See European Commission (2014), 'Mergers: Commission clears acquisition of Dutch cable TV operator Ziggo by Liberty Global, subject to conditions', press release, 10 October; and European Commission (2015), 'Mergers: Commission clears Liberty Global's acquisition of controlling stake in De Vijver Media, subject to commitments', press release, 24 February.

¹ Carriage fees refer to payments flowing between channel operators and platform operators. Typically, they are payments by the platform operators to carry the channel, although in some cases the channel may pay the operator for carriage.

² European Commission (2008), 'Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings', OJ 2008/C 265/07, 18 October.

³ The on-screen listing of channel schedules provided by pay-TV platforms.