

Appendix M: Potential interventions in digital advertising

Introduction

1. This appendix sets out possible interventions, over and above a code of conduct, to address competition issues in the digital advertising market. We consider first potential separation interventions and then interventions to improve transparency.
2. We have provided questions for consultation at the end of the appendix and we encourage interested stakeholders to provide views on the potential interventions we have identified.
3. We start this appendix by summarising the relevant concerns as expressed in Chapter 6 regarding digital advertising, which we have taken into consideration in identifying these potential interventions.

Summary of concerns

Concerns in the search and display advertising market

4. As set out in Chapter 5, our initial view is that Google and Facebook's market power in the sale of their own advertising inventory could lead to worse outcomes for advertisers in search and display advertising respectively, ultimately leading to worse outcomes for consumers. The main sources of this market power appear to come from barriers to entry and expansion in search and social media. However, these barriers are also exacerbated by features of the advertising market, including lack of transparency and the data advantages of the large platforms.

Concerns in intermediation within the open display advertising market

5. In the open display market, we noted Google's strong position stemming from its access to advertising inventory and user data, combined with its strong positions in the ad tech chain. This leads to potential concerns about:
 - conflicts of interest between Google's role on the buy and sell sides of the open display market;
 - Google's ability to exploit a lack of transparency in costs and fees in advertising intermediation to increase returns; and

- the potential for Google to leverage its market power from its owned and operated advertising inventory into the open display market and to foreclose potential competitors in advertising intermediation.
6. We also noted specific concerns from publishers about a lack of transparency over fees in the open display market. This may limit the extent of competition between SSPs, reduce the competitive pressure faced by DSPs, and lead to publishers earning lower overall revenues from selling their advertising inventory.

Concerns common across digital advertising markets

7. We identified a series of broader issues relating to a lack of transparency and the data advantages of the large platforms which could limit competition in digital advertising:
- the large platforms' processes for auctioning inventory are not transparent and there is limited ability to independently verify the effectiveness of advertising because of lack of access to data; and
 - the data advantages of the large platforms in targeting advertising means they can monetise their content much more effectively than other platforms/publishers, increasing their market power.

Separation interventions

8. In this section we first provide an overview of the nature of separation interventions and what they are typically designed to achieve. Secondly, we set out the views of stakeholders on this topic, given in response to our statement of scope consultation. Finally, we set out some options for separation which could improve competition across digital advertising markets.

Overview

9. One of the more intrusive remedies available to competition authorities and regulators is to require integrated firms to separate their businesses to address competition problems that arise from operating in multiple markets. The idea of 'breaking up' the large tech firms has been highlighted in some submissions to us as a way to limit the effects of market power across the markets in which they operate.
10. The benefit of separation remedies is that they provide for the possibility of solving problems at source, reducing the need for ongoing and costly

regulatory controls. However, these interventions could change the nature of competition in fundamental ways, and close attention would need to be paid to the potential costs and unintended consequences of such measures.

11. Separation, and particularly ownership separation, has the potential to deliver significant benefits in markets where one large player is able to affect the proper working of competition, in some cases across a number of markets. In digital markets, we would expect to see frequent innovation, often driven by dynamic competition. Separation is most effective where it can be used to re-establish a more effective competitive process, which can bring new products to consumers and lower prices to businesses.
12. Separation can, however, result in significant costs. There are normally costs directly incurred as a result of separation, which may be passed onto customers, from the separation process itself and the establishment of independent businesses. Some forms of separation can also require a costly ongoing process of monitoring and reporting to assess its effectiveness. There are also risks that separation remedies may not work as intended – although separation may be expected to increase the intensity of competition, the consequences for market dynamics can be hard to predict. Separation remedies do not offer as much ongoing regulatory flexibility in tackling problems as and when they arise as would be the case with less intrusive interventions such as a code of conduct.
13. Separation remedies come in a number of forms. The main forms of separation remedies in increasing order of intrusiveness are:
 - Remedies which mandate access to some or all the services in which a firm is dominant on fair and reasonable terms. Access remedies almost always need to be accompanied by monitoring mechanisms including accounting separation. This latter measure requires the firm to separate relevant businesses on a virtual basis through keeping separate books for each business ('access remedies').
 - Operational separation remedies, where the affected businesses within the firm operate separately from each other but are still owned by and remain under the overarching control of the same firm ('operational separation').
 - Structural separation remedies where, whilst the firm still continues to own the affected businesses, additional steps are in place to strengthen the independent control of each business ('structural separation').
 - Ownership separation.

14. We set out a fuller description of these forms of separation in the annex to this appendix.

Comments from stakeholders on separation interventions

15. We summarise below a selection of calls by stakeholders for consideration of separation-style interventions, including mandating access, made in response to our statement of scope. Whilst many of these calls made specific calls for the separation of (some part of) Google's intermediation business, some were articulated at a high-level and did not specifically refer to intermediation.
16. Arete Research, an independent equity research house, noted that Google aggregated advertiser spend and had the option to direct that spending to its own publisher websites and apps or to independent publisher websites and apps. One solution, Arete suggested, would be not to allow Google to sell advertising on behalf of independent publishers serving the UK market whilst continuing to sell its own ad inventory served to UK users. Such a measure would, Arete suggested, open the market to others selling ads for independent publishers and restrict Google's access to data on users beyond its own sites.¹
17. The European Publishers Council (EPC) told us that following Google's acquisition of DoubleClick in 2007, Google had used the ad server business acquired from DoubleClick to favour its own SSP business, thereby depriving rival firms from the opportunity to earn revenue. The EPC submitted that Google's ad tech stack was rife with conflicts of interests, as the same entity (Google) both organises auctions and participates in such auctions. It urged us to implement structural remedies, eg breaking up Google's ad tech stack.²
18. Damien Geradin, professor of competition law & economics at Tilburg university, the Netherlands, told us he saw separation remedies as part of an ex ante regulation regime that could be imposed to help limit platforms' ability to exercise market power, not least in relation to digital advertising. Implementing an appropriate form of separation between different activities across the value chain was necessary for certain vertically integrated platforms.
19. News UK told us one element of ex-ante regulation on platforms to constrain their market power should comprise of some degree of functional separation. That would curtail self-preferencing behaviour by platforms in auctions. News

¹ [CMA Online Platforms Review: Arete Research's View](#), page 2.

² [Observations of the European Publishers Council \(EPC\) on the Statement of Scope](#), pages 8 to 10.

UK gave the example of separating ad serving solutions from other parts of the ad tech stack.³

20. Guardian Media Group also supported separation for incumbent online platforms with strategic market status. It cited as a relevant market parallel the measures Ofcom had taken to separate out a BT bottleneck service (local loop unbundling) and to cap fees charged for that service. That measure had created (downstream) competition, investment and innovative new services in that area.⁴
21. In respect of remedies regarding the use of consumer data, one stakeholder called for consideration of access by rivals to user data held by platforms and another called for the banning of the sharing of user data across applications of the same platform.
22. Arete Research suggested that there might be the case for mandating open access to platforms. Aggregated pools of data from services like Search or social networks, for example, could be considered 'public goods' and therefore all firms should be able to get equal access to that data at similar costs.⁵
23. The EPC told us that a remedy of limiting the sharing of user data across applications of the same platform would be more appropriate than a remedy increasing access to data. Such a structural separation between data sets had the potential to lower barriers to entry, albeit at the expense of considerable monitoring costs. That would not only enhance user privacy and user trust, but also signal a shift back to the value of the original content and context of the advertising. That, the EPC submitted, would help restore the balance between platforms and (news) publishers, rewarding quality content instead of surveillance.⁶

Separation interventions in intermediation in the open display market

24. We have received representations that there is a strong case for separating aspects of Google's vertically integrated business in the intermediated open display market. This is an area where our own initial analysis suggests that there are conflicts of interest arising from Google's position on several sides of the market and where we have heard a range of concerns from market participants about Google's incentive and ability to leverage its market power

³ News UK's response to our statement of scope.

⁴ [Guardian Media Group PLC's \(GMG\) response to our statement of scope](#), pages 4 and 5.

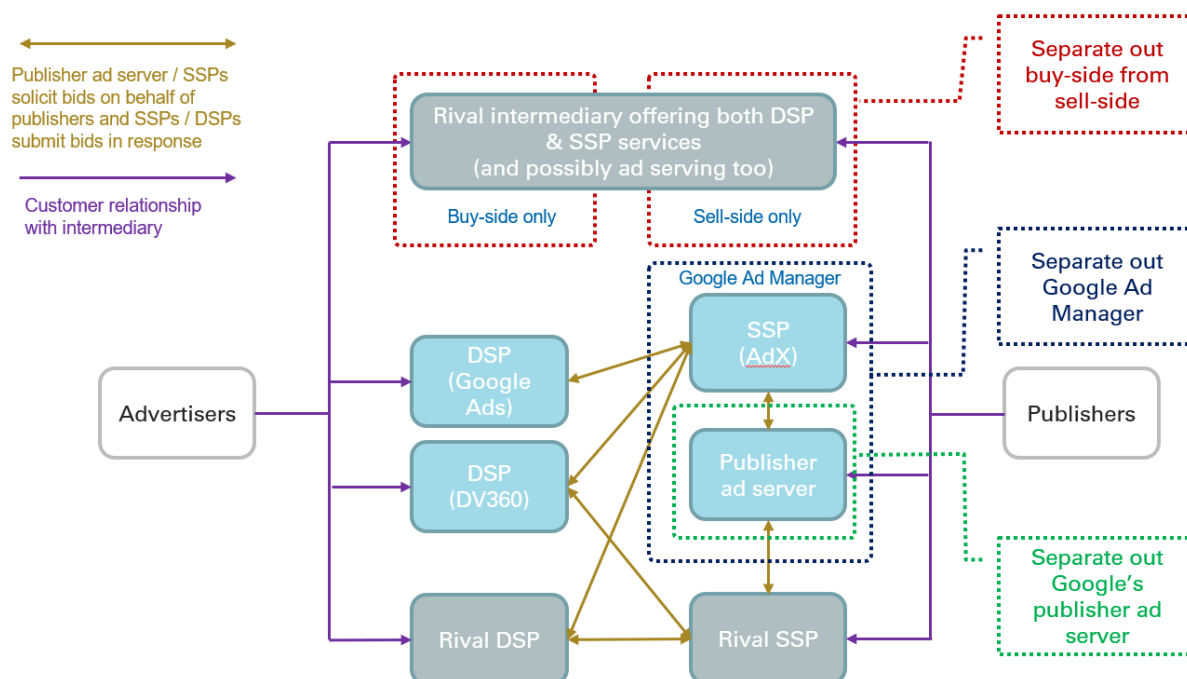
⁵ [CMA Online Platforms Review: Arete Research's View](#), page 6, points 3 and 5.

⁶ [Observations of the European Publishers Council \(EPC\) on our statement of scope](#), pages 9 to 10.

to undermine competition. Accordingly, this has been the main focus of our assessment.

25. Below we present a representation of potential interventions that might be applied to intermediaries, in particular Google, in the open display market. We discuss these potential interventions further below

Figure M.1: Potential separation options for intermediation in the open display market



Source: CMA analysis.

26. An intrusive remedy such as separation will only normally be appropriate where there are demonstrable benefits over and above those obtainable through less intrusive measures. We discuss in this section a number of areas where separation could bring benefits by meeting objectives including:

- eliminating competitive distortions arising from Google's role as the leading provider of publisher ad serving; and
- addressing conflicts of interest that may arise when acting for both advertisers and publishers.

Separation of Google's publisher ad server

27. Publisher ad servers fulfil a critical role in the sale of inventory on behalf of publishers. It is the publisher ad server which makes the decision of which bid is the winning bid. A publisher would normally want to sell each impression to

the highest bidder in an auction in which all relevant demand had been invited to participate on a head-to-head basis.⁷

28. We understand that Google Ad Manager has a share of supply of over 90% of publisher ad serving. Its publisher ad server service is deeply integrated with other elements of Google's ad tech stack offering to publishers. Publishers told us that it is a global market leader offering multi-functional capabilities of serving all ad formats across all platforms, and far superior to other ad servers. Google Ad Manager is considered to have best-in-market features, reporting, integration of demand and tools to provide buyers with easy access to the publisher's inventory, and a very robust decision logic.
29. However, a concern raised by many stakeholders is that Google's publisher ad server systematically favours other parts of Google's ad tech stack, harming competition in the process. Publisher ad serving is the digital advertising intermediation service that stakeholders have most called for to be separated out.
30. Although our current thinking is that a code of conduct could help address the potential harm arising from the scale of Google's market position in the publisher ad server market, it might be more effective in the long run to address Google's behaviour at source by requiring Google to separate the publisher ad server from those other parts of its business where there is a potential conflict of interest or where it could grant unfair advantages.
31. As outline above, there are a number of different forms of separation. When addressing the concerns around Google's ad server, the options which seems to be most relevant would be:
 - operational separation of the publisher ad server, where Google would be required to operate the publisher ad server independently, and would be required to have operational measures in place to ensure that the ad server operated in such a way that it treats Google's digital advertising businesses consistently with third parties; and
 - ownership separation of the publisher ad server, where Google would be required to operationally separate and then to sell the publisher ad server to an independent third party.
32. A sufficiently separated out publisher ad serving operation run by Google could increase competition both in the market for publisher ad serving but also

⁷ In practice, the auctions run alongside other constraints arising from previously made commitments to sell outside the open display markets, such as through direct deals.

in other ad tech markets. This could directly benefit publishers and also indirectly benefit advertisers and consumers.

33. In principle, a sufficiently separated out publisher ad serving operation within Google could meet objectives such as:
 - being indifferent to the identity of the winning SSP/DSP/advertiser because the fee it would levy on the publisher would be uninfluenced by this; and
 - being wholly focused on satisfying the needs of its publisher customer rather than being influenced by the objectives of other customers, such as advertisers.
34. Further, we have been told that independent publishers considering switching their ad server away from Google currently incur a material opportunity cost, namely that they would no longer be able easily to receive bids from Google Ads advertisers. Google Ads advertisers are a significant proportion of all advertising demand and losing access to this demand would entail a significant loss of revenue. If Google's publisher ad server were to be operated separately, then an independent ad server should be able to access Google Ads demand just as easily as the newly separated out publisher ad server. Google would no longer have any incentive to offer its demand only through a particular ad server, to the detriment of third-party ad servers. If Google's combined ad server/SSP activities operated independently, this ad server/SSP would become less important to publishers, reducing barriers to switching ad server. Publishers using independent SSPs could be able to access Google DSPs on comparable terms to Google's own SSP.
35. The potential dynamic benefits from separation might include greater competition in real time between SSPs leading to higher publisher yield. That would leave publishers better positioned to compete against each other by investing in content.
36. The associated costs would include the possible reduction in technical efficiency and the necessary re-organisational costs that Google would incur in relation to its ad serving and/or SSP operations. We have heard there are benefits of the integration of ad server and exchange functions in Google Ad Manager. These benefits include operational efficiencies, more effective yield management, reduced impression loss caused by redirects between different platforms and maximisation of revenue between different sales channels.
37. The publisher ad serving element would need to operate independently, and it might initially need to increase its charges to ensure that a separated publisher ad server is able to recover its cost of operations. Other providers of

publisher ad serving service would then be able to compete on a more sustainable basis.

38. We are seeking views from stakeholders on a possible intervention of requiring Google to separate out its ad server operations from the rest of its operations. The objective of the intervention would be to address the concerns identified in this report regarding the role of Google's publisher ad server. Google has integrated its publisher ad server and SSP, and so this intervention could be implemented either by reversing this integration and separation of the ad server as an independent service, or by separation of the combined ad server/SSP. If this intervention were implemented, we welcome views on the approach which could be most likely to achieve the objectives outlined above.

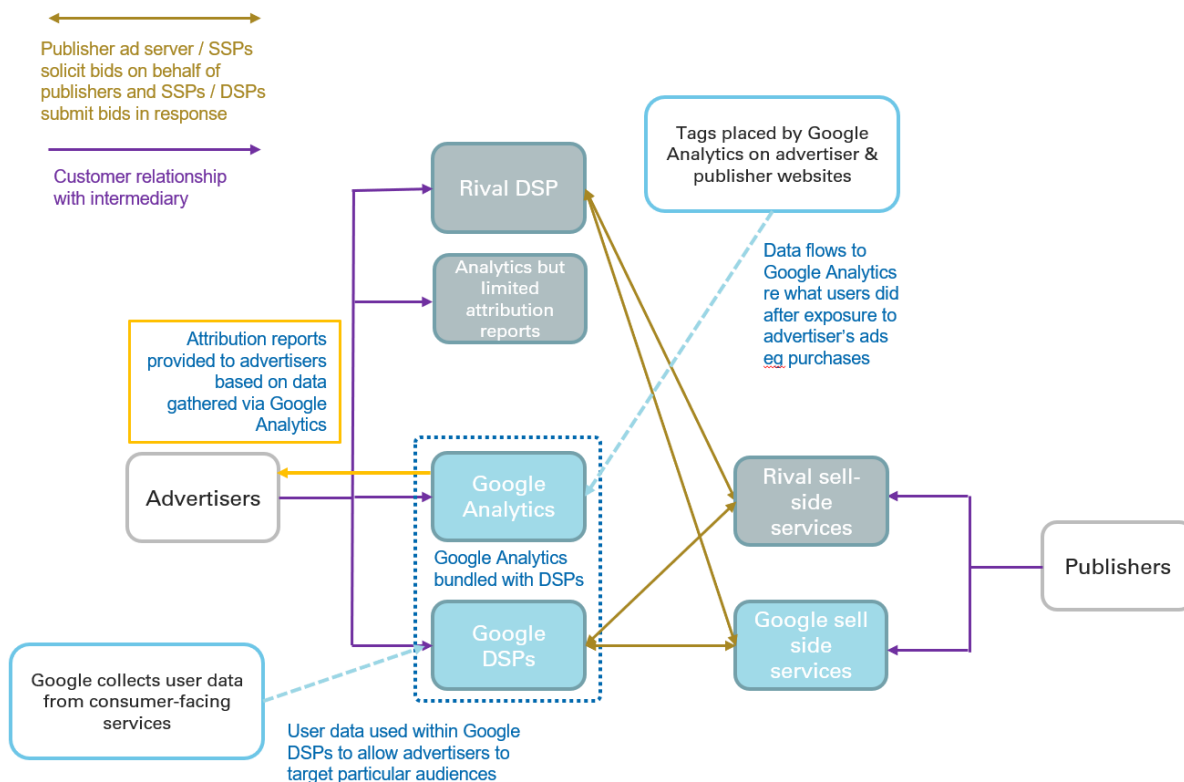
Separation of DSP and SSP

39. We have also been told that, in addition to the conflicts identified above stemming from Google acting both on the buy and sell sides of open display intermediation, these conflicts may also be present when other intermediaries active in the open display market operate both on the buy side and sell side, for example offering both DSP and SSP services to advertisers and to publishers in respect of the same item of advertising inventory.
40. We are seeking views whether there is a case to consider a general requirement on all intermediaries active in the open display market to separate their buy-side and sell-side businesses, as is required in some other markets where firms act on behalf of both buyers and sellers.

Separation interventions regarding data

41. Below we set out at a high-level our current understanding of the collection and subsequent re-use of data within digital advertising for both targeting audiences and tracking the subsequent actions of users after their exposure to particular adverts. For these purposes we use the example of Google.

Figure M.2: Current high-level understanding of flow and application of user data within digital advertising - Google example



Source: CMA analysis.

42. Currently, Google has a competitive advantage over other firms active in digital advertising intermediation as well as publishers because it has access to more data than any of its competitors, gathering data through its user-facing services, Android and its analytics businesses, including Google tags. This is discussed in Chapter 5 and Appendix E. This section discusses potential interventions which could address this competitive advantage and make it easier for other intermediaries which do not have their own user-facing platforms to compete with Google.
43. We note that Facebook also has access to significant volumes of user data, based on its own consumer-facing platform. The majority of our analysis in this section relates to Google, due to its much larger position in intermediation in open display markets. However, a number of concerns around the competitive advantage from access to user data are also relevant to competition across 'walled gardens' and publishers for advertising spend. Where this is the case, we expect that they might apply to both Google and Facebook.
44. Under one potential approach Google could be required to provide access to relevant parts of its data around the actions of users which it gathers from its Google tags. Rivals would then in principle be able to identify the actions that their users took in much the same way as Google is able to do. Alternatively,

instead of mandating access to the underlying data, Google could be required to allow rivals to access the results of Google's analytics process. Google could be required to provide results to a rival digital advertising firm which would confirm whether, based on Google's own tags, users specified by the rival took particular specified actions or not. From the information supplied rivals would in principle be able to provide a more comparable service in respect of the performance of their digital advertising products.

45. This form of mandated access to data would require careful design. It would involve establishing a price for the access that reflects the economic cost of the data to Google. It is likely that it would require some form of operational separation or accounting separation to ensure that analytics business provided a comparable service to Google's own business and third parties.
46. Granting access to user data (ie the subsequent actions of an individual use) is likely to pose privacy concerns. Google and its publisher/advertiser customers would only have gained consent for themselves (publisher or advertiser) and Google to further utilise the data yielded by the tags, not for unspecified rivals who might want to access the data base. This problem might be reduced if the form of access were to the results of the analytics process, rather than to the underlying data required to generate the results.
47. We are inviting views as to whether mandating access to an analytics service would be an effective intervention to promote competition in digital advertising services.
48. We are also interested in views on whether a comparable intervention could be applied to the user data applied for user targeting purposes and note that some stakeholders have called for this form of data openness or access. In practice, the privacy concerns and the practical consequences of access to this form of data appear to be difficult to overcome for a number of reasons. The data applied in targeting is often user-specific, and therefore in many cases could be linked to the individual user. The data used varies significantly for different forms of advertising, and we understand that this continues to change over time. Our current view is that any requirement to provide access might be difficult to implement effectively.

Access to YouTube inventory

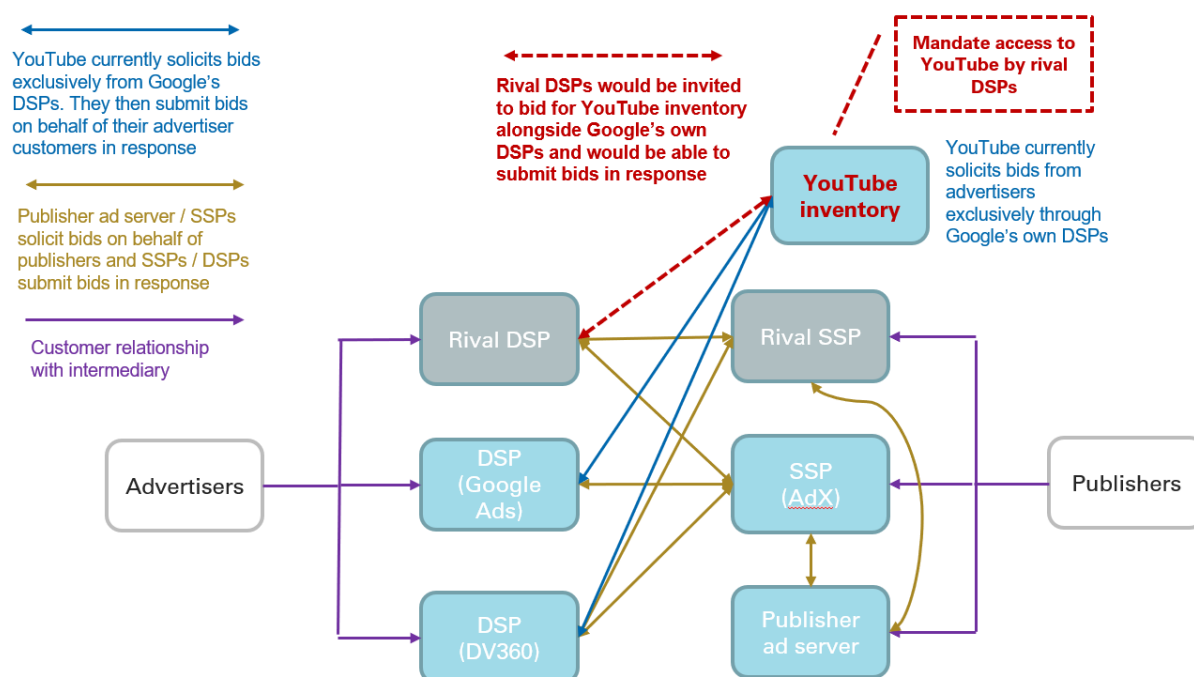
49. In Chapter 5, we note that stakeholders have told us that Google is able to exploit its market power in the provision of YouTube inventory to gain an advantage in open display advertising markets. The current situation is that if an advertiser wants to include YouTube advertising within its campaign, then it would have to use Google's own DSPs to access it. Given advertisers'

preference for using a single DSP for any one campaign, then that may lead to the situation where the same (Google) DSP is used more broadly to reach YouTube and non-YouTube audiences alike.

50. A possible intervention which could address this concern would be to open up YouTube inventory for sale by third parties. The purpose of the intervention would be to improve competition between intermediaries, most notably rival DSPs, in their being able to offer a comprehensive campaign service to advertisers. We have received several calls for this intervention.

51. Figure M.3 illustrates how this potential intervention might work.

Figure M.3: Potential YouTube access remedy for intermediation in the open display market



Source: CMA analysis

52. Under this possible intervention independent DSPs who would be given the opportunity to purchase YouTube inventory on behalf of their advertisers (or their media agencies) via the specific interface that Google has developed for YouTube. Google's own DSPs (Google Ads and DV360) when competing to be the advertiser's DSP for an individual campaign would therefore lose their exclusivity advantage in this respect.

53. Under this intervention Google would continue to run its YouTube auction. Instead of simply aggregating demand from DV360 and Google Ads, Google's two DSPs, Google would now have to also include any demand from advertisers who had chosen to place their ad spend, not with DV360, but with a competing DSP. To ensure that this form of intervention is effective, there

might need to be a mechanism to help ensure that Google would treat the different sources of demand on a consistent basis.

54. Historically, part of YouTube's inventory was made available for purchase through AdX (now Authorized Buyers). In 2016 Google removed YouTube inventory from Authorized Buyers, the mechanism through which non-Google DSPs, ad networks and trading desks historically were able to purchase this inventory. Google told us that key to this development was the development of TrueView YouTube Ads. TrueView ads are 'skippable' and, according to Google, TrueView uses proprietary algorithms to match the right ad to the right user, so integrating TrueView into DV360 had been a complex process.
55. Google noted that since Authorized Buyers had never been a significant distribution channel for YouTube inventory, that channel did not justify this resource investment. Google had therefore decided to focus its resources instead on developing the TrueView format, which Google believed would provide a better user experience.
56. Google has told us that the withdrawal of YouTube inventory in practice only had a limited impact. We welcome comments from stakeholders including advertisers and those representing advertisers' interests about whether this might be different in the future, as we have received a number of calls for this intervention.
57. We also understand that there are particular privacy concerns relating to the data required for the TrueView ads to work effectively, and that this might require changes to the current way in which the data required for TrueView ads is obtained. We also understand that there might need to be technical changes to how Google's digital advertising business operates to enable third party access to YouTube. We recognise there might be an additional cost to Google, and that needs to be seen in the context of the benefit that greater competition between DSPs would bring.
58. We have not at this stage come to a view on whether these concerns can be effectively mitigated as part of any intervention. We welcome views on whether this form of intervention, intended to promote competition by requiring Google to open its YouTube inventory to third-party intermediaries, could be implemented in practice at reasonable cost. If so, we are also seeking evidence as to the scale of any positive effect on competition in digital advertising.

Transparency interventions

Overview

59. We have identified in Chapter 5 that there are concerns about a lack of transparency in the digital advertising markets. Advertisers and intermediaries acting on their behalf have made a expressed a number of concerns about a lack of transparency when advertising on Google and Facebook's properties. A number of parties highlighted different concerns about the opacity of digital advertising markets. Examples of concerns raised about transparency and discussed in Chapter 5 include:
- Google sets the rules for its auctions of digital advertising and advertisers do not understand how prices are determined or the reasons for changes in the prices for certain keywords. Publishers have concerns relating to their ability to present content to users of Google and Facebook and monetise it, due to the opacity of the algorithms they use and the lack of transparency relating to when and how they are changed, sometimes with material effect.
 - Google and Facebook do not provide sufficient data to protect advertisers against fraud and to allow effective verification of what they are buying. Google and Facebook do not allow third parties to access data for ad verification purposes on behalf of advertisers.
 - Google and other intermediaries do not share information about the fees that they earn from buying and selling digital advertising inventory. Publishers identified examples of Google's multiple roles as a DSP, SSP and ad server where they had concerns that Google could be making a larger fee from controlling multiple auctions.
60. Some of these concerns may be addressed by a code of conduct. The potential code which we have outlined in Chapter 6 could include terms on transparency and auditability of data and algorithms. If there is to be a regulatory body with powers to investigate disputes and assess competition concerns relating to SMS firms, there will need to be associated powers to obtain and review data. Some of the concerns raised above could be addressed by a regulatory review which could verify whether concerns that algorithms are allowing the potential for 'arbitrage' had any basis.
61. However, some of the other concerns raised around transparency go beyond testing the fairness of the processes followed by Google and Facebook. Some of the transparency sought by users would involve Google, Facebook, and in some cases third parties, providing information which they either do not

collect or which they do not currently provide as part of their commercial offering. In this section we provide some examples. We are seeking views both on whether the data identified should be shared, and if so, who should be expected to provide the data.

Interventions to improve transparency over fees

62. A number of publishers have complained to us about both the size and the lack of transparency over the ‘ad tech tax’. It has been suggested that anywhere between 30% and 70% of the amounts paid by advertisers is retained by intermediaries. For the reasons given in Chapter 5, we think it is potentially harmful to competition if there is insufficient transparency over fees, including ‘hidden fees’, which are earned by ad tech intermediaries.
63. We welcome views on the following potential requirements which could improve transparency:
- **Reporting of fees by Google and Facebook.** In some other sectors, such as financial services, there can be requirements to report fees charged by intermediaries, to address risks around asymmetric information and to ensure that customers understand what they are paying. Google and Facebook have a particularly strong market position which gives them the greatest opportunity to set the terms on which digital advertising is bought and sold, and potentially to earn fees over and above those which they make transparent to customers. It could help address concerns around the market power of the large firms if they were transparent with customers about the fees earned.
 - **Reporting of fees by all ad tech providers.** An alternative intervention would be to require all ad tech firms to provide transparency over fees charged in a comparable format. This would reflect the fact that while Google and Facebook may have a particularly strong market position in some forms of digital advertising, the problems around ad tech fee transparency are broader and result in a fundamental gap in information between principals and intermediaries.
 - **Requirement to comply with a common transaction ID.** An alternative to transparency over fees would be a requirement for intermediaries to use a common transaction ID. This could apply either to Google and Facebook alone, or to all intermediaries.
64. We understand that third parties have developed options for a common ID which would allow all parties to the open display market more transparency about the amounts paid for digital advertising. Those parties who raised the

proposal said that Google and Facebook are not currently willing to agree to the IDs which are in development.

65. We note that the first and third options could be implemented as part a potential code of conduct.

Interventions to address other transparency concerns

66. Both publishers and advertisers have expressed concerns to us about a lack of transparency from ad tech intermediaries about the outcomes of the process of selling digital advertising inventory.
67. For advertisers, the main concerns relate to ad verification, measurement and attribution. We outline concerns from advertisers in Chapter 5, and also responses from Google and Facebook as to their rationale for restricting access to certain data types.
68. For publishers, the main concerns relate to transparency over the auction process and the amounts bid by advertisers, in order that they can optimise the sale of their inventory. Publishers have told us they have little confidence in the fairness of the auction process given this lack of transparency. If ad tech fees were more transparent, this could offset some of these risks.

Interventions to address advertiser concerns

69. We welcome views on the case for interventions requiring the following additional forms of transparency which could address advertiser concerns:
- a requirement on Google and Facebook to comply with industry standards on ad verification and measurement;
 - a requirement on Google and Facebook to enable third-party verification of their own advertising inventory.
70. As we explained in Chapter 5, agencies and advertisers told us that although both Google and Facebook do work with a number of 'approved' third-party verification providers, they restrict access to detailed consumer-level data in respect of verification for the advertising inventory they own and operate. Other display advertising platforms reported that they do allow advertisers to use tracking tags for third-party verification of impressions served on their advertising inventory. Without access to the underlying raw data and the ability to have full independent verification, there was a perception on the part of advertisers and agencies that Google and Facebook were able, in effect, to 'mark their own homework' in respect of the effectiveness of their own advertising inventory.

71. There are a number of practical questions about how these requirements might work. We welcome views on both whether a regulatory body should be able to put obligations on Google and Facebook in respect of the information that should be provided, and if so, what information should be provided.
72. We also seek views on whether these kinds of measures can be addressed by a code of conduct as discussed in Chapter 6, for example by requiring Google and Facebook to comply with existing or future industry standards. Alternatively, a requirement to provide increased transparency could require additional information to be provided by either these SMS platforms, or by all intermediaries.

Interventions to address publisher concerns

73. We welcome views on the case for interventions requiring the following additional forms of transparency which could address their concerns:
 - a requirement on Google and Facebook to provide certain data, including bidding data, to publishers; and
 - a requirement on Google and Facebook to provide transparency about the working of auctions to a regulatory body or approved independent auditor.
74. We understand that some third-party intermediaries provide additional data to publishers around bidding data, and that this is valuable for publishers in being able to optimise the process of procuring advertising inventory. We also understand that Google has raised concerns about confidentiality considerations in providing similar information, and that Google has stopped providing some information which publishers say that they value.
75. We welcome views on what information Google and Facebook should be providing, and whether this information should be provided to publishers themselves, for analysis purposes. Alternatively, a requirement could be for information to be made available to a regulatory body. If the information were provided to a regulatory body to allow auditing or review against stated auction rules, then this would be consistent with a potential code. The regulatory body would have information gathering powers, and this could include assessing auctions against principles of fairness and consistency.
76. We also understand that bidding data might also be used to understand the level of ad tech fees. A requirement to provide bidding data may therefore act as an additional transparency measure regarding the level of the ad tech tax.

Consultation Questions

77. We welcome views from stakeholders on possible interventions, over and above a code of conduct, to address competition issues in the digital advertising market.

Separation interventions

78. We have discussed the following specific potential interventions:
- separation of Google’s publisher ad server (or Google’s publisher ad server together with its SSP (AdX)) from other of its intermediary operations;
 - separation by all intermediaries active in the open display market which operate both on the buy-side and sell-side to separate their operations between buy-side and sell-side;
 - access by independent DSPs to Google’s YouTube advertising inventory;
 - access by independent intermediaries to Google’s Analytics service; and
 - access by independent intermediaries to Google’s data from its user-facing markets.
79. Where these interventions apply to data and digital advertising held within the ‘walled gardens’, and if the interventions were to be effective, we are seeking views on whether the interventions should be applied to Facebook, because of its strong position in display advertising.
80. In respect of each of these potential interventions we invite stakeholders to provide views on the following questions:
- M.1 Would the intervention be effective in addressing the concerns identified in Chapter 5?
- M.2 Would an intervention focused on the purchase/sale of digital advertising inventory aimed at UK users be effective?
- M.3 Should the intervention be considered further as a priority either by the CMA or by a regulatory body in the future?
- M.4 How could the intervention be designed to minimise costs and maximise benefits?

- M.5 Would the benefits of such an intervention would be likely to outweigh the costs?
81. In respect of mandating separation of Google's publisher ad server (or Google's publisher ad server together with its SSP (Adx)) from other of its intermediary operations we also invite stakeholders to specifically consider:
- M.6 Would separation in an appropriate form be effective in addressing the concerns above, and if so whether this would require ownership separation, or would operational separation be sufficient?
- M.7 If separation of the publisher ad server were to be an effective intervention, would it be more effective to require Google to separate out solely its publisher ad server operations or its now fully integrated publisher ad server/SSP operations?
82. In respect of mandating access by independent DSPs to Google's YouTube advertising inventory we also invite stakeholders to specifically consider:
- M.8 Could any concerns about the sharing of personal information needed in order for Google to be able to sell YouTube advertising on a programmatic basis via all qualified DSPs be overcome?
- M.9 If it were too difficult for TrueView inventory to be offered to third-party DSPs, could access to only non-TrueView inventory still be effective?
- M.10 Would there need to be a mechanism to help ensure that Google would treat Google and non-Google demand on the same basis?
83. In respect of mandating access by independent intermediaries to Google's Analytics service we also invite stakeholders to specifically consider:
- M.11 Would mandating access to Google's attribution service rather than underlying data address privacy concerns?
- M.12 Would mandating access to Google's attribution service, rather than the underlying data, allow rivals to offer an equivalent service to Google?
84. In respect of mandating access by independent intermediaries to Google's and / or Facebook's data from its user-facing markets we also invite stakeholders to specifically consider:
- M.13 Could a comparable intervention to that which we have indicated could be applied to attribution data could also be developed to open up access to data collected by Google and/or Facebook for targeting purposes?

Transparency interventions

85. We have considered the following potential interventions:

- reporting of fees by Google and Facebook or reporting of fees by all ad tech providers;
- requirement to comply with a common transaction ID;
- a requirement on Google and Facebook to comply with industry standards on ad verification and measurement;
- a requirement on Google and Facebook to allow third-party verification of their own advertising inventory;
- a requirement on Google and Facebook to provide certain data, including bidding data, to publishers; and
- a requirement on Google and Facebook to provide transparency about the working of auctions to a regulatory body or approved independent auditor.

86. In respect of each of these specific transparency interventions we invite stakeholders to consider:

M.14 Would the intervention, either individually or in combination, be effective in addressing the concerns identified in Chapter 5?

M.15 Should the intervention should be considered further as a priority either by the CMA or by a regulatory body in the future?

M.16 How could the intervention could be designed to minimise costs and maximise benefits?

M.17 Would the benefits of the intervention be likely to outweigh the costs?

87. In respect of those interventions that would just apply to Google and Facebook we invite stakeholders to consider:

M.18 Would transparency interventions would be better addressed by a code of conduct as proposed in Chapter 6, for example by requiring Google and Facebook to comply with existing or future industry standards, or by a regulatory body given specific powers to address the lack of transparency?

M.19 If there were to be a regulatory body with powers to be able to put obligations on Google and Facebook in respect of the information that should be provided, what information should be provided?

88. In respect of a requirement to comply with a common transaction ID we also invite stakeholders to specifically consider:

M.20 Would any of the standard formats which currently exist, were they be adhered to either through industry agreement or a requirement by a future regulatory body, be effective in enabling the reporting of the ad tech tax?

M.21 Would it be sufficient for the intervention to apply just to Google and Facebook or would the requirement also need to apply to all ad tech providers for it to work effectively?

89. In respect of a requirement on Google and Facebook to provide certain data, including bidding data, to publishers we also invite stakeholders to specifically consider:

M.22 What information should be provided?

M.23 Should this information be provided to publishers to analyse or, alternatively, provided to a regulatory body for audit or review against stated auction rules?

Other possible interventions

90. The above separation and transparency interventions represent a selection of possible interventions in the digital advertising market. They do not necessarily represent an exhaustive list of interventions that might be able to be made to work effectively in this area. We would therefore invite other suggestions intended to address the competition issues we have identified in Chapter 5 that stakeholders consider to be worthy of further consideration by us in the second phase of this market study.

Annex

Introduction

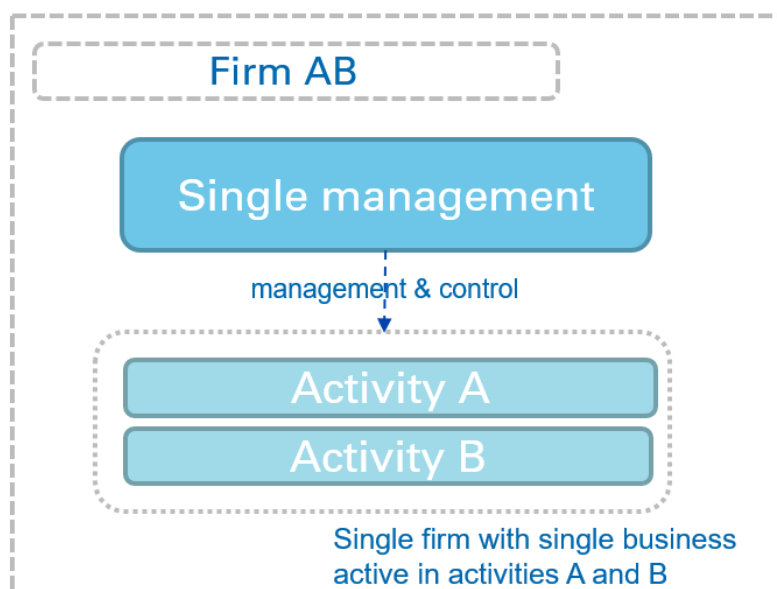
1. Separation remedies come in a number of forms. The form of separation which is most appropriate is likely to depend on the extent of the change in behaviour which is necessary to ensure that the separate business faces the same incentives as an independent firm.
2. The main forms of separation remedies in increasing order of intrusiveness are:
 - Remedies which mandate access to some or all the services in which a firm is dominant on fair and reasonable terms. Access remedies almost always need to be accompanied by monitoring mechanisms including accounting separation. This latter measure requires the firm to separate relevant business on a virtual basis through keeping separate books for each business (**'access remedies'**).
 - Operational separation remedies, where the affected businesses within the firm operate separately from each other but are still owned by and remain under the overarching control of the same firm (**'operational separation'**).
 - Structural separation remedies, where, whilst the firm still continues to own the affected businesses, additional steps are in place to strengthen the independent control of each business (**'structural separation'**).
 - Ownership separation.
3. This annex sets out in greater detail what we mean by these different forms of separation. The purpose of doing this is to help stakeholders wanting to respond to our consultation to have a clear idea of what each type of separation would involve. Such clarity might help stakeholders identify which form of separation, if any, would best form the basis of an appropriate intervention to the concerns we have set out.
4. In order to explain the differences between the various models of separation in a relatively easy-to-follow way we firstly describe the situation for a firm whose activities are not separated. We then contrast the integrated firm with the following scenarios:
 - ownership separation ('divestiture');
 - structural separation;

- operational separation (or 'ring-fencing'); and
 - access remedies including accounting separation.
5. The above order starts with the most intrusive form of separation ('ownership separation') and ends up with the least intrusive form of separation.

Firm whose activities are not separated

6. In this section we seek to depict the operations of a firm whose activities are not separated. Below we provide a stylised illustration of how such a firm, in this case providing two distinct offerings under a single management team, might choose to operate. One set of offerings, for example, might be geared around the needs of advertisers and another set geared around the needs of publishers.

Figure 1: Firm providing two distinct offerings within a single operational set up



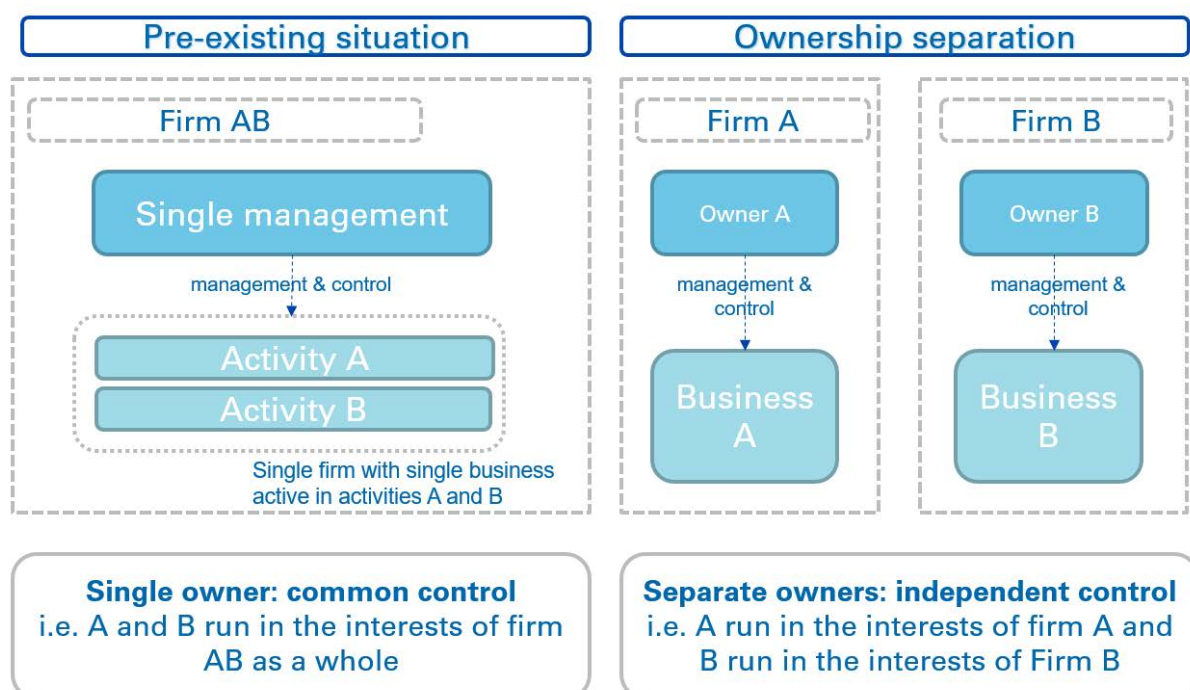
Source: CMA analysis.

7. In this scenario the management team will be seeking to optimise both in the shorter and the longer run the performance of the business as a whole in the interests of its owners. In a set up where there are interdependencies between these activities, management will, amongst other considerations, take into account the commercial impact of any proposed changes to the offering serving advertisers on the offering serving publishers and vice versa.

Ownership separation

8. By ownership separation we mean that there is a rule that no firm can be active in both activity A and activity B (either as a general prohibition, or, more typically, if that firm holds market power in activity A and where activity B is subject to a greater degree of competition).
9. In the following figure we compare this ownership separation outcome with an existing situation where both the management and operations of the two activities are deeply interwoven.

Figure 2: Firm required to dispose of ownership and control of either activity A or activity B



Source: CMA analysis.

10. Ownership separation provides the strongest form of separation. The two businesses will be run completely independently of each other, have their own internal governance set up and produce their own set of internal reports and financial statements for external consumption. Ownership separation also avoids the need for an independent body to monitor whether firms subject to lesser forms of separation remedy (see below) are in practice meeting the objectives of the remedy.

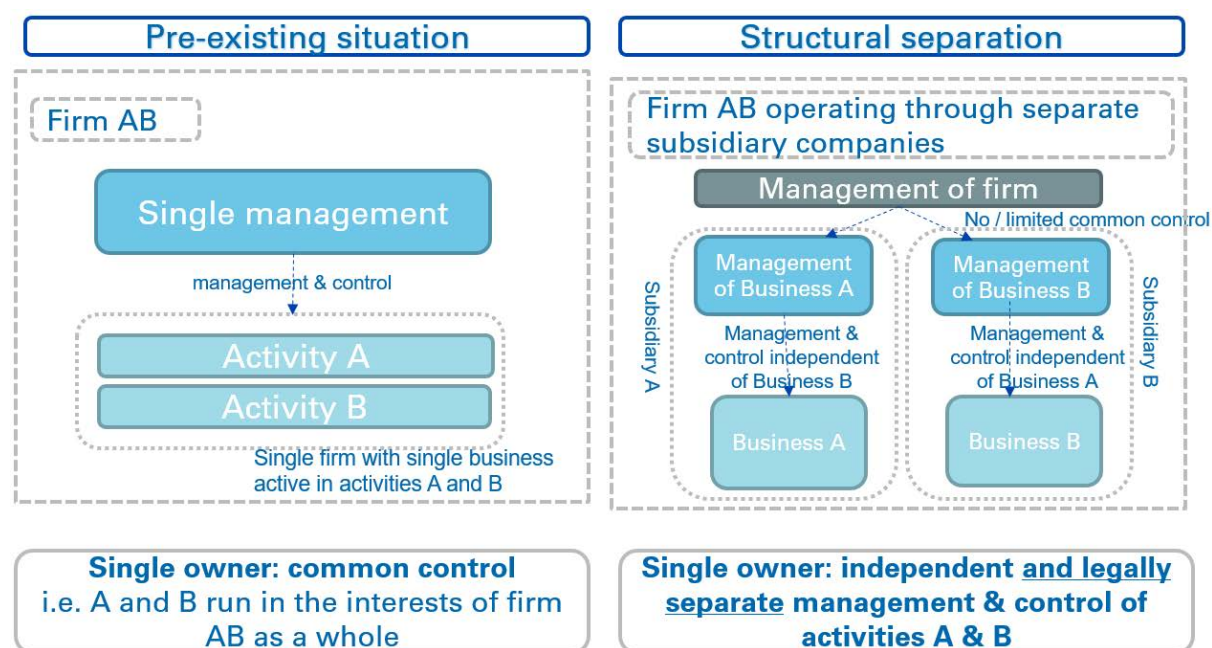
Structural separation

11. By structural separation we mean that there is a rule that if a firm is active both in activity A and activity B (either as a general prohibition, or, more

typically, if that firm holds market power in activity A and where activity B is subject to a greater degree of competition) then it has to separate that part of the firm undertaking activity A from that part undertaking activity B, such that there is no common control or very limited common control.

12. Structural separation can be most simply achieved by ownership separation. However, structural separation can also in some circumstances be achieved by moving one of the activities into a separate legal entity. This could be governed by a board of directors and run by a management team independent of the board of directors and senior management team of the firm as a whole.
13. In the following figure we compare this structural separation outcome with an existing situation where both the management and operations of the two activities are deeply interwoven.

Figure 4: Firm required to structurally separately operate activity A from activity B



Source CMA analysis

14. This form of separation has increasingly been adopted by UK utility regulators including Ofcom and Ofgem, when seeking to address concerns about the potential influence of a single firm undertaking multiple activities. In the case of Ofcom, it required BT to place all of its activities relating to bottleneck UK telecoms infrastructure services into a subsidiary company, namely BT Openreach.⁸ In the case of Ofgem, it required National Grid, the owner and

⁸ [Strengthening Openreach's strategic and operational independence](#), Ofcom, 26 July 2016.

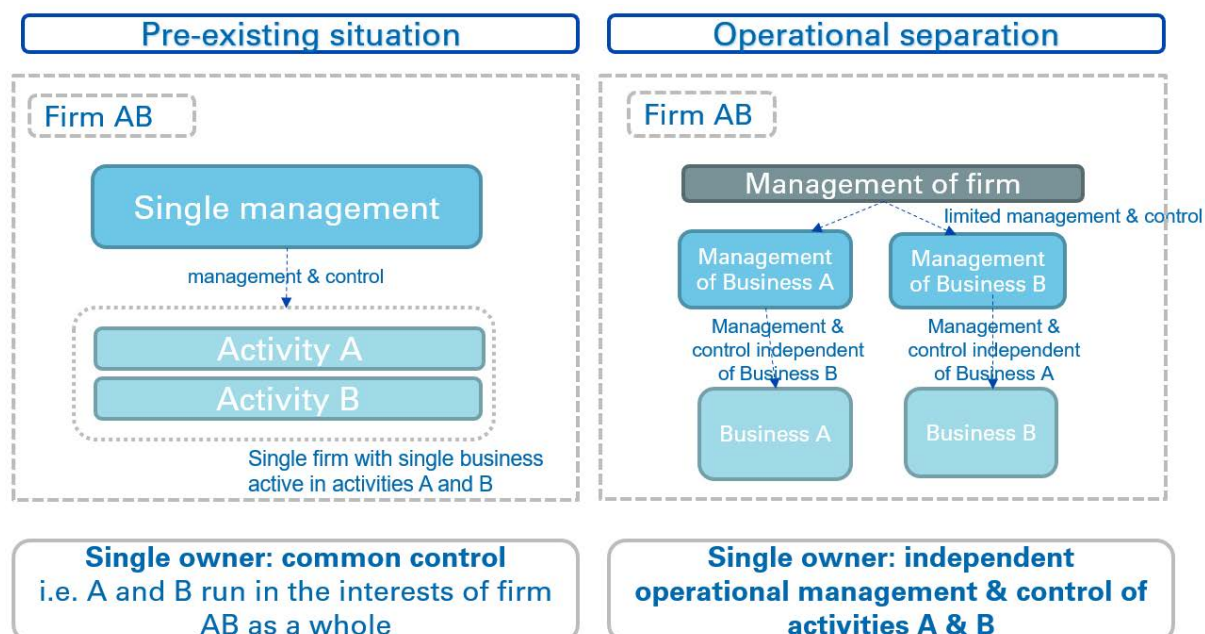
operator of much of GB's electricity transmission infrastructure, to place its electricity systems operator activity into two separate legal entities.⁹ Likewise, Ofgem has also required Scottish energy firms, SSE and Scottish Power, who own electricity transmission infrastructure, to place these assets and operations into separate legal entities.

Operational separation ('ring fencing')

15. By operational separation we mean that there is a rule that if a firm is active both in activity A and activity B (either as a general prohibition, or, more typically, if that firm holds market power in activity A and where activity B is subject to a greater degree of competition) then the firm must adopt a number of operational practices to help ensure that those responsible for governing, managing and operating activity A have the incentives to operate that activity ('Business A') completely independently of, and without regard to the impact on, activity B ('Business B').
16. Operational separation is less intrusive than structural separation as it still permits common ownership and some limited common management of the two activities. Operational separation normally requires a regulator to define restrictions on the day-to-day management of the two different activities, to ensure that management has sufficient incentives to act independently.
17. In the following figure we compare operational separation with an existing situation where the two activities are currently fully integrated and managed together.

⁹ Industry update following our Future Arrangements for the Electricity System Operator: Informal Consultation on Electricity System Operator Licence Drafting, Ofgem, 14 March 2018.

Figure 3: Firm required to separately operate activity A from activity B



Source: CMA analysis

18. Operational separation applies in a number of financial markets. It was advocated by the CMA as a solution to improve the quality of audits undertaken by big accountancy firms by requiring them to operationally separate their practices from their more profitable consultancy practices.¹⁰ Typically, operational separation would include some or all of the following measures:

- the setting of appropriate incentives on the management of Business A that are separate and distinct from the incentives operating on the management within the rest of the firm (here, Business B) and at the level of the firm as a whole;
- a requirement for ‘firewalls’¹¹ between Business A and Business B;
- a requirement for arms-length commercial agreements for any trading between Business A and Business B comparable to those that would have been negotiated with an independent third-party firm (‘arm’s length transfer charging’);
- the physical separation of the operations of Business A from the operations of Business B; and

¹⁰ CMA Audit market study, 2019.

¹¹ The concept of firewalls is discussed in our guidance, CC3, page 109.

- the separate reporting of the operating and financial performance of Business A from Business B, including accounting for inter-firm transactions on the basis set out in c) above.
19. The effectiveness of operational separation will depend on the extent to which these measures can be implemented in practice in a way which achieves the objectives of the remedy. The objective will normally be for the two activities to be operated in a way that means that they have incentives to act in their own interests, rather than in the interests of the combined business.

Access remedies including accounting separation

20. These are remedies which mandate access by rivals to some or all the services in which a firm is dominant on fair and reasonable terms, enabling them to compete on a more equal footing in neighbouring markets. Access remedies almost always need to be accompanied by monitoring mechanisms including accounting separation. This latter measure requires the firm to separate relevant business on a virtual basis through keeping separate books for each business.
21. An accounting 'separation' remedy may not directly require the firm to change how it operates on a day to day basis, if its current operations already support the ability to report separately on the businesses being separated. Indeed, it could continue to run its business on an integrated basis.
22. An accounting separation remedy accompanied only by access remedies therefore does not by itself require the firm to undertake any form of operational or structural separation apart from the separation that is constructed in order to prepare the separated accounts. Accounting separation remedies are therefore sometimes advocated because they seek to provide a mechanism for checking for compliance with a requirement on a firm to refrain from problematic behaviour without at the same time imposing additional reorganizational costs on the firm.¹²
23. For accounting separation to work as an effective remedy, however, it is not only necessary for the separated accounts to be prepared in respect of each of the adjacent markets susceptible to leverage, but those accounts also need to be independently audited. Independent audit is necessary to give assurance that the separated accounts have in fact been prepared by the firm subject to the remedy in the manner envisaged.

¹² Re-organisational costs can arise from a one-off re-organisation of business processes but there might also be recurring costs if the re-organised process is statically less 'efficient' in terms of overall costs.

24. An authority would then be able to review the separated accounts to understand whether the firm subject to the reporting remedy is, based on the evidence from the accounts, making a commercially sustainable return in each area. This is likely to be evidence that will help with understanding whether remedies such as access remedies are being implemented effectively. Accounting separation is therefore implemented by utility regulators such as Ofgem and Ofcom alongside remedies such as access remedies and operational separation remedies.