

Merger Assessment Guidelines

Response to Call for Information to supplement or revise the MAGs for assessing mergers in digital markets

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1. Introduction

We welcome the opportunity to respond to the CMA's Call for Information to revise or update the Mergers Assessment Guidelines (MAGs).

The MAGs are an important tool to ensure transparency and consistency in the CMA's approach to merger assessment. Alongside helping provide certainty to businesses and external advisers, the MAGs also guide CMA staff on appropriate analytical frameworks and avoid risks of inconsistent approaches between cases.

The MAGs are especially important given merging parties in UK merger control have limited rights of appeal on substantive grounds (subject to a judicial review reasonableness standard that is significantly lower than the 'more likely than not' test for an SLC at Phase 2), which gives the CMA a significant degree of discretion in its assessment, the evidence it relies on and its decision-making. Consequently, the more guidance that the CMA can provide on its use of that discretion, the more beneficial for the review process, and the better advice that advisors can provide their clients regarding potential CMA concerns, which in turn helps create certainty for business investment.

Digital markets and the growth of the information economy create a wide range of competition issues and, given the recent recommendations of the Furman Review, it is welcome that the CMA is reviewing whether and how these and other recent developments might be incorporated into the MAGs.²

In this context, we believe there are a number of sections of the MAGs which would benefit from greater detail on how the CMA will apply economic principles. However, as outlined in further detail below, no market feature is unique to the context of digital markets and any revisions should have as universal application as possible. In our view sector-specific carve outs should be avoided and are rarely if ever justified.

¹ The respondents are Vice Presidents at CRA and between them have advised one or both of the merging parties in a number of the recent merger cases in digital markets before the CMA, including *PayPal/iZettle*, *Experian/ClearScore*, *The Stars Group/Sky Betting*, *Just Eat/Hungryhouse*, and for an intervener in *ICE/Trayport*. Both also used to be economists at the UK competition authority. The views expressed here are their own and do not reflect the views of CRA or any other individuals at CRA.

² *Unlocking digital competition: Report of the Digital Competition Expert Panel*, March 2019. Alongside this, the CMA published merger retrospectives of a limited number of cases involving digital markets. See *Ex-post Assessment of Merger Control Decisions in Digital Markets*, May 2019.

In light of this, if the MAGs are to be revised or updated, we would recommend that a wider review of whether they are fit for purpose for merger assessment across all markets is undertaken, not just for digital markets. We would strongly urge against piecemeal updates to the MAGs dependent on the particular focus of competition policy at any given time. Guidance should aim to be durable and not driven by specific technology, firms or individual cases.

When the MAGs were initially published in 2010 to replace the substantive assessment guidance, considerable collaboration was undertaken with the US authorities, which were updating their own horizontal merger guidelines at the same time. As substantive assessment should reflect well-established economic principles and consensus based on economic theory and empirical studies, as well as merger retrospectives, we would urge the CMA to work in collaboration with other authorities and particularly the European Commission and US authorities to ensure any changes to assessment guidelines are consistent with the approach taken elsewhere. International harmonisation is particularly helpful for multi-jurisdictional merger filings to ensure consistency of outcomes and becomes increasingly important if or when the UK leaves the European Union.

2. Market features relevant to assessment

All of the features noted by the CMA in paragraph 3.1(a) – *multi-sided platforms, monetisation strategy, non-monetary payments, data assets and network effects* – can be relevant for assessing digital markets dependent on the characteristics of the merging parties, their business models and the sectors in which they compete. Not all features will be relevant in all cases.³

Importantly, none of these features are specific to digital markets, and can apply equally or more so to other sectors as well. For example, network effects are extremely strong in financial markets where trading venues act as two-sided platforms and increasingly use data to innovate and develop new products. The same is true of credit card companies that provide a multi-sided platform with significant indirect network effects, airline reservation systems with direct and indirect network effects, and, in the context of subsidy-supported platforms, television and radio stations, newspapers and shopping malls.. If the MAGs were to be updated solely in relation to digital markets, which we believe is unwarranted, clear guidance would be required as to what the CMA considers to be a digital market.

In addition to the market features noted by the CMA there are a number of other factors that can be critical to the assessment of some digital markets, including, in particular, where increasing returns to scale are extreme, where significant fixed and sunk costs are necessary, where economies of scope are low, and where marginal costs are low. The most relevant market features are those that have the potential to create monopoly or oligopoly structures and entry barriers and thus lead to greater concentration. As with the features listed by the CMA, these are not unique to digital markets.⁴

Below we provide a brief overview of why and when these market features may be relevant to merger assessment and suggestions for revising the MAGs to reflect this where it does not currently. These sections also address subsequent questions on efficiencies and RCBs.

³ For example, in *JustEat/Hungryhouse*, competition between multi-sided platforms was very relevant to the assessment and this can be seen in the evolution of the CMA's position as regards the constraint from competing platforms between Phase 1 to Phase 2. However, there were no direct (positive) network effects on either side of the platforms, no non-monetary pricing and there were no issues around access or use of data. This is not unusual with *service based* platforms (see below).

⁴ Again, while these features may be highly relevant to an assessment in digital markets, none are unique to that context. Increasing returns to scale and fixed, sunk costs are far greater, for example, in aircraft manufacturing due to significant development stage costs and large-scale production requirements.

Network externalities and multi-sided platforms – (i) and (v)

Network effects can lead to greater levels of concentration because consumers realise benefits from being on the same network as others. Where a merger increases the size of the network beyond what would be possible absent the merger these positive network externalities can result in efficiencies. However if the network effects are sufficiently strong, they can lead to a market tipping to a single technology or firm, leading to high levels of concentration. Network effects can also create switching costs and significant entry barriers as individual or small groups of consumers will lose the benefits from being present on the large network by switching to a smaller network rival (even if that competitor offers a superior product). These switching costs and entry barriers create strategic advantages that can protect the leading firm's market position.

Network effects can also be indirect where products have separate but dependent customer groups or are multi-sided: an increase in the number or value of users on one side of a platform can increase the value of the product to the other groups of users. This interdependency can create a feedback loop that can exacerbate the extent to which the market may be prone to tipping (and firms prone to 'winning' or failing). This also means that mergers between multi-sided platforms have greater potential to generate efficiencies than a merger between two one-sided firms due to the indirect (i.e. cross-platform) network externalities that result from an increase in size.⁵

As noted above, these effects are currently reflected in the MAGs.⁶ However, the MAGs could benefit from further clarity in the following areas:

(i) Specific circumstances and approach to crediting positive network externalities

Where network effects can be identified as strong and unsatiated, additional users will lead to benefits to all users and give rise to efficiencies. While the possibility for these efficiencies to arise as a result of an acquisition of consumers through a merger is recognised in the MAGs, they are rarely considered or granted credit, even in cases where the presence of strong network effects is accepted.

For efficiencies to be granted where network effects have been established, the questions to be answered should focus on, first, whether there is scope for additional network effects arising from the acquired users (taking account of the extent of single and multi-homing – see below) and, second, whether these could be achieved (in full) absent the merger through competition. Even where competition may lead to potential additional users, network efficiencies may be delayed relative to the outcome of a merger, leading to losses to consumers.

Clearly, any efficiencies would need to be balanced against evidence of anti-competitive effects, which may be exacerbated by the presence of network effects. In this context, where there are indirect network effects platform mergers may result in price increases that could yield positive efficiencies. For example, if advertisers are subject to post-merger price increases, this may increase the subsidy to consumers on the other side of the platform (i.e. a reduced price) causing the number of consumers to increase and in turn the audience for advertisers. This could potentially be net beneficial to advertisers (and overall).⁷ While demonstrating this involves a complex economic analysis of cross-platform pass-

⁵ See, for example, *The Antitrust Analysis of Multi-sided Platform Businesses*, Evans & Schmalensee: 'All else equal a merger of multisided platforms would ordinarily increase indirect network externalities by increasing the size of all customer groups and thereby provide efficiency benefits' (page 25).. Available at: <https://www.nber.org/papers/w18783.pdf>

⁶ The possibility for a market to tip at paragraph 5.8.6, switching costs at paragraph 5.4.5, barriers to entry at paragraphs 5.8.13 and 5.8.6, and efficiencies at paragraph 5.7.16.

⁷ See, for example, *Estimating platform market power in two-sided markets with an application to magazine advertising*, Song, M. 2013 Meeting Papers 1264, Society for Economic Dynamics. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1908621

through, the price elasticity of demand for consumers and the cross-platform elasticity reflecting the responsiveness of advertisers to consumer demand, it would be helpful for the MAGs to recognise the scope for this interplay in merger cases that involve overlapping multi-sided platforms (which increase the number of consumers and benefit advertisers) when supported by the evidence.

Where there is a monopolist incumbent in the market or where two firms merge to form a monopoly such that network externalities cannot be considered to be rivalry-enhancing (and thus able to counter an SLC finding), the MAGs should make clear that in such circumstances, submissions on relevant customer benefits are appropriate.⁸

(ii) The impact of single- and multi-homing

Where consumers use more than one platform (i.e. multi-home) this reduces the network externalities associated with use of any given platform. For example, if a consumer uses both Kik Messenger and Snapchat, they can easily communicate with a friend that uses either (or both). Firms may have a greater incentive to attract and retain single-homing consumers as they may be subject to even greater switching costs and so competition is likely to be stronger for these types of consumers. Where the platform is multi-sided, consumers that choose to single-home (perhaps because there are costs to multi-homing) can provide and entrench market power to the platform they use: advertisers on Facebook or drivers on Uber can only use that particular platform to access those consumers. The MAGs could usefully expand on the ways in which single-homing and multi-homing might be tested.

In assessing the scope for positive network externalities (see above), if consumers predominantly multi-home or could readily do so, there may be limited gains from adding additional users through a merger (in some circumstances gains may still arise if it can be shown there are costs to consumers to multi-home). Where consumers single-home, the scope for positive network externalities may be greater.

(iii) Distinguishing between service platforms and subsidised platforms

Multi-sided platforms can be service-based or subsidised. Service based platforms connect a supplier and consumer (for example, Just Eat connecting restaurants with food consumers, Amazon Marketplace, Airbnb, and Uber, as well as shopping malls). For these platforms, a consumer does not benefit directly from having other consumers on the platform.⁹ Nevertheless, indirect network effects can be very strong. Feedback loops mean that users will care about how many other users are on the platform as, for example, the more users on the platform, the more restaurants will use the platform and, the more restaurants, the more choice for consumers, and so on. These cross-platform network effects are typically bidirectional and positively correlated. The MAGs could helpfully note that in the context of service-based platforms, impacts on one side of the platform will likely have an impact on the other and this would be reflected in a merger assessment alongside the importance of developing a clear understanding of the cross-platform effects.

With subsidised platforms, customers on one side of the platform (typically advertisers) do not offer a service to the consumer that attracts them to the platform but instead subsidises their costs of using the platform (this impacts the price charged to users – considered further in the next section). Thus there is a separate service to provide content to attract the subsidised users. Content can be provided by third parties, the platform itself or other users. Examples include Snapchat, Facebook, and Twitter, as well as television and radio stations and newspapers. Where content is provided by third parties or users,

⁸ Recognising the significant number of recent cases the CMA has cleared on the basis of RCBs, the MAGs would benefit from reflecting the CMA's more recent analytical and policy approach to RCBs. See, for example, *Central Manchester University Hospitals/University Hospital of South Manchester*, August 2017

⁹ In some circumstances, there may even be negative direct network externalities. For example, other passengers would obtain their Uber or Lyft ride quicker if there were no other passengers and a restaurant would be more likely to be selected on a food takeaway platform if there were no other similar restaurants on the platform.

advertisers will also likely benefit from a larger number of content suppliers. There may or may not be direct network effects on the subsidised side of the platform (for example, social networks have significant network effects on the user side but a local newspaper does not).

Cross-platform indirect network effects are typically asymmetric: advertisers strongly desire more users on the other side of the platform but consumers will benefit from more advertisers only to the extent it subsidises them and, beyond this, are likely to be indifferent to advertisers or may actually prefer less (i.e. negative cross-platform externalities).¹⁰ Due to the cross-platform network effects being unidirectional, the weak cross-platform network effects experienced by consumers and content providers do not provide the same constraint on price increases to advertisers, which makes those parties providing subsidies more vulnerable to unilateral effects than the user and consumer side. There is also empirical support for this.¹¹ The MAGs could also usefully note the importance of exercising caution when theories of harm relate solely to the non-subsidised side.¹² In such circumstances, it would be important to have a very clear understanding of what is (and is not) important to users or consumers and specifically how harm to them would arise.

(iv) Indirect network effects also apply to complementary products

The MAGs currently frame indirect network effects in the context of two-sided products or two distinct groups of customers. However indirect network effects can also occur through the addition of complementary products or services that increases the value of a product. For example, the more complementary apps developed for iOS, the more popular and valuable iOS will be to consumers. Complementary products can be thought of as similar to content providers on subsidised platforms as discussed above.

(v) Mergers at different stages of technology and firm 'life-cycles'

Where markets are prone to tipping, competition is likely to first take place for the market. During this period, firms can commonly be making significant losses, investing heavily in marketing, customer acquisition, and product development. Initially prices charged (or marketing spend) can often be commercially unsustainable long-term and, as a result, would be expected to increase (or decrease in the case of marketing spend), adjusting to offer a rate of return on the investment. Firms, while concerned with customer retention, can often be more focused on attracting consumers into the market than competing with rivals. Continued competition is dependent on the availability of finance to sustain investment losses associated with requisite customer acquisition and new product development. These costs and the availability of funding can and should be assessed as part of a merger where relevant.

Investors will only be willing to fund firms through this *competition for the market* phase so long as there is a prospect of a future return. How many platforms survive to compete in a stage of sustainable profitability will depend on the strength of network effects, the availability of funding and the payback or exit horizon of initial investors, and the degree of horizontal and vertical differentiation between competing platforms.

Where network effects are sufficiently strong (and if platforms are only vertically differentiated or customers do not have heterogeneous preferences), it is likely the market will tip to a single provider. In such circumstances, the remaining incumbent (the 'winner') may be able to extract monopoly rents which may be a legitimate return to its efforts and investment in the initial stage. The extent of these

10 There are exceptions, for example, where consumers may value a wide choice of classified advertisers.

11 See, for example, *Effects of mergers in two-sided markets: Examination of the US Radio Industry*, Przemyslaw, J., American Economic Journal of Microeconomics (2014).

12 As was the case, for example, in *Experian/ClearScore*, Provisional Findings December 2018.

monopoly rents will depend on the persistence of the incumbent's market power and their continued investment and innovation.

The competitive process then shifts back to competition for the market. Rather than competition being between multiple firms in a nascent market as in the initial stage, this competitive process involves new entrants and innovations threatening the incumbent with future competition. Only when these entrants and innovations offer a superior product to the incumbent will there be an opportunity for them to compete with and potentially replace the incumbent, although this is far from guaranteed: the factors that led to a single provider (strong network effects, switching costs) also make it difficult for the entrant to gain customers. The incumbent can prevent future competition by excluding the entrant, new innovation or by innovating itself. The threat of innovation and entry may drive the incumbent to innovate further itself, which is a normal part of the competitive process.

During this stage, acquisitions by incumbents must be scrutinised carefully to ensure the incumbent is not removing a potential entrant in cases where there is unlikely to be other potential entrants. Alternatively, the acquisition may facilitate innovation where the incumbent is able to take an early stage idea and provide it with the skills, technical capabilities, and resources to innovate in a way that could not happen otherwise. Specific evidence that would be helpful for this assessment includes detailed analysis of: (i) the transaction valuation; (ii) the funding available and sought by the target (relative to anticipated requirements to expand and grow into a fully-fledged competitor) and (iii) the pre-merger strategy and realistic projections for growth of the target. Any business plans and targets must be interpreted in the context in which they are produced. In particular, it will be common for a nascent firm to have ambitious if not unrealistic targets in order to obtain additional funding.

Non-price parameters, monetisation and data collection – (ii), (iii) and (iv)

Subsidised multi-sided platforms often provide services to users for free (a monetary price of zero). The platform may however impose terms and conditions on the user that can involve, amongst other things, collection and use, or transfer to another party, of data on the consumer which can also raise issues around privacy. The data can be used to improve products, make them more convenient for consumers and to better target advertising towards them. In some cases, the data provided may be valuable enough that the equilibrium price is actually less than zero but this is not charged; this may also result in greater investment on the user side.

Consumers may be less responsive to price where products are offered for free (competitive reductions in price not being likely) and this may mean it is difficult to encourage consumers to switch or that platforms tend to compete on visible quality parameters. Consumers may also be unaware of the full extent of collection and use of their data and this means that some quality parameters are not immediately observable, even when these may be valued by consumers. This can mean that quality can be reduced without consumers being aware and able to respond.

These issues are less relevant to service based platforms. Nevertheless, data assets can be relevant in both contexts, representing an entry barrier that is difficult for an entrant to replicate and so may, in effect, entrench an incumbent's strong market position. Where a platform is also active as a supplier, data could potentially be used to foreclose competitors, which are also customers of the platform. This would particularly be the case where data is a key source of competitive advantage.

In addition, data assets can make market definition exercises complex. The merging parties may not overlap in any product or output market and the rationale for the transaction may be to acquire additional data assets.

The MAGs do not address any of these issues currently and could usefully be expanded in the following respects:

- Free subsidised services and a zero monetary price can still be associated with possible price effects and, while harm on the user side may be more likely to occur through non-price parameters, consumers can still be indirectly affected through more or less subsidies.
- There are potentially offsetting effects from the use of data that need to be weighed up: better, more targeted products and increased convenience set against using the data in ways which consumers may consider welfare reducing (for example, where privacy is reduced and behavioural biases taken advantage of). A merger can affect both elements and the welfare effect is uncertain and must be established not assumed in any case.
- Specifically, the MAGs should note an intention by the CMA to identify the relative importance of particular parameters of competition to consumers in any given market, including terms and conditions, privacy over specific aspects of the product and use of data. While non-price parameters, including those difficult to observe, may be affected by a merger, the impact that changes in these parameters have on consumers welfare cannot be assumed. This is important to outlining a clear theory of competitive harm, rather than defaulting to a generic unilateral effect that references an increase in price or reduction in quality (loosely defined) or innovation without a full assessment of each of those parameters.
- Where non-price factors are critical to the assessment, it will be important to understand and obtain evidence on the ease and speed with which these parameters can be varied and the likely response of rivals to changes in those parameters (e.g. do they always behave as strategic complements).
- Recognition that data assets when they are extensive can be used to impose or take advantage of consumer behavioural biases that may exacerbate (or dampen) unilateral effects concerns when data assets are brought together in a merger.
- The rationale for a merger may be to enhance data assets, which raises difficult issues around appropriate product market definition (as there may be no product overlap – current or potential – between the merging parties). Clearly such a merger requires a more creative approach to assessing the possibility for competitive harm and benefits to product development, including fully understanding the intended use of the data and which consumers (in which output market) may be affected. A first step to this is fully understanding the role that data plays (what it is used for, how it is obtained, how easy it is to replicate, its lifetime and depreciation).
- The MAGs could note the potential for data assets to be used to harm rivals and thus as a means of foreclosure (always balanced against the possible benefits of additional data acquired to consumers).

Alongside digital markets, any revisions reflecting an approach to non-price or zero price parameters should also take into account the CMA's recent experience in other markets characterised by non-price competition.¹³

¹³ See, for example, *Central Manchester Univesity Hospitals/University Hospital of South Manchester*, August 2017

3. Theories of harm

Loss of potential competition

The MAGs outline the CMA's current approach to assessing **actual potential competition**, asking: (i) whether the potential entrant is likely to enter absent the merger¹⁴ and (ii) whether such entry would lead to greater competition.¹⁵

We do not believe any of the market features that characterise digital markets justify materially changing this analytical approach. Nevertheless, it would be reasonable for the MAGs to expand these two limbs to provide greater clarity on the CMA's approach:

- In relation to the first limb, it would be helpful to note that likelihood applies to the entrant acting as a *meaningful future constraint* not merely entering. The assessment should include an analysis of (i) the requisite funding for product development and customer acquisition costs that would lead to the potential entrant being a meaningful competitor (which relates to the prospective strength of the entrant taking account of the fact that meeting a 'meaningful' threshold is easier where the market is particularly concentrated) and (ii) the funding available to the entrant to undertake this investment, including an analysis of the funding calls, previous investment, and investment horizons of existing investors. Funding is critical to many digital markets as these are often nascent markets where firms may not yet be profitable – uncertainty over future earnings can make funding less certain than in other contexts or can lead to investors having short-term investment horizons leading to a sale. As noted above, clearly there are circumstances where there is a risk that incumbent operators in concentrated markets strategically acquire potential entrants (so-called 'killer acquisitions') but an acquisition can also be motivated by the potential entrant's investor exit plans with trade buyers often the most likely potential purchaser.
- In relation to the second limb, it would be reasonable for the MAGs to note that where an acquiring company operates in a market with high levels of concentration and entry barriers this second limb is highly likely to be met (save for extraordinary circumstances) and the CMA will be particularly vigilant in assessing the likelihood of entry.

We do not believe there is any justification for lowering the likelihood threshold in circumstances where the second limb is met as this risks leading to speculative judgements by the CMA that are very difficult for merging parties to rebut. This is especially true where the target is not currently active (nor has an intention to enter) with a product that would directly compete with the acquirer but where the acquirer seeks to acquire 'users'. The assessment of likelihood must be based on evidence available to the CMA at the time of review and meet a high evidentiary standard. As such we support the application of the 'KLM/City Jet/VLM approach' to assessing likelihood.

We have no suggestions to review the approach to perceived potential competition as outlined in the MAGs.

In addition to the established framework for actual and perceived potential competition, the CMA has recently taken the approach that analysis of the transaction valuation can be highly probative of the intentions of the acquiring firm. We fully support this. Such detailed valuation analysis, undertaken recently in *PayPal/iZettle*, can provide useful evidence of whether the acquiring firm is removing a

¹⁴ In its approach to assessing likelihood, the CMA has also commonly followed the 'Air France KLM/City Jet/KLM approach' (see OFT Decision of May 2008, paragraph 108 to 111) of assessing, first, the likelihood of entry (in absolute terms) and, second, whether the target is uniquely positioned or most likely to enter (i.e. relative to other possible entrants). This is consistent with the approach of the European Commission.

¹⁵ MAGs, paragraph 5.4.15.

potential entrant or has intentions to increase price post-merger (and provides a meaningful way in which merging parties can rebut such a theory of harm). This requires a detailed analysis of what specifically is underlying any future cash flow assumptions and their relevance for a competition assessment, including importantly the economic context for such assumptions. Where weight is given to (subsequent analysis of) contemporaneous valuation then this should also be interpreted as a credible realistic assessment of a firm's expectations for the efficiencies that will arise from the merger.

Loss of innovation

Assessing the effects of a merger on innovation can be different to assessing static price effects for several reasons. First, the consequences of the effects (both positive and negative) on incentives to innovate for productivity and consumer welfare have the potential to significantly outweigh standard static unilateral price effects. Second, the process through which innovation occurs is a dynamic one meaning that assumptions made in a static assessment about fixed technology may be less relevant. Third, R&D can also be subject to significant spillovers dependent on how easily firms can retain and appropriate knowledge underlying innovation. These spillovers can be internalised (and increased) as a result of a merger. Fourth, R&D can be a long-term process during which adjustments or decisions to discontinue are more difficult to make than say, changes to price.¹⁶

There is also significant ongoing debate about the relationship between competition and innovation and how this should affect merger assessment. Where two firms are innovating to develop new products, if both bring the product to market, they compete against each other, while if only one firm brings the product to market, that firm will be a monopolist. R&D investment of either firm can reduce the future potential profits of the other such that a merger will internalise this negative externality, lowering the merged firm's incentives to invest. It has also been argued that a merger may increase the returns to R&D investment thereby increasing the incentives to invest, although significant caution should be taken with such an assessment if the profitability driving *ex-ante* investment incentives is driven by an anti-competitive effect. Showing the relationship between profitability and investment incentives sufficient to mitigate concerns over this anti-competitive effect can be very challenging in the context of merger assessment.

Within the context of digital mergers, the network effects discussed above can also affect innovation. For example, where an incumbent benefits from significant network effects, even a substantially more innovative entrant can struggle to overcome the strategic advantages and entry barriers of the incumbent. This may mean that a firm offering only incremental innovation (or limited product differentiation) may provide or be providing a relatively limited constraint on a larger firm with strong network effects. In this case one may worry more about the effects of a merger when there is radical innovation that significantly advances technology or shifts consumer preferences. In these circumstances, there may be a need to distinguish customer relocation to a new technology from ongoing competition.

Nevertheless, we do not believe the market features discussed above in relation to digital markets warrants significant changes to the MAGs particularly where issues are still being debated. However there may be some issues that are not specific to digital markets where the MAGs could provide useful additional guidance.

- The question of how quick innovation can be replicated is an important question for the assessment of a merger, particularly for innovation theories of harm that are not based on existing overlaps. For example when firms commonly innovate to develop user improvements to a product or platform and they can be easily observed and copied by rivals, then these

¹⁶ For an overview of effects see *Mergers and Innovation*, P Rejibeau and K Rockett, September 2018. Available at: http://repository.essex.ac.uk/23644/1/Regibeau_Merger%20and%20Innovation%20RIS.pdf

significant spillovers to rivals can reduce the incentive to invest in the first place such that a merger that internalises these spillovers may increase the incentive to invest.¹⁷ However in markets where there is a significant 'first mover advantage' in innovating then one may be more concerned. Spillover effects could usefully be outlined in the MAGs.

- Where an innovation theory of harm is pursued, the assessment should articulate and evidence not only the mechanisms through which the loss of a competitor will affect the incentives to innovate, but also whether innovation is an important parameter of competition.

Finally, we believe that further work is required to understand the relationship between the ability for a new entrant to be acquired by an incumbent and the entrant's incentive to innovate. There are clear examples where potential entrants have invested – and investors have funded investment - under the expectation of an exit strategy that involves acquisition, and where the most valuable or only credible path to entry is via an existing player (see valuation analysis above). This may be relatively common in digital markets where start-ups have been funded by investors that have a investment exit horizon.

4. Counterfactual

In the context of network effects, the relevant stage of the technology and firm life cycle can be important to understand the relevant counterfactual. There may be circumstances where there is greater scope for the CMA to depart from pre-merger conditions of competition where the evidence allows it to. For example:

- Where markets are nascent, network effects strong and firms undifferentiated (horizontally), such that the market appears prone to tipping, competing firms that are of lower quality may seek to exit the market. This can occur even when those firms are still growing as they may not be expanding sufficiently to guarantee them the role of 'winner' (i.e. without significant investment in marketing they may not be able to 'catch-up').¹⁸ Funding may not be available, particularly when it appears the firm is in a downward spiral or has 'lost the race'.
- Where an incumbent purchases a potential entrant, and the criteria for potential entry are met, then an assessment of how strong the potential entrant will become is relevant. The entrant will have its own growth projections and strategy documents. Growth projections need to be considered with caution as the firm is likely seeking or has sought finance and needs to market itself to existing or new investors. Strategy documents may provide a guide as to the extent to which the potential entrant intends to compete head-to-head with the acquirer. More likely to be relevant is the valuation undertaken by the acquirer. This valuation will contain cash flow projections and underlying this user growth assumptions that will provide the expectations of the acquirer. It may also include opportunity cost assessments reflecting the extent of revenue the entrant would 'steal' from the acquirer absent the merger. These assumptions need to be considered in the wider economic context as often cash flow projections can include assumptions about specific parameters as proxies for a wider set of parameters to make the assessment more manageable. In addition, growth projections by prospective investors that the target has pitched to may be helpful.

In circumstances where there is a possibility of the target being acquired by an alternative party, this should only be considered the relevant counterfactual (at Phase 2) where evidence suggests it is the

¹⁷ See *Cooperative and Noncooperative R & D in Duopoly with Spillovers*, D'Aspremont and Jacquemin, *American Economic Review*, 78(5), December 1988, pages 1133-1137, which shows that the overall effect of a merger on innovation is positive if spillovers are high.

¹⁸ This was the case with Hungryhouse in *JustEast/Hungryhouse*.

most likely outcome (and such evidence would need to specifically identify the most likely alternative purchaser) and such an event is foreseeable. As the MAGs rightly note, *[g]iven that the counterfactual incorporates only those elements that are foreseeable, it will not be necessary for the CC to make finely balanced judgements about what is and what is not in the counterfactual.* Where the CMA cannot foresee a specific alternative purchaser, it should not make speculative judgements about possible counterfactuals.

At Phase 2 where a specific alternative purchaser can be clearly identified as the most likely outcome absent the merger, the CMA is in a position to conduct an in-depth assessment of one transaction compared to another, just as it has in past cases. This may mean that a merger which would be assessed as anti-competitive relative to pre-merger conditions of competition would be allowed to proceed on the basis that the most likely outcome is sale to an alternative purchaser that is not substantially less anti-competitive than the current purchaser.