Written evidence from the Centre for Competition Policy (CCP)

Merger Efficiencies Review: Rivalry-Enhancing Efficiencies

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Centre for Competition Policy (CCP)

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Summary

This submission responds to a selected subset of questions in Figures 1-4 of the CMA call for evidence (https://tinyurl.com/cvfaxfjb). It focuses on how the CMA can assess rivalry-enhancing efficiencies credibly in markets where competition is primarily on non-price margins and where dynamic investment and innovation are central, using a mechanism-based evidentiary approach with staged verification.

1. **Figure 1 Q1 (Current framework).** The CMA's current framework for the cumulative conditions used to assess efficiencies is theoretically sound, such that substantive reform is unnecessary; however, the framework for practical implementation should be reconsidered to ensure its operational efficacy.

2. **Figure 1 Q2(a) (Timeliness).** Timeliness should be assessed with reference to the adjustment horizon of the specific mechanism through which efficiencies are expected to enhance rivalry, rather than a single generic timeframe. Early, verifiable indicators of implementation should carry primary weight, while longer-run evidence should serve to confirm persistence and magnitude as additional data become available.

3. **Figure 1 Q2(b) (Balancing across time, parameters, and customer groups).** Balancing should recognise that efficiencies and harms may differ in timing, affect different competitive parameters (such as price, quality, variety, and innovation), and impact distinct customer groups. The assessment should therefore avoid treating small price effects as sufficient evidence of overall competitive outcomes and instead compare benefits and harms across the relevant dimensions.

4. **Figure 1 Q3 (Which transactions/markets are more likely to create efficiencies).** Efficiency likelihood is heterogeneous: efficiencies are more plausible where integration relaxes investment constraints, combines complementary capabilities, or improves governance and coordination, and less plausible where the primary effect is the elimination of rivalry between close substitutes.

5. **Figure 2 Q1 (Types/extent of evidence; variation by efficiency type).** Evidence standards should be mechanism-specific and proportionate: operational product and implementation metrics are most informative for dynamic and non-price efficiencies, while structured or bounded counterfactual analysis may be needed where key mechanisms, such as platform quality or visibility, are only partially observable.

6. **Figure 3 Q2 (Evidence for innovation/dynamic efficiency claims).** Innovation claims are most credible when they are supported by multiple, complementary indicators of both inputs and outcomes (for example, R&D, product introductions, update activity, and portfolio reallocation), rather than relying on a single proxy.

7. **Figure 3 Q5 (Challenges assessing dynamic efficiencies; practical solutions).** Key challenges include measurement, attribution, and latent mechanisms; practical responses are pre-specified measurement plans, transparent checks of pre-trends using suitable comparators, sensitivity-based and bounded counterfactual approaches where mechanisms are not directly observable, and staged evidential demands reserved for cases where efficiencies are central.

8. **Figure 4 Q4 (Improvements aligned with the 4Ps).** The 4Ps can be operationalised through early standardised mechanism statements, published templates and exemplars by efficiency type, proportionate evidential escalation where efficiencies are outcome-determinative, and structured engagement on measurement and counterfactual design.

Recommendations at a Glance

We propose a set of practical refinements to the CMA's implementation of its existing framework for rivalry-enhancing efficiencies. These proposals preserve the current legal

criteria while improving their operationalisation in line with the 4P principles of *pace, predictability, proportionality, and process*. They are particularly relevant in markets where competition occurs primarily on non-price margins and where dynamic investment and innovation are central.

1. **Standardised Efficiency Mechanism Statement (EMS).** Require merging parties to submit, at an early stage, a concise and structured statement identifying the claimed efficiency, the causal pathway to rivalry enhancement, implementation milestones, and early verifiable indicators.

2. **Published Templates and Exemplars by Efficiency Type.** Improve predictability by publishing short templates and illustrative examples of accepted efficiency mechanisms, including indicative time horizons appropriate to different categories of efficiencies.

3. **Staged Evidence Ladder with Proportional Escalation.** Clarify what constitutes sufficient short-term confirmation versus longer-run validation, reserving the most resource-intensive evidential requirements for cases where efficiencies are outcome-determinative.

4. **Structured Multi-Dimensional Balancing.** Require a structured mapping of benefits and harms across time horizons, competitive parameters (price, quality, variety, innovation, etc.), and affected customer groups, without requiring all effects to be collapsed into a single scalar metric.

5. **Pre-Specified Measurement Plans with Triangulation.** For dynamic efficiencies, require parties to submit a small set of complementary indicators (outcome-based, allocation-based, and where feasible capability-based) explicitly linked to the claimed mechanism.

6. **Bounded Counterfactual and Sensitivity Analysis for Latent Mechanisms.** Where efficiency mechanisms operate through partially unobservable governance or platform channels, permit structured range-based analysis rather than demanding point precision.

7. **Early Engagement Focused on Measurement Design and Sector Expertise.** Structure engagement around agreeing measurement and counterfactual design at an early stage, and where appropriate draw on sector-specific regulatory expertise to reduce error costs.

Scope note. This submission focuses on the operationalisation of rivalry-enhancing efficiencies and responds to a selected subset of the questions in Figures 1–4 of the Call for Evidence.

Table 1: Mapping of recommendations to CMA questions and 4P principles.

Recommendation	**Primary CMA Questions**	**4P(s)**	**Practical Effect**
R1. Efficiency Mechanism Statement	Fig. 2 Q1; Fig. 3 Q2, Q5; Fig. 4 Q4	Pace, Process	Standardises early articulation of mechanism, milestones and indicators.
R2. Templates and Exemplars	Fig. 1 Q1; Fig. 1 Q2(a); Fig. 2 Q1	Predictability	Clarifies evidential expectations and credible time horizons.
R3. Evidence Ladder	Fig. 2 Q1–Q2; Fig. 3 Q5; Fig. 4 Q4	Proportionality, Pace	Aligns evidential intensity with centrality of efficiencies.
R4. Multi-Dimensional Balancing	Fig. 1 Q2(b)	Process, Predictability	Makes trade-offs explicit across time, parameters, and groups.
R5. Measurement Plan + Triangulation	Fig. 3 Q2; Fig. 3 Q5; Fig. 2 Q1	Process, Pace	Focuses data collection on mechanism-linked indicators.
R6. Bounded Counterfactual Approach	Fig. 2 Q1–Q2; Fig. 3 Q5	Process, Proportionality	Permits structured sensitivity ranges where mechanisms are latent.
R7. Early Measurement Engagement	Fig. 4 Q1–Q4	Pace, Process	Improves clarity on what should be observable and when.

Detailed responses

This submission addresses the CMA's Call for Evidence under the two themes identified in the consultation. Within each theme, we focus on a subset of questions (embedded in Figures 1–4 in the call) where we can provide the most relevant evidence and methodological/academic insight.

Figure 1 Q1 The CMA's current framework: How should the CMA update its implementing framework to the assessment of rivalry-enhancing efficiencies?

Most competition law regimes consider pro-competitive efficiencies when assessing the competitive effects of mergers, following a common framework that requires efficiencies to: enhance rivalry in the market(s) where the merger raises competition concerns; be timely, likely, and sufficient to prevent an Significant Impediment to Effective Competition (SIEC)/Substantial Lessening of Competition (SLC) from arising; be merger-specific; and benefit customers in the relevant market(s). These conditions, as reflected in the CMA's framework, play an important role in reducing uncertainty and error costs in the assessment of efficiencies. However, if applied too rigidly or set at an unduly high standard, they may result in most efficiency claims being rejected and risk signalling a hostile stance towards parties' submissions, thereby foregoing efficiencies capable of mitigating a SLC. The current framework is conceptually sound and does not necessarily require substantive reform, but the limited contribution of efficiencies to clearance decisions suggests that its practical implementation could be updated.

Challenges in the submission and substantiation of efficiencies, including long time-

frames for investment-related efficiencies to materialise; uncertainty about the scale, scope, and timing of efficiencies; uncertainty regarding immediate and future market reactions; asymmetries between short-run price effects and longer-run non-price benefits; and uncertainty about the evolving incentives of merging and non-merging firms can be mitigated without altering the core framework. In particular, the CMA may wish to consider the following:

1. The CMA may wish to provide guidance on how efficiencies can be claimed and substantiated under each of the existing criteria, including concrete examples of recognised efficiencies in specific settings.

   For instance, in *Asda/Sainsbury* (2019), the CMA recognised that purchasing synergies would be deliverable within a reasonably short period and, in effect, established a timeliness benchmark of around three years for similar supermarket transactions, as reflected in *Ahold/Delhaize* (2018), *Tesco/Booker* (2017), and *Sainsbury's/Argos* (2016). The CMA may wish to incorporate this decisional practice into the Merger Assessment Guidelines (MAG), clarifying when the timeframe for assessing efficiencies may differ from that used in the competitive effects analysis, and under what conditions longer assessment periods are appropriate (for example, where new technological standards are emerging, or where remedies effectively 'lock in' the realisation of efficiencies, as discussed in *Vodafone/Three* (2025)).

2. The CMA may wish to adopt a more flexible approach when applying the existing conditions to dynamic efficiencies. By providing cross-industry examples of recognised efficiencies, as above, the CMA could clarify how the MAG is to be applied and interpreted in a case-specific, proportionate, and realistic manner, without altering the underlying legal test.

3. The CMA may wish to prioritise and encourage early engagement with merging parties and third parties, in line with the Government's Strategic Steer and the CMA's 4Ps framework.

   To support investment and innovation, the CMA could remain open to structured early discussions that acknowledge the risk that regulatory intervention may reduce the scope and magnitude of efficiencies, particularly by weakening incentives to invest. Early engagement may help avoid foregone efficiencies by facilitating more tailored remedies. It should also encourage parties to submit the evidence needed to substantiate efficiencies, such as financial modelling of network integration and detailed investment plans, as illustrated in *Vodafone/Three* (2025).

4. The CMA could more systematically draw on the expertise of sectoral regulators when assessing efficiencies, particularly dynamic efficiencies with strong industry-

specific features, so that the existing framework can be applied flexibly without substantive modification.

This is particularly appropriate where harms and benefits are difficult to compare directly or cannot readily be quantified. In such cases, engagement with sector regulators to evaluate, validate, and, where possible, quantify merger efficiencies, especially dynamic efficiencies that may be substantial yet hard to verify, can be highly valuable despite associated administrative costs. Such cooperation can also reduce error costs, given that sector regulators possess specialised industry knowledge and technical expertise that complement the CMA's analytical toolkit.

For example, only a limited number of mergers have been cleared on the basis of relevant customer benefits, yet healthcare mergers of this kind may generate significant benefits for patients and commissioners through dynamic efficiencies, including higher-quality services and increased innovation in research and development, though to be proven, with potential implications for mortality, access times, and clinical outcomes. In these cases, many of the claimed benefits were assessed and supported by NHS Improvement (NHSI), which is required to advise the CMA on merger efficiencies under the CMA's Guidance on the Review of NHS Mergers (CMA29), paragraph 7.5. In the *Derby Teaching Hospitals NHS Foundation Trust/Burton Hospitals NHS Foundation Trust* merger, NHSI advised that the claimed efficiencies were merger-specific, highly likely to materialise within a reasonable timeframe, and capable of benefiting a large number of patients, findings that were also supported by key stakeholders (*Decision ME/6726-17*). This example illustrates how structured engagement with sector regulators can provide a practical and effective means of assessing dynamic efficiencies.

In practical application, the CMA may wish to elaborate how early-stage mechanism work can be used to encourage stakeholder engagement, clarify the evidence required to substantiate efficiency claims, and provide examples of recognised efficiencies under different conditions, without altering the core framework for assessing efficiencies. Updating the practical implementation in this way could improve predictability and transparency while preserving the analytical integrity of the current test.

The CMA may therefore consider offering more detailed guidance on the types of evidence that are likely to be persuasive at different stages of review, including indicative evidential thresholds for dynamic, investment-related, and innovation-based efficiencies. Such clarification would reduce uncertainty for merging parties and facilitate earlier and more focused submissions, thereby improving the efficiency of the review process. These changes would not require modification of the substantive legal standard or the existing conditions on efficiencies, but would enhance operational effectiveness by better aligning evidentiary expectations, procedural engagement, and analytical practice with

the increasingly dynamic nature of modern markets.

Figure 1 Q2(a) Timeliness of efficiencies: How should the CMA treat the timing of efficiencies when assessing whether they are likely to be realised and to enhance rivalry?

Efficiencies should be regarded as timely when they are expected to materialise within the period over which they can reasonably be anticipated to influence competitive dynamics. In practice, this means recognising that different mechanisms operate over distinct timeframes. Efficiencies stemming from organisational realignment, product reprioritisation, or modifications to platform governance may affect rivalry in relatively short order, whereas those associated with investment and innovation typically require longer to emerge and to be reflected in observable market outcomes.

The central challenge lies in ensuring that the assessment horizon is aligned with the relevant adjustment process. Evidence suggests that post-merger R&D restructuring is often protracted and may vary systematically between acquirers and targets, in case of mergers and acquisitions, implying that the effects of R&D-related efficiencies may only become apparent after several years (Szücs, 2014). Moreover, merger outcomes may depend critically on the timeframe adopted for analysis, given that short-run (price-based) effects may diverge from longer-run impacts on innovation and investment incentives (Lefouili and Madio, 2026). Related theoretical work indicates that mergers can alter both product-market rivalry and investment incentives where competition takes place along price and innovation margins (Federico et al., 2018; Motta and Tarantino, 2021). For these categories of efficiencies, the appropriate timeframe for assessment should therefore correspond to the evolution of investment and innovation decisions rather than a generic synergy timetable.

In operational terms, the CMA may wish to require merging parties to provide a clear articulation of the causal mechanism linking the merger to rivalry enhancement and to identify milestones at which relevant effects should become observable. This request might include demonstrable shifts in product development activity, changes in innovation pipelines, or modifications to governance and internal decision-making rules that plausibly affect the merging parties and rivals' competitive outcomes.

In practical application, the CMA could adopt a structured approach that requires parties to: (i) define the mechanism and its expected horizon; (ii) identify early, verifiable indicators of implementation; and (iii) specify longer-term indicators that would confirm persistence and magnitude as further evidence accrues. Where early indicators are consistent with the predicted mechanism and credible implementation is substantiated, the CMA could treat the efficiency claim as timely for the purposes of its decision-making, while transparently acknowledging any residual uncertainty and calibrating evidential

weight accordingly.

Figure 1 Q2(b): Balancing efficiencies against adverse effects across (i) time, (ii) parameters of competition, (iii) customer groups.

The assessment of efficiencies should recognise that efficiencies and adverse effects may differ in timing, may arise on distinct parameters of competition (such as price, quality, variety, and innovation), and may affect different customer groups. This approach is consistent with evidence that merger effects, particularly on innovation, are heterogeneous across contexts and depend on pre-merger conditions and the nature of rivalry (Haucap et al., 2019). A single, uniform presumption regarding net effects is therefore unlikely to be reliable.

Competitive harm can often be inferred through rivals' observed responses. Empirical studies show that post-merger conduct among non-merging competitors can provide valuable insights into the presence and magnitude of market power (Stiebale and Szücs, 2022). In digital and data-driven settings, similar reasoning applies where rivals' behavioural adjustments reveal changes in non-price competition (Affeldt and Kesler, 2021). Moreover, where consumers derive value from quality, product range, or innovation, welfare-relevant changes may occur through shifts in product mix or quality allocation, even in the absence of pronounced price effects (Johnson and Rhodes, 2021).

The CMA may therefore wish to require merging parties to present a structured mapping that distinguishes:

1. the expected *time horizon* of each claimed efficiency and adverse effect (short- versus longer-term);

2. the specific *parameters of competition* on which each effect is expected to operate (for example, price, quality, variety, or innovation); and

3. the *customer groups* or user segments expected to benefit or bear potential risks.

This approach does not require that all effects be collapsed into a single scalar measure. Rather, it ensures that comparisons are made across commensurate dimensions, that tradeoffs are explicit, and that differential impacts are properly accounted for. This could be made through a template of possible requirements.

In digital and platform markets, the balancing exercise is inherently multi-market. Adjustment processes frequently involve reallocations across non-price margins or changes to governance structures. For instance, a post-merger shift from extensive-margin product expansion to within-portfolio maintenance may affect variety and innovation differently from short-run impacts on quality or reliability. Similarly, changes to platform governance can influence rivalry by altering how visibility and quality are rewarded, rather than through direct price effects.

In practical application, the CMA could require parties to provide a mechanism-based mapping linking each claimed efficiency to specific potential harm channels, with explicit reference to timing and customer-group implications. On this basis, the CMA can assess whether the available evidence supports a net enhancement of rivalry on the parameters most relevant to affected users. Such an approach would improve pace, predictability, and proportionality by focussing assessment on the dimensions and customer groups that are genuinely at issue.

Figure 1 Q3: Which transactions/markets are more likely to create efficiencies (e.g., horizontal vs non-horizontal; market characteristics)?

The likelihood that a merger will generate efficiencies is systematically heterogeneous across transaction types and market environments. Dynamic efficiencies are more plausible where integration relaxes a binding constraint on investment, combines complementary capabilities, or improves coordination in a way that enables rivalry-enhancing innovation or quality improvements. By contrast, efficiencies are less plausible where the principal effect is the elimination of rivalry between close substitutes. This pattern is consistent with economic theory showing that merger effects on innovation and investment operate through multiple channels, including the internalisation of innovation externalities and the modification of product-market competition, and may differ across merging parties and their rivals (Federico et al., 2017; Motta and Tarantino, 2021).

In multi-product markets, an additional determinant is whether the relevant adjustment margin concerns the firm's *scope*, that is, its internal product mix and cannibalisation tradeoffs, rather than simple price competition on individual products. Research in multiproduct oligopoly indicates that firms may adjust which products to offer as market conditions evolve, suggesting that mergers can affect both product-line composition and market outcomes (Nocke and Schutz, 2018). Similarly, in R&D-intensive industries where firms allocate resources across multiple research avenues, mergers may alter the *composition* of innovation portfolios by internalising business-stealing and business-giving externalities between projects. These portfolio adjustments can, in some cases, be central to welfare assessment (Moraga-González et al., 2022).

In digital platform and ecosystem transactions, an additional factor is whether the merger affects the governance environment that shapes quality provision, visibility, and access. These governance mechanisms may play a decisive role even where traditional marginal-cost efficiencies are limited. Evidence from the cloud-computing sector demonstrates that merger effects on innovation (as measured by patent output) are heterogeneous: they tend to be more positive for market leaders and multi-sided platform firms, while average effects across the sector are often statistically indistinguishable from zero (Doan and Mariuzzo, 2022). Complementary evidence from the mobile application sector (Kummer

et al., 2026) indicates that efficiency outcomes also differ systematically by transaction type. Horizontal mergers in the app economy are associated with portfolio-stabilisation and coordination efficiencies that enhance ongoing development and consolidation activity, whereas non-horizontal mergers and acquisitions tend to generate integration-related efficiencies arising from the reallocation of internal capabilities, often accompanied by more limited expansion in product variety.

In operational terms, the CMA may wish to apply an early-stage mechanism screen based on information shared by the merging parties that classifies the plausible efficiency channel, such as marginal cost reduction, innovation or investment enhancement, or platform governance and quality effects, and then tailors evidential requirements accordingly. The degree of rivalry between the merging parties should inform this screening. In practice, this approach would support pace and proportionality by concentrating more detailed evidential analysis on the subset of cases where the proposed efficiency mechanism is both plausible and potentially decisive for the assessment outcome.

Figure 1 Q4: Are there circumstances in which efficiencies arising from a merger could create competition concerns, and/or circumstances where such concerns are unlikely to arise?

Efficiencies are generally pro-competitive and should not be treated as a competition concern in themselves. In some settings, particularly in highly concentrated or tipping-prone markets, the mechanism through which efficiencies are realised may coincide with, or enable, foreclosure or rivalry-weakening conduct. For example, efficiencies may arise through tighter control of a bottleneck (distribution defaults, platform rules, access to user data, or ranking and recommendation systems) that simultaneously reduces rivals' ability to reach users or scale. Such situations are best analysed within the theory of harm, for instance under foreclosure or barriers to expansion, rather than as a reason to discount efficiencies *per se*. The analytical question remains whether the mechanism enhances or weakens rivalry.

A practical complication is that in zero-price or non-price environments, standard tools for market definition and competitive set identification are often strained. When competition occurs primarily along quality, innovation, visibility, privacy, or governance dimensions, price-elasticity-based segmentation may mischaracterise both closeness of rivalry and the scope for rivalry-enhancing efficiencies. Improving predictability under the 4Ps therefore requires clearer guidance on how competitive proximity may be assessed in such contexts.

A growing empirical literature shows that digital trace data can supplement traditional approaches by measuring competitive proximity directly. Text-based similarity measures derived from product descriptions Hoberg and Phillips (2010, 2016) and platform-generated

relationship data, such as category trees or 'similar product' recommendation networks, can be used to construct rival sets and concentration metrics in digital markets Kesler et al. (2019a); Oestreicher-Singer and Sundararajan (2012). Evidence from app ecosystems further illustrates how platform design and visibility constraints shape competitive interactions Ershov (2024). Complementary work in the mobile application sector demonstrates how textual similarity, update activity, and portfolio overlap can be used to characterise competition across overlapping product spaces Kummer et al. (2026). Conceptually, these approaches allow agencies not only to delineate sets of competitors in non-price settings, but also to move beyond binary market definitions and quantify degrees of competitive closeness, thereby assisting in the assessment of whether claimed efficiencies plausibly strengthen rivalry or instead raise barriers to entry or expansion.

Incorporating such tools, where proportionate and transparent, would strengthen process and predictability. Clear guidance that NLP-based similarity metrics and recommender-system data may serve as supplementary evidence would enable a more accurate assessment of both anticompetitive risk and rivalry-enhancing efficiencies in markets where competitive boundaries are fluid and multi-dimensional.

Figure 2 Q1: Types and extent of evidence the CMA should consider (and whether this should vary by efficiency type)

The type and extent of evidence considered should be proportionate to the efficiency claim and to the specific competitive parameter through which rivalry enhancement is expected to occur. For efficiency claims relating to *non-price* parameters, such as innovation, quality, variety, sustainability, or privacy, the supporting evidence should extend beyond price and quantity data and be directly aligned with the relevant non-price mechanism (Haucap and Stiebale, 2023).

For investment and innovation-related efficiencies, feasibility constraints suggest that the CMA should prioritise evidence that is credible, verifiable, and realistically attainable within merger review timelines. The literature indicates that identifying merger effects on investment and innovation is often constrained by limited data availability and by the need for long observation horizons. The policy implication is that evidential limits should be made explicit and residual uncertainty acknowledged, rather than overstating the precision of estimates (Lefouili and Madio, 2026).

In practical terms, it is helpful to distinguish between two broad categories of evidence:

1. *Immediately verifiable evidence*, closely linked to implementation milestones. In fast-moving markets, such evidence may include time-stamped product roadmaps, release activity, and portfolio decisions, as well as observable market outcomes such as new product introductions, update frequency, and discontinuations.

2. *Corroborative evidence*, which may evolve more slowly but provides useful supporting

context. Examples include R&D input measures, resource allocation data, internal project pipelines with timestamps, and independent benchmarking evidence where available.

A relevant illustration of a non-price competitive parameter is privacy and data collection. Evidence from the mobile app industry demonstrates that levels of data collection, interpretable as a non-monetary 'price' in zero-price settings, tend to increase with market power and concentration (Kesler et al., 2019b). Where mechanisms are partially latent, as in platform settings where outcomes depend on the governance of quality and visibility, the CMA may rely on structured counterfactual analysis that is transparent about assumptions and explores sensitivity across plausible intervention ranges. Mariuzzo and Zhang (2026) provide an applied example of this approach, using counterfactual 'rating advantage' wedges to model equilibrium responses to governance-related interventions.

In operationalising these principles, the CMA may wish to adapt evidential expectations in line with the type and centrality of each efficiency:

- Require mechanism-linked, verifiable evidence as the default standard.
- Request corroborative investment and capability evidence where this is feasible and probative.
- Apply structured counterfactual tools, with transparent assumptions and sensitivity tests, where efficiency mechanisms operate through governance or non-observable channels (Lefouili and Madio, 2026; Mariuzzo and Zhang, 2026).

The CMA should also specify what constitutes sufficient short-term confirmation versus longer-run validation, thereby enabling parties to target evidence towards aspects most relevant to decision-making. This approach would enhance transparency, predictability, and analytical robustness while maintaining proportionality in evidential requirements across efficiency types.

Figure 3 Q2: Evidence the CMA should consider to assess innovation/dynamic efficiency claims

Innovation and dynamic efficiency claims should be assessed through *triangulation* across different types of evidence capturing both outcomes and underlying capabilities. Because innovation is complex, and as such no single proxy provides a complete picture; indicators such as R&D expenditure, patenting activity, and product outputs may evolve differently and support distinct inferences (Bennato et al., 2021). Where the claimed mechanism relates to investment aimed at generating *new products*, evidential focus should centre on indicators directly linked to product development and market introduction, in line with

theoretical work on how mergers affect firms' incentives to invest in new product R&D (D'Annunzio et al., 2025).

In operational terms, the CMA may wish to require parties to define, *ex ante*, a structured measurement set that corresponds to the claimed efficiency mechanism and that differentiates between early observable responses and slower-moving validation measures. In digital product markets, many innovation-relevant dimensions are directly observable in real time. Evidence indicates that high-frequency product activity, such as launches, updates, acquisitions, or discontinuations, can serve as a useful indicator of dynamic adjustment following consolidation (Kummer et al., 2026). In other sectors, the sensitivity of conclusions to measurement choice is substantial, as shown by studies demonstrating that outcomes may differ depending on whether innovation is measured by R&D inputs, patents, or product outputs (Bennato et al., 2021).

In practical application, the CMA could require each party to provide a mechanism-linked measurement plan satisfying three criteria:

1. At least one *outcome-based indicator* directly reflecting product introduction or development activity.

2. At least one *allocation-based indicator* capturing resource or portfolio reallocation relevant to the claimed mechanism.

3. Where feasible, one *capability-based indicator* that corroborates the firm's underlying capacity to generate and implement innovation.

Parties should specify which indicators are expected to move, the direction and timeframe of expected change, and the rationale linking these indicators to the claimed merger mechanism. This structured approach would enhance pace and predictability in casework by clarifying evidential expectations, while maintaining proportionality by focussing data collection on the measures most informative for the efficiency mechanism under assessment.

Figure 3 Q5: Challenges in assessing dynamic efficiencies and practical ways to overcome them

The assessment of dynamic efficiencies presents recurring challenges relating to measurement, attribution, and latent mechanisms, each of which calls for a proportionate and transparent methodological response.

The first challenge concerns *measurement*. Innovation is inherently multidimensional, and conclusions can vary depending on whether analysis focuses on R&D inputs, patents, or product-market outcomes (Bennato et al., 2021). To address this, the CMA may wish to require parties to submit a pre-specified measurement plan containing multiple indicators that are explicitly mapped to the claimed mechanism. Each indicator should

be accompanied by a rationale explaining the expected direction and timing of response relative to the merger.

The second challenge is *attribution*. Merging firms differ systematically, and innovation shocks may coincide with merger timing. The CMA could mitigate this difficulty by placing greater weight on analytical designs that examine pre-merger trends, exploit timing variation, or use matched comparison firms. Parties should also be expected to present transparent baseline trajectories to clarify how evidence distinguishes merger-induced changes from underlying momentum. In digital markets, where high-frequency outcomes can be observed, quasi-experimental approaches exploiting timing and benchmark comparators may assist in differentiating genuine post-merger reallocations from broader secular trends.

The third challenge relates to *latent mechanisms* in platform settings, where key determinants of performance, such as ranking algorithms, visibility, and quality contribution, are unobservable to external assessors. In these contexts, the CMA could combine requirements for verifiable documentation of governance and implementation changes with bounded counterfactual analysis. This analysis should aim to quantify plausible impact ranges under clearly stated assumptions, avoiding unwarranted claims of precision. A fourth, related challenge concerns the interpretation of innovation indicators around acquisition activity and financing conditions. Evidence from large technology-firm acquisitions demonstrates that such effects vary across innovation metrics (for example, venture capital investment versus patenting) and exhibit substantial heterogeneity across acquirers and periods (Gugler et al., 2025).

In practical application, the CMA may wish to adopt a structured framework that: (i) makes pre-specified measurement planning standard practice; (ii) requires clear discussion and testing of pre-trends and attribution; (iii) accepts bounded and sensitivity-based methods where governance mechanisms are partially unobservable; and (iv) stages evidential demands such that the most resource-intensive validation is reserved for cases where efficiencies are central to the overall competitive assessment. This approach would enhance pace and predictability by clarifying expectations in advance, while supporting proportionality by aligning evidential requirements with what can realistically be demonstrated.

Figure 4 Q4: Other improvements to embody the 4Ps (pace, predictability, proportionality, process)

A practical way to embody the principles of pace, predictability, proportionality, and process ('the 4Ps') is to introduce a more standardised and staged framework for assessing efficiencies, structured around the underlying causal mechanism.

Pace can be improved by requiring parties to submit a concise, standardised mechanism

statement early in the review process. This statement should set out the causal pathway linking the merger to the claimed efficiency, identify key milestones, and specify a short list of observable indicators expected to move if implementation is genuine. It could be a light process.

Predictability can be enhanced by publishing templates and short exemplars, organised by efficiency type, that illustrate what constitutes sufficient evidence and what time horizons are typically credible under different mechanisms.

Proportionality may be strengthened by aligning the intensity of evidential demands with both the plausibility of the mechanism and the centrality of efficiencies to the overall case assessment. More data-intensive validation should be reserved for claims that are likely to be outcome-determinative, while lighter-touch evidence should suffice where efficiencies are peripheral or uncertain.

Process improvements can be achieved by structuring early engagement around measurement design and, where applicable, counterfactual construction. This is particularly relevant in dynamic or platform-based markets, where underlying mechanisms may be only partially observable and where bounded, sensitivity-based approaches are often more credible than claims of point precision.

In practical application, the CMA may wish to standardise early mechanism-based submissions, adopt a staged model for evidential escalation linked to the significance of efficiencies in the assessment, and articulate clearer expectations for measurement and bounded counterfactual methods in non-price and governance-based efficiency contexts. Collectively, these steps would enhance pace and predictability for merging parties, maintain proportionality in evidential effort, and strengthen process by reducing uncertainty about what should be observable and when during the review.

Submitted on 26 February 2026.

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