

The Iterative Nature of Digital Regulation: Stakeholder-driven enforcement in the DMA and DMCCA

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Key Points

- The EU Digital Markets Act (DMA) and the UK Digital Markets Competition and Consumers Act (DMCCA) both adopt an iterative approach towards stimulating competition and enhancing contestability, driven by stakeholders seeking to compete or to enter digital markets.
- Both legal frameworks pursue an iterative and evolutionary approach, i.e. gradual, staged pathway toward greater competition. Rather than mandating comprehensive reform at once, they envision regulation as an evolving process - recognising that reshaping digital markets is a journey.
- This journey is fundamentally dependent on stakeholder engagement. Without strong input from market participants representing market realities, the evolution of digital regulation lacks input variations supporting richer regulatory outcome.
- Ultimately, both the DMA and the DMCCA are likely to yield converging compliance outcomes that reflect the practical realities of the markets they regulate: as competitive opportunities emerge, these realities will evolve, and the regulatory responses will adapt accordingly.

I. Introduction

Legislative responses to the dominance of Big Tech in the EU and the UK - namely, the Digital Markets Act (DMA)¹ and the Digital Markets, Competition and Consumers Act (DMCCA)² -

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¹ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) [2022] OJ L265/1.

² Digital Markets, Competition and Consumers Act 2024, UK Public General Acts, 2024 c. 13.

are two distinct pathways toward a common goal.³ While the two regimes are at different stages of enforcement,⁴ this article focuses on a shared underlying feature of these divergent legal frameworks: It contends that both the DMA and the DMCCA adopt an iterative approach toward stimulating competition and enhancing contestability. Rather than prescribing wholesale reform, DMA and DMCCA conceptualise regulation as an evolving process, a gradual, staged progression toward greater competition, acknowledging that reshaping digital markets is a journey.

This evolution is fundamentally driven by stakeholder engagement. Without the active involvement of market participants reflecting on-the-ground realities, enforcement agencies have limited capacity to assess effective compliance with the laws. Where the DMA and DMCCA provide pathways for stakeholders – particularly business users – they can assert their rights pro-actively and may influence the development of new principles and standards for these laws. The importance of stakeholder engagement has long been evident in the context of competition law and continues to influence the development of digital regulation, including the DMA and the DMCCA. For instance, the sanctioning of anti-steering practices has been largely driven by stakeholders such as Epic Games and Spotify - companies with strong commercial incentives to expand and establish their own distribution channels.⁵ Antitrust proceedings

³ Jasper van den Boom, Sarah Hinck, Oles Andriychuk and Rupprecht Podszun, ‘Digital Regulation Synthesis: Comparative Analysis of the DMA, Sec. 19a and the DMCCA’ (2024), available at SSRN: <https://ssrn.com/abstract=5079869>.

⁴ The first gatekeepers have already been designated under the Digital Markets Act, and the European Commission has already concluded its first investigations into potential non-compliance. For the DMCCA on the other hand, the first designations are expected to happen in October 2025, and enforcement has not yet started. For a full overview of all cases under the DMA including designations and enforcement see the official website: European Commission, Digital Markets Act (DMA), Case Search https://digital-markets-act.ec.europa.eu/index_en.

⁵ See cases *Apple - Online Intermediation Services - app stores - AppStore* - Art. 5(4) (Case DMA.100109) Commission Decision of 23 April 2025; *Apple Interoperability – Art. 6(7) DMA* (Case DMA.100203/204) Commission Decision of 19 March 2025; *Alphabet - Online Intermediation services - app stores - Google Play* - Art. 5(4) (Case DMA.100075), Commission Decision to open procedure of 25 March 2024 (ongoing). These cases deal with issues raised by Epic and Spotify under EU competition law earlier, and for which they have lobbied in favour of enforcement under the DMA, as they are aimed at allowing and facilitating third-party app stores, payment systems, and anti-steering practices.

initiated by these firms have directly shaped the anti-steering provisions in the DMA.⁶ This suggests that their strategic interactions with regulatory authorities have influenced enforcement priorities and prompted regulatory intervention. Conversely, in the absence of business users with the capacity to expand their business activities to compete, non-compliance is likely to go undetected and systemic issues to remain unaddressed. It seems that private enforcement does not fill the gap left by a lack of public enforcement, yet public enforcement in the early stages of implementing these laws may support effective private enforcement in later stages by establishing interpretations and standards that enhance legal certainty. This is part of the iterative process of shaping digital markets.

In this article, we describe DMA and DMCCA as a stakeholder-driven evolutionary process. In section 2 we briefly describe the analytical framework of evolutionary legal theory and the focus on the role of different actors. In section 3 we portray the DMA and DMCCA as constantly evolving legal frameworks that largely depend on stakeholders. We show that the dynamics of this model are partly in contrast with the initial legal design. In section 4, we turn to mobile ecosystems for illustration. In section 5, we conclude.

II. Digital regulation through the evolutionary lens

The paper interprets the DMA and DMCCA through an evolutionary lens: actors involved proceed step by step, offering and selecting new variations of compliance. This triggers feedback effects, new paths and further variations. *Vezzoso* has framed Big Tech regulation in

⁶ *Apple – App Store Practices (music streaming)* (Case AT.40437) Commission Decision of 4 March 2024; Epic Games, Epic Game Files EU Antitrust Complaint Against Apple, Official communication of 17 February 2021; Epic Games, Apple is Breaking the Law By Charging Fees for Steering, Imposing Restrictions on Third Party Stores, Official Communication of 23 April 2025; Tommi Lahtinen and Victor Pierre, ‘Spotify’s allegations – genuine anti-competitive concerns or a devious bite of the Apple?’ (Leiden Law Blog, 16 April 2019), available at <https://www.leidenlawblog.nl/articles/spotifys-allegations-genuine-anti-competitive-concerns-or-a-devous-bite-of>.

similar evolutionary terms.⁷ This approach yields two insights: It allows an understanding of regulation as an iterative process - a journey with moving milestones, and of a formative role which different actors play.

A. The fluid nature of the ‘search process’ in digital regulation

This conceptualisation begins with two trivial – yet challenging – insights, namely that the law, understood broadly, is (a) permanently solving problems of knowledge,⁸ trying to come up with solutions for real-world problems, and (b) constantly changing.⁹ This is trivial on the one hand as it is widely accepted that fields of law, digital regulation in particular, are developing. This development involves more than legislators: courts, agencies, contract drafters, and even private actors shape the law’s meaning through interpretation and practice. Each legal decision affirms or alters existing interpretations.

On the other hand, acknowledging this ever-changing, fluid nature of the law is challenging. The concept deprives the law of its core value of legal certainty. It also questions the hierarchy of actors since it aims at integrating the feedback effects coming from those subjected to the law. But understanding law as evolutionary clarifies how legal systems adapt and innovate.¹⁰ The evolution of law results from the continuous interplay of different factors, and it highlights that regulation is a permanent ‘search process’. In newer fields like digital regulation, this evolution is more pronounced than in mature legal domains, that have already

⁷ Simonetta Vezzoso, ‘The Digital Markets Act under Initial Scrutiny: A Variation-Selection-Adaption Framework’ (2025) (*forthcoming*).

⁸ Friedrich A. von Hayek, ‘Law, Legislation and Liberty’, vol 1: Rules and Order (1973); Martina Eckardt, ‘Technischer Wandel und Rechtsevolution’ (2001), 105; Rupprecht Podszun, ‘Wirtschaftsordnung durch Zivilgerichte’ (2014), 132 et seq.

⁹ Set out in more detail in Rupprecht Podszun, ‘Regelsetzung durch Gerichte als evolutionärer Prozess’, in: Florian Möslin (ed.), *Regelsetzung im Privatrecht* (Mohr Siebeck, Tübingen 2019), 255 et seq.; see also Mauro Zamboni, ‘From „Evolutionary Theory and Law“ to a „Legal Evolutionary Theory“’ (2008) German Law Journal 9, 515.

¹⁰ This focus on change was established by Richard Nelson and Sidney Winter, ‘An Evolutionary Theory of Economic Change’ (1982).

reached a high level of stabilisation, and the dynamics of emerging and changing modern markets are difficult to capture with static regulation.¹¹

Evolutionary theory of law, borrowing from the Darwinian concept,¹² frames legal change in terms of reproduction, variation, selection and adaptation or stabilisation.¹³ A decision or a legal statement can be seen as a reproduction of the law by offering interpretative variations. These compete, and some are selected over others. Market actors adapt, but in a new cycle of reproduction, feedback effects on the prior decisions may stabilise a selection pattern or deviate when there are new or other variations that, over time, seem better suited to solve the problem.

Regulation, particularly in emerging sectors, follows this variation-selection-feedback dynamic. Regulated entities propose compliance behaviours as ‘variations,’ which regulators then assess and ‘select’. This triggers an adaptation process in the markets. Stabilisation occurs when patterns are reinforced through subsequent decisions. But feedback can also take different forms, e.g. when actors work around a decision or do not follow it or do not make use of it. The legal procedures provide a forum for reflecting these processes in an official form.

In biological evolution, reproduction leads to new variations. Important drivers for variations are frequency of reproduction and diversity of inputs.¹⁴ Transferred to the field of law, one may conclude that more cases and more varied inputs yield richer, more resilient legal rules and decisions. Thus, “more cases make better law,” and broader stakeholder involvement improves outcomes.

¹¹ Jasper van den Boom, *Regulating the digital network industry* (Cambridge University Press, *forthcoming*), Ch. 7-9.

¹² Charles Darwin, ‘On the origin of species’ (1859); cf. Rupprecht Podszun (n 9), 255, 269.

¹³ Cf. Simonetta Vezzoso (n 7).

¹⁴ Cf. Rupprecht Podszun, (n 9), 255, 270.

The analogy to evolution in natural sciences need not be overstated in the context of social sciences.¹⁵ For this analysis, the key point is that regulation constantly evolves with all actors adapting. Its path toward a certain regulatory goal is not linear but unfolds gradually in a journey where the milestones are not reached over night.

B. The role of different actors, in particular stakeholders

Seeing law through this lens highlights the importance of who participates in the process of reproduction, variation, selection, and adaptation. Regulatory outcomes are not only driven by regulator and regulated entity but can also profit from the involvement of other actors, offering diverse variations, thereby enhancing choice for the selection process and stabilising or correcting selections made through their feedback. If more actors are involved, the outcome will be richer.

In digital regulation, these additional actors – commonly referred to as stakeholders – include business users, (horizontal) competitors, and end users of digital platforms, in the EU, representatives of Member States, for instance the competition agencies, and other actors in the field (such as data protection agencies, recognised in the DMA as participants of the High Level Group (Art. 40), and, of course, courts.

While in competition law, agencies usually try to select solutions that cater to the needs of end consumers, end consumers rarely participate in the variation and selection process. Instead, competitors and downstream businesses often act as proxies in the process of finding competition law solutions, e.g. in market testing of remedies. In digital regulation, rules aim to support both end and business users of digital platforms – with a stronger focus on the latter

¹⁵ Cf. Friedrich von Hayek, 'The Pretence of Knowledge' (1989) 79 *The American Economic Review*, 3, 6; Geoffrey Hodgson, 'Darwinism in economics: from analogy to ontology' (2002) *Journal of Evolutionary Economics* 12, 259, 278; J.W. Stoelhorst, 'Darwinian Foundations for Evolutionary Economics' (2008), *Journal of Economic Issues* 42, 415 et seq.

under the DMA. Yet, end users remain largely unrepresented, fragmented with diverse interests, and difficult to mobilise.

Business users of platforms, by contrast, could play a central role in the process of offering conduct variations and selection, yet, their position is complex: business users co-generate value together with the platform operator as part of their *actor ecosystem*.¹⁶ There is a mutual dependency between the parties, at least when the platform is still growing: the value of the platform is determined by the complements offered on it, and the complementors need the platform to offer their services.¹⁷ However, as the platform operator matures, it is able to vertically integrate and provide an increasing number of complements itself, this weakens the bargaining position of the complementor.¹⁸ If a complementor is too vocal, or does not agree with the terms of the platform operator, they are easily ousted from the ecosystem and their business models lose their viability.¹⁹

There are three main issues where it comes to business users offering variation and selection: First, business users rely on the gatekeeping platform operator for access to markets and customers, yet are also constrained by the same platforms, resulting in a love-hate dynamic. Second, their business models are adapted to the overpowering role of gatekeepers as business users try to maximise profits in the given setting with a dominant platform operator. Business models are rarely geared toward direct competition, even though the DMA puts forward contestability as a selection paradigm. Third, business users are a highly heterogeneous group:

¹⁶ Michael G. Jacobides and Ioannis Lianos, 'Ecosystems and competition law in theory and practice' (2021) *Industrial and Corporate Change*, Vol 30, Issue 5, 1199–1229.

¹⁷ Marc Bourreau, Pinar Dogan and Matthieu Manant, 'Modularity and Product Innovation in Digital Markets' (2009) 6 *Review of Network Economics*, 3.

¹⁸ Ariel Ezrachi and Maurice Stucke, *How Big Tech Barons Smash Innovation – and how to strike back* (Harper Collins 2024) Ch. 3.

¹⁹ The position of the business user within the ecosystem is determined by the maturity of the ecosystem operator. Jasper van den Boom (n 11), Ch. 6 conceptualises these dependencies across four stages of ecosystem competition: inception, growth, maturity, and incumbency. Platform operators are only dependent on business users in the stages for inception and growth. Once they are mature and able to exert gatekeeper and/or ecosystem power, business users are left with little protection absent regulation.

large firms like Epic or Spotify differ vastly from small traders on Amazon marketplace in terms of capacities and incentives to engage in formal processes.

Apart from business users and end users, there may also be potential competitors or alternative providers of some services. With regard to the power of gatekeepers, it is more likely, however, that offers are made in support of existing core platform services or complimentary to them.²⁰

Experience from private enforcement suggests only two groups of business users are likely to have the necessary incentives and resources to challenge gatekeepers: those backed by powerful corporate group interests and those fighting an existential battle.²¹ A regulatory system aiming to benefit from a multi-stakeholder approach, integrating diverse inputs into the variation-selection-process, must therefore recognise the limitations of these stakeholders and actively create avenues for their engagement in the evolutionary process.²²

C. Substantive outcomes of regulation as results of an evolutionary process

The paper's analysis does not hinge on full commitment to an evolutionary theory of law. This concept serves as a theoretical framework, while the conclusions drawn are intuitive:

First, digital regulation is an iterative process. Frameworks like the DMA and the DMCCA set out procedural pathways that share this ongoing regulatory evolution.

Second, outcomes depend heavily on who participates in this process. While legislators, agencies, regulated entities, and courts are the natural actors in the process, participation of other stakeholders – especially of business users – is also crucial. Their participation can enhance the

²⁰ Simonetta Vezzoso (n7), 9; see Recitals 32, 33 DMA.

²¹ Cf. Rupprecht Podszun, 'Private Enforcement and Gatekeeper Regulation: Strengthening the Rights of Private Parties in the Digital Markets Act' (2022) *Journal of European Competition Law and Practice* 13/4, 254.

²² For an analysis of the difficulties for stakeholders to come forward see Sarah Hinck and Jasper van den Boom, 'Closing information gaps in DMA enforcement—expectations, incentives, and the role of anonymity for whistleblowers' (2025) *Journal of Antitrust Enforcement*, available at <https://doi.org/10.1093/jaenfo/jnaf017>.

process of finding solutions to problems, although their influence is limited by dependence on platforms, varying incentives and capacities. It is important to keep this limitation in mind – many business users do not have the capacity or plan to compete with gatekeepers directly in the short term, even if the law means to facilitate this.

These two premises lead to another, more substantial observation: a perfect regulatory equilibrium for digital markets is unlikely to emerge in the first enforcement cycle. Instead, digital regulation must progress gradually. Enforcement agencies should not expect immediate optimal regulatory outcomes, even with a set of new detailed rules. Law constantly evolves in practice, shaped by back-and-forth between regulated entities and regulators—with stakeholder input countering platform resistance against regulation. This slow adaptation will continue until the dominance of gatekeepers fractures. Substantive regulatory outcomes are thus the product of evolutionary processes within the limits and possibilities by law. Legal frameworks can be designed in a way that strengthens or limits the influence of certain actors.

III. The DMA and DMCCA: the stakeholder-driven evolution of two frameworks towards one end

As described above, a legal framework is more likely to evolve according to a variation-selection-adaption-process and to benefit from a multistakeholder approach, if it creates a forum that enables such a process. The legal frameworks of the DMA and the DMCCA do not diverge markedly in their overarching design or in the categories of Big Tech practices they seek to address. Both frameworks adopt a two-step regulatory model comprising, first, the designation of relevant firms and, second, the imposition of corresponding obligations-stages that display

substantial structural similarities.²³ However, the regulatory mechanisms embedded in each stage differ significantly across the two regimes.

This section examines these apparent divergences and the role that stakeholders play in both legal regimes. The analysis proceeds in three parts. Section 3.1 considers how the DMCCA's design facilitates or constrains stakeholder engagement at both the designation and obligation stages. Section 3.2 undertakes a parallel analysis of the DMA. While these design choices appear to reflect distinct regulatory philosophies, we argue that they need not result in fundamentally divergent enforcement outcomes. Finally, Section 3.3 identifies key areas of convergence between the two legal regimes, suggesting that iterative regulatory practices and stakeholder engagement may ultimately align the enforcement paths of the DMA and the DMCCA.

A. The DMCCA: Evolution through participation?

The DMCCA is characterised by a flexible, participatory enforcement approach, reflected both at designation as well as conduct requirement/intervention level.

1. Designation stage

Already on the designation level the vast discretion of the CMA becomes visible as the law provides that any firm operating a digital activity, with a link to the UK, and over £25 billion turnover worldwide or £1 billion turnover in the UK is in the scope of the DMCCA and potentially an undertaking having a 'strategic market status' (SMS).²⁴ Such broad scope allows the CMA to designate any large online platform liberating the enforcer from a burden of proving the self-evident. The CMA starts its investigations *ex officio*, allowing to decide which

²³ See for a comprehensive comparative analysis of DMA and the DMCCA Jasper van den Boom, Sarah Hinck, Oles Andriychuk and Rupprecht Podszun (n3).

²⁴ Sec. 2-4 DMCCA.

designations have priority and to immediately start their qualitative assessment of the potential strategic market status of these firms.

The ongoing first designation procedures of the CMA also reveal the sensitivity that comes with such discretion. The CMA has – at the time of writing – only initiated investigations into Apple and Alphabet.²⁵ Where the DMA has led to the designation of 6 entities between May 2023 and September 2023,²⁶ it is uncertain whether the CMA can designate more than these two gatekeepers before the end of 2026. In addition to the vast discretion of the CMA, the DMCCA designation procedure is explicitly cooperative in nature. The CMA conducts its own qualitative investigations but has structural and mandatory moments to consult stakeholders.

The CMA is required to conduct a forward-looking assessment to determine whether the firm has substantial and entrenched market power and a position of strategic significance. In this assessment, the CMA must look at whether the undertaking has a significant scale within the activity, other undertakings use it for the provision of their services, the firm could expand its market power to other markets, and the firm has the power to determine how these others firms conduct themselves.²⁷ The DMCCA, unlike the DMA, does not rely predominantly on

²⁵ CMA, CMA takes first steps to improve competition in search services in the UK, Press Release of 25 June 2024, available at <https://www.gov.uk/government/news/cma-takes-first-steps-to-improve-competition-in-search-services-in-the-uk>.

²⁶ See the designation decisions in *ByteDance—Online social networking services* (Case DMA.100040) Commission Decision of 5 September 2023; *Microsoft—Online Social Networking Services; Microsoft—Number-Independent Interpersonal Communications Services; Microsoft—Operating Systems* (Cases DMA.100017, –23, –26) Commission Decision of 5 September 2023; *Microsoft—Online Search Engines; Microsoft—Web Browsers; Microsoft—Online Advertising Services* (Cases DMA.100015, –28, –34) Commission Decision of 12 February 2024; *Amazon—Online Intermediation Services—Marketplaces; Amazon—Online Advertising Services* (Cases DMA.100016, –18) Commission Decision of 5 September 2023; *Meta—Online Social Networking Services; Meta—Number-Independent Interpersonal Communications Services; Meta—Online Advertising Services; Meta—Online Intermediation Services—Marketplace* (Cases DMA.100020, –35 –44) Commission Decision of 5 September 2023; *Apple—iPadOS* (Case DMA.100047) Commission Decision of 29 April 2024, 28–66.; *Alphabet - online intermediation services – verticals* (Case DMA.100011); *Alphabet - online advertising services* (Case DMA.100010); *Alphabet - operating systems* (Case DMA.100009); *Alphabet - web browsers* (Case DMA.100008); *Alphabet - online search engines* (Case DMA.100004); *Alphabet - online intermediation services - app stores* (Case DMA.100002), Commission Decision of 5 September 2023.

²⁷ CMA, Digital Competition Regime Guidance (2025), 2.48.

quantitative criteria for its assessment.²⁸ Instead, the CMA is to conduct an in-depth investigation into the functioning of the firm and the ways in which it can exert its strategic influence.

The CMA's own investigation is, however, only one of several steps related to fact-finding. After the CMA's evidence is synthesized into the proposed decision, this proposal is published for the first round of public consultations. The CMA – according to its own procedure – is required to formally take account of these publications and then publish a new proposal.²⁹ This is again opened for a second round of consultations before the final decision is published.³⁰ The CMA does not have a formal obligation to include the views of all stakeholders, but it is bound by an obligation that there must be at least some differences between the text of its decisions before and after consultations.³¹ Moreover, the role of public consultations may be particularly important in light of the CMA's vast margin of discretion. The CMA will have to explain why the designation of a certain firm is prioritised. This explanation can be based in large part on the qualitative assessment of the CMA itself. However, public support in the consultation – particularly from business users – helps to highlight why this designation is necessary for the CMA to achieve the objectives set out under the DMCCA.³² After all, the CMA itself notes that it must enforce the law in a way that benefits business users and end

²⁸ The CMA does however use quantitative metrics as part of their qualitative assessment to determine the strategic significance of the firm, see CMA, Digital Competition Regime Guidance (2025), par. 2.68.

²⁹ The CMA must conduct consultations for designations according to Sec. 24 DMCCA. For the CMA's procedure in practice see CMA, Digital Competition Regime Guidance (2025); CMA, SMS investigation into Google's general search and search advertising services [2025], online: <https://www.gov.uk/cma-cases/sms-investigation-into-googles-general-search-and-search-advertising-services>; CMA, SMS investigation into Apple's mobile platform, online: <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-ecosystem>.

³⁰ See the procedure on CMA, SMS investigation into Google's general search and search advertising services (2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-googles-general-search-and-search-advertising-services>; CMA, SMS investigation into Apple's mobile platform, online: <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-ecosystem>.

³¹ CMA, Digital Competition Regime Guidance (2025), par. 2.48 et seq.

³² CMA, Digital Competition Regime Guidance (2025), par. 2.98 et seq: the CMA states it will be in constant dialogue with stakeholders throughout the designation procedure.

users. Vocal support from these parties would therefore inherently show that the CMA is working to fulfil its mandate.

The first round of consultations for Alphabet's designation that took place between 14 January, and 3 February 2025 revealed a clear interest of stakeholders to engage in the process. The CMA has published 47 non-confidential submissions in the consultation period, including submissions by Google (the designated entity), competitors, business users, natural persons and anonymous persons or undertakings, academic institutions, and representative organizations.³³ The scope of submissions varies greatly from short paragraphs to long academic studies. Google itself has also submitted a viewpoint detailing their preliminary defence in four pages.³⁴ According to the CMA's process, they have issued responses to the submissions to these consultations at the end of February, and have considered them in formulating the proposed decision. While the exact extent of the influence of various submissions is hard to determine, DuckDuckGo has issued a statement on the 25th of July 2025 welcoming the CMA's findings in its provisional decision.³⁵

The DMCCA makes it mandatory for the CMA to have at least one round of public consultations in the designation process. However, the CMA is free to decide the number of rounds that it takes to designate an entity. The CMA specifies this in their procedure beforehand, but there is no automatism. As highlighted by DuckDuckGo's submission, the CMA can nevertheless take into account or react to on-going developments, there are several prescribed steps within a process, and the decision is shaped by different influences.

³³ See Consultation Outcome, SMS investigation into Google's general search and search advertising services (2025), available at <https://www.gov.uk/government/consultations/sms-investigation-into-googles-general-search-and-search-advertising-services>.

³⁴ Ibid.

³⁵ DuckDuckGo, Submission to the Competition and Markets Authority on its Provisional Decision to Designate Google Search Under the Digital Markets, Competition and Consumers Act, Statement by DuckDuckGo of 25 July 2025.

2. Obligation stage

The relevance of the iterative, negotiations-based and cooperative character of the DMCCA becomes, however, even more visible at the obligation stage. To impose measures under the DMCCA on designated entities, the CMA has to consult stakeholders including the regulated entity along the way in a participatory process.

The CMA is granted two tools in the DMCCA to shape competition in digital markets: conduct requirements and pro-competition interventions. The CMA may impose any number of conduct requirements upon the designation of an entity with SMS.³⁶ The CMA again enjoys a wide margin of discretion when imposing conduct requirements: it may impose any conduct requirements or combination thereof to resolve existing issues in the market or to protect against the risk that the firm may use its strategic position in the future in a way that exploits consumers or businesses or undermines competition.³⁷ The CMA's Guidance describes in great detail the procedures for the CMA to determine the aim of a conduct requirement, what type or combination of conduct requirements would be suitable to achieve such an aim, and to consider whether such measures are proportionate.³⁸ Despite having clear procedural guidance however, the CMA has discretion to determine the scope of its substantive assessment. The process of imposing conduct requirements is iterative by its nature: conduct requirements are not meant to be imposed all at once, but gradually developed to reflect the conditions of the market. The CMA has already announced that it will impose a first round of conduct requirements to address the most obvious harms to competition, and that it will consider a second round of conduct

³⁶ CMA, Digital Competition Regime Guidance (2025), par 3.1.

³⁷ CMA, Digital Competition Regime Guidance (2025), par. 3.2.

³⁸ CMA, Digital Competition Regime Guidance (2025), par. 3.20-3.38.

requirements for more complex cases.³⁹ The CMA is free to impose, amend, or remove conduct requirements throughout the implementation period.⁴⁰

Aside from conduct requirements, the CMA can also impose pro-competition interventions which can take shape as either non-binding recommendations or binding pro-competition orders. Pro-competition interventions complement conduct requirements and can be used in a situation where the CMA establishes an ‘adverse effect on competition’.⁴¹ Unlike conduct requirements, which are requirements for the designated firm to behave in a certain manner or work towards a specific outcome, pro-competition interventions take shape as remedies whose purpose it is to create a ‘well-functioning market’. They do not necessarily relate to how the firm conducts itself, but rather the status of competition in the market overall.

The stakeholder-driven procedures play an important role in relation to the CMA’s enforcement of the DMCCA conduct requirements. It is mandatory under the DMCCA to open a public consultation when conduct requirements are considered (Sec. 24 DMCCA). The CMA must thus open a new consultation for every round of conduct requirements it aims to impose. As the conduct requirements are determined through a cooperative approach, stakeholders must flag where solutions pursued by the potential SMS-firm are unreliable. The importance that the CMA attaches to such consultations is highlighted as the CMA undertakes several voluntary consultation activities, such as its stakeholder workshop on mobile ecosystems, the multiple rounds of consultations (where the DMCCA only requires one round), and by providing detailed

³⁹ CMA, Strategic market status investigation into Google’s general search services, Roadmap of possible measures to improve competition in search (2025).

⁴⁰ CMA, Digital Competition Regime Guidance (2025), par. 3.82 et seq.

⁴¹ According to the Guidance, “[a] factor or combination of factors giving rise to an AEoC can be related to an SMS firm’s conduct, and include an action or failure to act, whether intentional or not, as well as any agreements between the SMS firm and other businesses. A factor or combination of factors giving rise to an AEoC may also not be caused by the SMS firm’s conduct – for example, it may be a structural characteristic of a sector such as high levels of market concentration or high barriers to entry or expansion.”, see CMA, Digital Competition Regime Guidance (2025), par. 4.6.

information and guidance on where it is looking for guidance.⁴² The CMA also highlights the responsibility of stakeholders in this process in their Guidance, where it notes that stakeholders are not only expected to flag issues, but also to provide evidence: “[I]n all cases, the CMA expects the SMS firm and/or other relevant third parties to identify the likely effects of CRs and provide the CMA with evidence of these. Parties will have the opportunity to do this when the CMA issues any invitation to comment early in the CR design process and/or when the CMA consults on proposed CRs. The CMA will assess submissions provided by all relevant parties in this regard and weigh these submissions having regard to the strength of evidence supporting them.”⁴³ In later stages of implementing and enforcing the law, similar procedures are likely to apply for pro-competition interventions. These are also mandatory under Sec. 54 DMCCA, and the Guidance specifies the importance of hearing any stakeholder that is potentially impacted by the pro-competition interventions either in writing or orally.⁴⁴

Thus, the enforcement design of the DMCCA, stakeholders can flag issues *ex ante* in the process of formulating conduct requirements and pro-competition interventions.

B. The DMA: The realities behind a self-executing façade

The DMA is based on a very different regulatory philosophy than the DMCCA. Instead of a flexible, negotiations-based and cooperative approach, the DMA is designed as formalised, *ex ante* regulation, relying on quantitative thresholds for designations and a fixed set of applicable, self-executing obligations.

⁴² See CMA, Strategic Market Status Investigation into Google’s General Search and Search Advertising services Invitation to Comment (2025), 13; CMA, SMS investigation into Google’s general search and search advertising services (2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-googles-general-search-and-search-advertising-services>; CMA, SMS investigation into Apple’s mobile platform (2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-ecosystem>; : the CMA conducts workshops with stakeholders, sets out its proposed interventions in their invitations to comment, and welcomes submissions on the topic of conduct requirements specifically, see CMA, Strategic Market Status Investigations into Apple’s and Google’s mobile ecosystems, Invitation to Comment (2025), 24-26.

⁴³ CMA, Digital Competition Regime Guidance (2025), par. 3.36.

⁴⁴ CMA, Digital Competition Regime Guidance (2025), par. 4.58-4.60.

A closer look at the business-centric purpose, the design and enforcement actions, however, shows that in reality, the DMA embraces an iterative process and holds possibilities to vary and adapt. Stakeholders, in particular business users, practically play a much more important role than the legal design of the DMA would suggest in this process.

1. Designation stage

The apparent self-executing, formalised design of the DMA framework, providing for only limited formal stakeholder participation, can be best observed at the designation stage, where the Commission has a lot less freedom and discretion than the CMA. However, certain aspects of the law show that the process of designation under the DMA reveals both an iterative as well as a stakeholder-driven element.

Under the general legal framework of the DMA, large platform undertakings operating certain core platform services listed in Art. 2(2) DMA can be designated as gatekeepers if they meet the qualitative criteria set out in Art. 3(1) DMA. They include (1) a significant impact on the internal market, (2) a core platform service which is an important gateway for business users to reach end users and (3) an entrenched and durable position. These criteria are specified by easy-to-apply quantitative criteria set out in Art. 3(2) DMA. These criteria include annual turnover, market capitalisation, as well as the number of active end and business users of the last three financial years. These quantitative thresholds work as presumptions. Potential gatekeepers are obliged to notify the Commission if they meet these criteria and may also bring forward arguments against designation of having gatekeeper power over specific core platform services under Art. 3(5) DMA (rebuttals). This approach has allowed the designations to happen fast: the DMA became applicable in May 2023 and by September 2023 the first six gatekeepers were designated.⁴⁵

⁴⁵ See the DMA designation decisions in *ByteDance—Online social networking services* (Case DMA.100040) Commission Decision of 5 September 2023; *Microsoft—Online Social Networking Services*; *Microsoft—Number-*

The designation procedure under the DMA offers benefits: it is predictable due to the quantitative presumptions and the requirement for the gatekeeper to notify, yet allowing for qualitative arguments under Art. 3(5) DMA creates flexibility. However, designations under the DMA cannot be described as tailored as the Commission is working first and foremost on the basis of whether the quantitative conditions are met.⁴⁶

Nevertheless, the DMA designation framework is not static. It also shows iterative elements, offering variations and selection, distinct from the status quo in the form of a formalised, quantitative-thresholds-based approach. These iterative elements come in the form of qualitative designations under Art. 3(5) and 3(8) DMA, following market investigations (Art. 17 DMA) and the investigation into new core platform services by way of a market investigation (Art. 19 DMA).

Qualitative designations, in deviation from the quantitative thresholds can follow from a rebuttal by the potential gatekeeper, demonstrating that despite meeting the quantitative thresholds, it does not reach the qualitative criteria in Art. 3(1) DMA. The Commission can either reject the rebuttal or open a market investigation to assess whether the qualitative criteria are met under Art. 17(3) DMA. Such a market investigation for designation purposes does not

Independent Interpersonal Communications Services; Microsoft—Operating Systems (Cases DMA.100017, –23, –26) Commission Decision of 5 September 2023; *Microsoft—Online Search Engines; Microsoft—Web Browsers; Microsoft—Online Advertising Services* (Cases DMA.100015, –28, –34) Commission Decision of 12 February 2024; *Amazon—Online Intermediation Services—Marketplaces; Amazon—Online Advertising Services* (Cases DMA.100016, –18) Commission Decision of 5 September 2023; *Meta—Online Social Networking Services; Meta—Number-Independent Interpersonal Communications Services; Meta—Online Advertising Services; Meta—Online Intermediation Services—Marketplace* (Cases DMA.100020, –35 –44) Commission Decision of 5 September 2023; *Apple—iOS (Case DMA.100047) Commission Decision of 29 April 2024, 28–66; Alphabet - Alphabet - online intermediation services – verticals* (Case DMA.100011); *Alphabet - online advertising services* (Case DMA.100010); *Alphabet - operating systems* (Case DMA.100009); *Alphabet - web browsers* (Case DMA.100008); *Alphabet - online search engines* (Case DMA.100004); *Alphabet - online intermediation services - app stores* (Case DMA.100002), Commission Decision of 5 September 2023.

⁴⁶ The Commission emphasises that the quantitative thresholds are leading in the ByteDance designation decision, where it states that it can designate as long as these thresholds are met unless the gatekeeper is able to argue that designation on the basis of these criteria is manifestly unfounded. For further analysis see Jasper van den Boom and Sarah Hinck, ‘ByteDance v. Commission: The EU General Court has set first bars for gatekeeper designation decisions under the Digital Markets Act’ (VerfBlog, 2024/7/30), available at <https://verfassungsblog.de/bytedance-v-commission-dma-gatekeeper-designation/>.

have to be triggered by rebuttal by the gatekeeper. According to Art. 3(8) DMA, the Commission can equally conduct a market investigation *ex officio* to assess whether the qualitative criteria are met despite the fact that the potential gatekeeper remains below the quantitative thresholds of Art. 3(2) DMA. Art. 17(4) DMA even allows for a variation in the case of gatekeepers which do not yet enjoy an entrenched and durable position in its operations but will do so in the foreseeable future. In this case the provision allows for a limited application of only certain obligations under the DMA to prevent the gatekeeper from reaching such a position. Hence, the DMA offers varying gateways to designating gatekeepers from which the Commission can select.

Another deviation from the perception of the static nature of the designation framework under the DMA, representing a more iterative, evolving approach, is the possibility to add new core platform services to the list contained in Art. 2(2) DMA, following a market investigation according to Art. 19 DMA. This way the DMA can be adapted to evolving market conditions.

In terms of stakeholders driving the process of designating gatekeepers under the DMA, the primarily formalised nature of DMA designations based on the quantitative thresholds allows for limited influence on the selection process. The potential gatekeeper itself has to declare whether or not it reaches the thresholds by producing the relevant evidence for the Commission only to assess. From a regulatory perspective, this can be justified by taking the perspective, that stakeholders – other than the gatekeepers – are primarily interested in a designation of gatekeepers, less in a non-designation. Therefore, they profit from a static, presumption-based designation, said to produce more false-positives than false-negatives.⁴⁷ However, whenever there is a deviation from a quantitative-thresholds-based designation, the legal framework of the DMA opens up windows for stakeholder participation. While not

⁴⁷ Cf. Jasper van den Boom, ‘Incumbent or Challenger?—Assessing Ecosystem Competition in the DMA’ (2024), 20 *Journal of Competition Law & Economics* 4, 409–444; Philipp Hornung, ‘The Ecosystem Concept, the DMA, and Section 19a GWB’ (2024) 12 *Journal of Antitrust Enforcement* 3, 396–437.

formally regulated in Art. 17 DMA, market investigations – by its very purpose – usually take into account views from market participants. Art. 19(2) DMA explicitly requires the Commission to consult third parties, in particular business users in the context of market investigations into new services. Moreover, the Commission can use the procedural powers granted to it (e.g., RFIs pursuant to Art. 21 DMA), third parties can provide information (Art. 27 DMA) and under Art. 41 DMA, three or more Member States can request the Commission to open a market investigation pursuant to Art. 17 DMA.

So far, these gateways to stakeholder-driven influence on designation under the DMA are rather the exception than the rule. There have been six market investigations in relation to designations conducted by the Commission, with one leading to a designation.⁴⁸ Nevertheless, these gateways are recognised in the DMA's legal framework, signalling an openness for stakeholders with strong incentives to drive and shape the designation process. There have, for example, been strong calls by businesses and politicians to start designating cloud and AI services under the DMA, which are not covered by the current designations of core platform services.⁴⁹ Moreover, business users and competitors seem to be turning to courts, thereby providing another type of feedback to the selection made by the Commission: the web browser provider Opera has filed a complaint with the EU General Court against the Commission's decision not to designate Microsoft Edge.⁵⁰ Hence, a variety of actors influencing designations

⁴⁸ *X – online social networking services* (Case DMA.10041) Commission Decision of 16 October 2024; *Apple – iPadOS* (Case DMA.100047) Commission Decision of 29 April 2024; *Microsoft – online advertising services* (DMA.100034) Commission Decision of 12 February 2024; *Microsoft – web browsers* (Case DMA.100028) Commission Decision of 12 February 2024; *Microsoft – online search engines* (Case DMA.100015) Commission Decision of 12 February 2024; *Apple – number-independent interpersonal communications services* (Case DMA.100022) Commission Decision of 12 February 2024.

⁴⁹ Peggy Corlin, 'DMA should urgently apply to cloud and AI, lead lawmaker warns German MEP Andreas Schwab thinks the DMA should apply to cloud and AI services' (Euronews, 30 January 2025), available at <https://www.euronews.com/my-europe/2025/01/30/dma-should-urgently-apply-to-cloud-and-ai-lead-lawmaker-warns>; Francesca McClimont, 'Exclusive: Cloud Coalition calls for new EU Tech law to cover DMA holes' (Global Competition Review, 1 July 2025), available at <https://globalcompetitionreview.com/article/exclusive-cloud-coalition-calls-new-eu-tech-law-cover-dma-holes>.

⁵⁰ See Opera Blog, 'Opera requests that the EU General Court secure the DMA's promise of free browser choice on all platforms' (12 July 2024), available at <https://blogs.opera.com/news/2024/07/opera-dma-request/>.

under the DMA can be observed, thus shaping the evolution of how gatekeepers are designated under the DMA.

2. Obligation stage

Taking a closer look at how the obligations on gatekeepers and their enforcement are designed reveals that also the realities behind the DMA may be much more iterative and stakeholder-driven than its enforcement design would suggest.

With regard to its general regulatory design, the DMA foresees an imposition of 22 obligations and prohibitions on all regulated gatekeepers through Art. 5, 6, and 7 DMA. Obligations in Art. 5 DMA were intended to be self-executing, while Art. 6 DMA obligations are considered to require further specification and alignment between the gatekeeper and the Commission.⁵¹

a) The iterative process in the DMA

When the DMA was enacted the idea of creating specific obligations was differentiated according to three different models of implementation:

The self-executing provisions of Art. 5 were, in the eyes of the lawmakers, so “clear and unambiguous” (rec. 31) that gatekeepers were expected to comply with them without further ado (after a transition period after designation) “fully and effectively” (Art. 13(3)). This concept of Art. 5 becomes even clearer in contrast to the programming of Art. 6 obligations and the obligations in Art. 7: For Art. 6, the DMA sees potential for “a dialogue with the gatekeeper concerned and after enabling third parties to make comments, to further specify some of the measures that the gatekeeper concerned should adopt in order to effectively comply with obligations that are susceptible of being further specified” (recital 65). Thus, Art. 6 is more

⁵¹ Rupprecht Podszun, ‘Introduction’ in Rupprecht Podszun (ed.), *DMA Commentary* (Beck/Nomos/Hart 2024), 9, 14.

iterative in nature: Its implementation may depend on a ping pong of gatekeeper and enforcer with third parties giving comments in between. Art. 7 takes a staggered approach to interoperability with set time limits for different steps of implementation.

In the decisional practice of the first years of DMA-application it turned out that even Art. 5 obligations are not a straight-forward implementation one-off. This is even acknowledged to a certain extent in the DMA itself. It is foreseen that gatekeepers “shall ensure and demonstrate compliance”, actually to a degree that measures are “effective in achieving the objectives of this Regulation and of the relevant obligation” (Art. 8(1)). This is a high and new standard in that the gatekeeper itself needs to prove compliance (not the authority proving non-compliance), and that compliance entails not only adherence to the wording but having effects – even effects in achieving the objectives of the Regulation as such.

It has been pointed out that this means full compliance at the point of time specified in Art. 3(10).⁵²

This “full compliance at once”-stipulation is unrealistic, in particular with a view to the goals of the DMA, namely the proper functioning of the internal market and ensuring contestable and fair markets (Art. 1(1)). It is hard to define these three aims as a fixed state that can be reached. It is even harder to imagine that these three aims are achieved within a six-month-period after obliging companies that have created a high dependency and an entrenched market position over decades. These three aims are dynamic ideas of goals that the EU can strive to achieve in steps. Art. 8(1) DMA does not describe a fixed target, but rather sets the direction for a journey. A violation occurs when the steps taken on this journey are not large enough, or in the wrong direction.

⁵² Daniela Seeliger, Art. 8 DMA’ in Rupprecht Podszun (ed.), *DMA Commentary* (Beck/Nomos/Hart 2024), 6, 7.

This is mirrored in the process. It is clear for Art. 6 and 7 that there are iterative steps within the dialogue and the specification process. But even for Art. 5, the Commission started the process of implementation with compliance workshops and reports where the gatekeepers offer their “variations” of DMA compliance.⁵³ The Commission had to evaluate these variations and selected some as compliant and others as non-compliant. Where it rejected the variations, it started non-compliance procedures. In these it worked with the gatekeepers in getting closer to achieving the aims. For instance, in its Meta 5(2) Decision, the Commission took into account that Meta had to comply with a new rule and that it was required to devise a nuanced compliance strategy because it had to comply with both the DMA and GDPR as mitigating factors.⁵⁴ The dynamics of the markets with changing designs, algorithms, technology makes it inevitable that there is a constant readjusting of aims.

Since there is no clear-cut idea what “fairness” or “contestability” mean it is impossible *not* to understand compliance as an ever-on-going process. It is therefore conceivable that the goals are tightened over time, and that compliance in 2025 does not mean the same as compliance in 2027.

b) Stakeholder involvement in the DMA

Gatekeepers have been given a proactive role in the DMA. Following Art. 8 to 11 DMA the gatekeeper is responsible for its own compliance. It must prove the effectiveness of their compliance strategies (Art. 8(2) DMA) and provide annual confidential and non-confidential reports (Art. 11(2) DMA). In an ‘ideal’ compliance scenario, the obligations under the DMA would be self-executing and would effect change without any enforcement by the Commission.

⁵³ See SCiDA Blog, ‘The Second Round of DMA Compliance Workshops – Compliance Progress or Slowdown?’ (SCiDA Blog, 11 July 2025), available at <https://scidaproject.com/2025/07/11/the-second-round-of-dma-compliance-workshops-compliance-progress-or-slowdown/>; SCiDA Blog, ‘A Week of Workshops: Observations from the DMA Compliance Workshops’ (SCiDA Blog, 27 March 2024), available at <https://scidaproject.com/2024/03/27/a-week-of-workshops-observations-from-the-dma-compliance-workshops/>.

⁵⁴ *Meta – Art. 5(2)* (Case DMA.100055), Commission Decision of 23 April 2025, 347-360.

In practice, the compliance solutions offered by gatekeepers serve as a ‘first offer’. On this basis, the Commission can then choose to enforce the law *ex officio* by way of investigations which may end in non-compliance decisions (Art. 29 DMA) or specification decision mandating specific compliance measures (Art. 8(2) DMA). This gives significant power to the gatekeeper in shaping compliance with the majority of the provisions in the DMA. Formalized consultations and participative rights of business users and other stakeholders in the compliance process, on the other hand, are not foreseen under the legislative design of the DMA.⁵⁵

Against this background, the regulatory design of the DMA reveals a tension between two different poles. On the one end, the DMA provides for a formalised set of *ex-ante*, largely self-executing rules, a ‘compliance-by-design-principle’ – creating a primary responsibility of the gatekeepers to design compliance measures effectively – and the Commission as the sole enforcer of the compliance obligations, with very limited formalized participation options for stakeholders, in particular business users. On the other end, a recalibration of the relationship between business users and gatekeepers is central to the DMA. Effective compliance with the DMA suggests therefore, that such a recalibration of the relationship between business users and gatekeepers has been achieved – an end for which input by business users seems essential.

The DMA’s unique focus on the rights of business users is recognized not only in the text of the regulation (where the term business user is mentioned exactly 200 times), but also in the objectives and design of the obligations themselves. The DMA – specifically – departs from the pursuit of consumer welfare that dominates competition law thinking. Instead, the DMA’s goals of fairness and contestability strive to ensure that the level playing field is recalibrated in favour of business users dependant on the gatekeepers.

⁵⁵ Sarah Hinck and Jasper van den Boom (n 22), 18-19.

Business users are also at the centre of the DMA's obligations, which grant them new rights and protections, which can be categorized into four different categories: For category 1 obligations, including Art. 5(9),(10), 6(4), (7), (8), (10), (11), (12), and 7 DMA, it is up to the business user (or in specific instances access seekers) to actively make a request to the gatekeeper to enjoy rights granted to them in terms of interoperability, access to data, or access to reports generated by the gatekeeper. With category 2 obligations, including Art. 5(3),(4),(5),(8), and 6(6) DMA, business users are granted rights that they can invoke against the gatekeeper if these are infringed upon, for instance, where it relates to user steering or limitations in how they can offer their subscriptions and services. Similarly, Art. 5(6) offers a procedural safeguard for business users, ensuring their access to the courts. In category 3, there are provisions that protect the interest of business users passively, such as Art. 5(2), 6(2), 6(3), and 6(5) DMA. Prohibitions on the use and combination of data, self-preferencing, and obligations to allow for the uninstallation of proprietary apps of the gatekeeper apply irrespective of business user involvement. Finally, category 4 contains a small number of obligations that are end-user driven, such as the invocation of data portability rights under Art. 6(9) DMA. Here, the business user can inform end-users of their rights and make it technically available but is not the driver of activity. In short, the categories can be understood as follows:

- Category 1: provisions that allow business users to actively make requests to gatekeepers
- Category 2: provisions that bestow rights on the business user that they can invoke
- Category 3: provisions that impose restrictions on the gatekeeper to passively protect business users (and indirectly end-users)
- Category 4: provisions that bestow rights on end-users that (in)directly benefit business users.

The majority of provisions are category 1 and 2 and depend on participation of the business user in one form or another: either the business user has to request access themselves, or has to invoke their rights through a court or by notifying the Commission. This means that – for the most part – the DMA can only be operational if there are business users that want a specific obligation to be enforcer, and if these business users are able to effectively use the rights bestowed on them.

Therefore, in practice, the ‘self-executing’ nature of the rules may be different than originally intended, as the DMA is not self-executing in the sense of producing these outcomes without any additional step. Instead, it is self-executing in the sense that as soon as a gatekeeper is designated, the DMA produces grounds for interventions through public enforcement and rights for business users that can, where necessary, be enforced with the help of the Commission or through courts in the form of private litigation. Fairness and contestability must be interpreted through a business user lens: the developed principles and priorities will serve the interests of business users of gatekeepers. From this perspective, it becomes clear that the DMA is stakeholder-driven, specifically business user-driven. Which is supported by the Commission’s prioritisation of investigations into behaviour that is most clearly harmful to business users and with strong business users advocating for strict enforcement of the DMA rules.⁵⁶

⁵⁶ See n. 6; see also the numerous calls by European vertical search providers to enforce against Google’s self-preferencing through both EU competition law and Art. 6(5) DMA; Heureka Group, Comparison shopping services call for actions to end Google’s Shopping Units, 17 October 2022; iDealo, Open Letter to European Commission on DMA Enforcement and Google’s Comparison Shopping Service, 7 November 2023; EuroCommerce, European Retail Associations call on European Commission to ensure the timely and adequate enforcement of the Digital Markets Act, 12 March 2025; Open Letter to the European Commission on Google’s Non-Compliance with the DMA, 5 March 2025. Enforcement of the DMA provisions so far is generally preceded by a number of such open calls to action, while bilateral contact between the Commission and industry participants happens behind closed doors.

c) The Apple Interoperability specification measures as an example

The importance of the iterative process and of business user approval of compliance measures become very visible in the Commission's first specification decisions under Art. 8(2) DMA, specifying the interoperability measures Apple has to take to comply with the vertical interoperability obligation of Art. 6(7) DMA.⁵⁷ The Commission found it necessary to specify how Apple should effectively comply with the Art. 6(7) DMA obligations to open up both Apple's physical and software environment for interoperability. Specification procedures differ from non-compliance procedures due to their cooperative, participative dimension between the Commission, the gatekeeper, and other stakeholders. Specification also acknowledges that the gatekeepers need guidance on their journey to full compliance, testing and checking different variations of possible compliance for their effectiveness.

According to the decision, after opening its investigation on 19 September 2024, stakeholders were heard through a public consultation open between 9 and 15 January 2025, where the Commission had received 63 submissions.⁵⁸ In addition, the Commission had sought information from access seekers to the Apple ecosystem on the effectiveness of the current solution and possible improvements through meetings and submissions, and had sent RFIs to developers.⁵⁹ In total around a dozen stakeholders were heard including developers, industry representatives, and non-profit organisations. The Commission makes it explicit that "the input collected from third parties has been used to inform the specification by providing qualitative insights and considering, to the extent relevant, the responses independently, not as a statistical measure of consensus."⁶⁰ This invitation of stakeholder input sets it apart from the non-

⁵⁷ *Article 6(7), Apple – iOS – SP – Features for Connected Physical Devices* (Case DMA.100203) Commission Decision of 19 March 2025; *P - Apple - Article 6(7) – Process* (Case DMA.100204), Commission Decision of 19 March 2025.

⁵⁸ *Article 6(7), Apple – iOS – SP – Features for Connected Physical Devices* (Case DMA.100203) Commission Decision of 19 March 2025, 25-55.

⁵⁹ *P - Apple - Article 6(7) – Process* (Case DMA.100204), Commission Decision of 19 March 2025, 33.

⁶⁰ *Ibid.*, 35.

compliance investigation, which seems more closed and where third parties have less opportunities to provide input. Moreover, it reveals significant similarities with the consultation-heavy, participatory approach to compliance with the law taken under the DMCCA.

This shows how Art. 6-obligations of the DMA work in practice: at first, an obligation is imposed that is open to interpretation by the gatekeeper. Different gatekeepers will introduce different compliance mechanisms depending on their business model and openness of their ecosystem as a starting point to the Commission in a first step. The Commission's assessments of and investigations into these compliance measures should be seen as the second step in filling in the contours of the obligations. The second enforcement phase is driven by business users as the question of effective compliance largely hinges on whether business users have an interest in the compliance measures. The DMA, while generally presenting itself as a top-down form of economic regulation, thus includes a bottom-up element.

C. Synopsis: the stakeholder-driven convergence between two different frameworks

As established above, the DMA and DMCCA have very different approaches to designating and to imposing obligations on Big Tech platforms. Both legal regimes initiate a process of discovery starting at different points: the CMA is bottom-up and works together with stakeholders to identify where intervention is most urgent before it imposes any regulatory obligations. The DMA starts top-down by imposing a codified framework for acceptable digital competition and then selects which of these obligations have priority.

More specifically, the DMCCA pursues a negotiations-based, participative approach under which the CMA has to bring different stakeholders, including business users, to the table to designate large digital platform ecosystems as having a strategic market status in the first

place, but also in a second step, to impose further an evolving set of conduct requirements and pro-competition interventions on them. Stakeholders can therefore shape the outcome of the enforcement of the DMCCA already *ex ante*. These will likely be those market actors who have the resources to contribute to the DMCCA proceedings in an impactful way and who expect significant gains from a change of business practices of the designated tech platforms. In addition, the CMA has clearly specified that it intends to create a pro-innovation and pro-business environment.⁶¹ Public consultations are embedded in the procedures of the DMCCA as a requirement, yet the CMA still goes beyond what it is legally obligated to do by inviting app developers for an additional workshop and opening additional rounds of consultations.⁶²

The DMA does not foresee to a similar extent such formalised ways for stakeholders other than the gatekeeper to shape the outcome of the DMA. This is specifically true for designations where there is very limited room for input from stakeholders as it operates on the basis of formalised proceedings and quantitative thresholds. The forum for stakeholders to engage in an evolutionary regulatory process for the benefit integrating diverse inputs into the variation-selection-process is therefore less formalised under the DMA.

However, both the business-user centric view of the DMA, enshrined in its goals of fairness and contestability but also in the scope of protection of the obligations contained in Art. 5 and 6 DMA specifically, paint a slightly different picture when it comes to the enforcement of the obligations and the assessment of effective compliance. As the obligations are targeted at granting business users' rights and protections to level the playing field vis-à-vis the gatekeeper, their success - i.e. the effective compliance of the gatekeeper with these

⁶¹ Sarah Cardell, New CMA proposals to drive growth, investment and business confidence (13 February 2025), available at <https://competitionandmarkets.blog.gov.uk/2025/02/13/new-cma-proposals-to-drive-growth-investment-and-business-confidence/>.

⁶² CMA, Mobile SMS Investigations – App Developer Workshop, Summary of the Workshop (25 May 2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-platform>. For the total procedure see CMA, SMS investigation into Apple's mobile platform (2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-ecosystem>.

obligations - depend heavily on their approval by business users. Such approval will be tested in an uptake of the new rights by business users, which may trigger non-compliance investigations. Also here, business users which have the resources to inform the Commission adequately about their views on the success of the compliance measures and who expect significant gains from effective compliance will be likely to impact the compliance outcome most significantly.

The stakeholder (business user)-driven road to compliance marks a significant factor of convergence between the two differently designed legal frameworks of the DMA and the DMCCA. The impact of stakeholders which the DMCCA considers on a pre-imposition-of-obligations-stage through consultation opportunities as part of its regulatory system, plays an important role on the post-imposition-of-obligations-stage in the DMA. As stakeholders, notably in the form of relevant business users, are likely to have the same interests in the EU and the UK and to push for largely the same outcome from the DMA as well as the DMCCA, this observation establishes a notable convergence between the two laws. For convergence to happen on the basis of stakeholder interventions, both systems must be open for such feedback effects. As shown above, this is given to a different extent in both regimes, partly depending on the type of obligation in the DMA. If the CMA and European Commission as the main drivers of the process embrace a learning approach that strongly relies on stakeholders, it is likely that convergence is achieved and problems of fragmentation between the different settings are minimised.

IV. Stakeholders & the iterative process to open up digital markets: early signals from mobile ecosystems

While the preceding analysis highlights both the iterative nature as well as the impact of stakeholders on the enforcement outcome of both the DMA and the DMCCA, ultimately

increasing the likelihood of a convergence of the compliance outcomes of the two legal acts – despite their different designs – the remainder of this article examines how this is reflected in the developments in relation to mobile ecosystems, which have been at the centre of recent DMA enforcement activity.

This analysis highlights the close connection between the stakeholder-driven and iterative element of evolution of digital regulation to gradually open up ecosystems. It also shows how the evolutionary theory variation-adaption-selection framework can help to explain a perceived evolution of business models: Business *users* can gradually start to become *competitors* with the gatekeepers, in particular when new markets are explored.

A. The significance of mobile ecosystems for competition in digital markets

Mobile ecosystems have been an important target of digital regulation everywhere. Driven by the smartphone revolution from 2007 onwards, mobile computing has become the main gateway to the internet for many users and the value generated in these environments is significant.⁶³ Despite the initial presence of competition, these vital digital markets have become dominated by two firms: Apple and Alphabet.⁶⁴ These undertakings exert significant control over their ecosystems, constituting important gateways for the vast majority of dependant business users to gain access to customers.

Apple and Alphabet had initially very different approaches to the openness of their ecosystem. Apple, formerly referred to as a ‘walled garden’, used to only allow interoperability between Apple devices, the use of its own cloud service, its own web browser and the exclusive installation of its App Store, with strict terms of access for any third party that wants to complement the Apple ecosystem.⁶⁵ Alphabet’s Android OS is open compared to Apple’s

⁶³ Daniel Mandrescu and Damien Geradin, ‘Creating contestability and fairness in mobile ecosystems: the contribution of the DMA’ (2025), CPI Antitrust Chronicle.

⁶⁴ Ibid.

⁶⁵ CMA, Market Investigation into Mobile Ecosystems, final report (2022), 22 et seq.

walled garden, yet Alphabet also uses its gatekeeper power to steer users towards its proprietary services. Agreements for exclusive default installation and the prominent placement of its Play Store and access points for search engage with users' path dependency to ensure that Google's services remain top picks for users. This appeals to the so-called 'default bias' of end users.⁶⁶ Hence, in both cases, businesses find it extremely difficult to compete with the proprietary services of the gatekeepers and therefore align their business models to what is enabled by Apple and Alphabet.⁶⁷

Efforts by competition law enforcement authorities to open up the mobile ecosystem and to introduce competition have been long ongoing. The Commission's 2018 investigation into *Google Android* serves as a starting point for the evaluation of competition in mobile ecosystems. This case was the result of a complaint from FairSearch, a Brussels-based industry association.⁶⁸ Here, the Commission investigated Google's contractual web of ties through which it prevented fragmentation and ensured a central position of its proprietary apps and search engine.⁶⁹ In 2019, Spotify complained to the Commission that Apple's commissions fees constituted margin squeeze, making it impossible for the music-streaming service to compete with Apple Music.⁷⁰ The Commission started its investigation on 16 June 2020, which culminated into an €1.8 billion fine, and the Commission declared it restrictive to refuse linking to another payment service.⁷¹ National competition authorities have helped to push these cases forward. The Dutch Competition & Markets Authority has played an important role in

⁶⁶ Jan Krämer and Richard Feasey, 'Device Neutrality – Openness, Non-discrimination, and transparency on mobile devices and general internet access' (2021), CERRE Report, 50-51, 67-70, available at <https://cerre.eu/publications/mobile-devices-net-neutrality-internet-access/>.

⁶⁷ *Google Android* (Case AT.40099) Commission Decision of 18 July 2018; Australian Competition and Consumer Commission, 'ACCC Digital Platform Services Inquiry 2020-25 -Final Report – Key Findings' (2025).

⁶⁸ Hausfeld Blog, 'Hausfeld clients succeed with competition complaint against Google's Android practices, leading to € 4,34 BN fine' (2018), available at <https://www.hausfeld.com/news/hausfeld-clients-succeed-with-competition-complaint-against-google-s-android-practices-leading-to-4-34-bn-fine>.

⁶⁹ *Google Android* (Case AT.40099) Commission Decision of 18 July 2018.

⁷⁰ *Apple - App Store Practices (music streaming)* (Case AT.40437) Commission Decision of 4 March 2024, 8 et seq.

⁷¹ *Apple - App Store Practices (music streaming)* (Case AT.40437), Commission Decision of 4 March 2024.

investigating Apple's restrictive terms related to in-app-payments following complaints by Match.com.⁷² The Commission has taken over the investigation into in-app payment systems broadly from the ACM,⁷³ but the latter has still issued a prohibition decision with periodic penalty payments for Apple's abusive behaviour in December 2021.⁷⁴ The French competition authority has concluded an investigation into Apple's App Tracking Transparency (ATT) programme on 31 March 2025, fining Apple €150 billion. This case originates from complaints by the associations Interactive Advertising Bureau (IAB) France, Mobile Marketing Association (MMA) France, Union des entreprises de conseil et achat media (UDECAM) and Syndicat des Régies Internet (SRI).⁷⁵ A case in Germany against the Apple's App Tracking Transparency Framework concerning third party cookies and data tracking is currently ongoing.⁷⁶

These cases highlight both the competitive concerns prevalent in digital mobile ecosystems as well as the significance of market players pushing for these investigations and the multiple steps in trying to push for contestability. These cases have all been driven by business user complaints, and in many instances also in cooperation with national competition authorities. The cases also demonstrate that – as of yet - stakeholders seem to choose the venue of public enforcement over private enforcement to resolve anti-competitive issues. These cases have also instructed the obligations imposed through the DMA and the DMCCA.

⁷² Foo Yun Chee, Toby Sterling and Stephen Nellis, 'EXCLUSIVE Dutch watchdog finds Apple app store payment rules anti-competitive – sources' (Reuters, 7 October 2021), available at <https://www.reuters.com/technology/exclusive-dutch-watchdog-finds-apple-app-store-payment-rules-anti-competitive-2021-10-07/>.

⁷³ ACM, 'ACM kan onderzoek naar Apple App Store voortzetten', Press Release of 22 June 2021, available at <https://www.acm.nl/nl/publicaties/acm-kan-onderzoek-naar-apple-appstore-voortzetten>.

⁷⁴ *Apple – Dating Apps* (Case ACM/19/035630), ACM Decision of 24 December 2021.

⁷⁵ Autorite de la concurrence, Decision 25-D-02 of March 31, 2025,

⁷⁶ See Bundeskartellamt, Press release of 13 February 2025, available at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2025/02_13_2025_ATTf.html.

Under the DMA, ten of the 22 obligations laid down in Art. 5 and 6 are aimed at opening up (mobile) operating systems for more competition.⁷⁷ The Commission's early enforcement of the DMA shows that opening up mobile ecosystems remains a priority with its investigation into both Apple and Alphabet for their app store policies under Art 5(4) DMA⁷⁸, its specification decision for interoperability with Apple products under Art. 6(7) DMA⁷⁹, and its (now closed) investigation into Apple under Art. 6(3) DMA.⁸⁰

Mobile ecosystems are also the CMA's first priority under the DMCCA. This is no coincidence, the CMA has conducted an in-depth market investigation into mobile ecosystems between June 2021 and June 2022. Here, the CMA set out how Apple and Google controlled their mobile ecosystems and the size of their market share in downstream markets.⁸¹ In addition, the conduct requirements listed in the DMCCA include requirements applicable to mobile ecosystems that overlap with the DMA (see e.g., conduct requirements relating to interoperability restrictions or default settings).⁸² Regarding Apple's mobile ecosystem, there have already been a public consultation and a specific workshop for app developers to determine the key drivers for innovation and investment in app development in the UK, current barriers to developing new apps or app features, and the measures that may be needed to reduce these entry barriers.⁸³ The CMA seems intent to rapidly open up mobile ecosystems, and some level of alignment with the DMA may be expected.

⁷⁷ Art. 5(3), 5(4), 5(5) 5(7), 5(8), 6(3), 6(4), 6(6), 6(7), and 6(12) DMA.

⁷⁸ *Apple - Online Intermediation Services - app stores - AppStore - Art. 5(4)* (Case DMA.100109) Commission Decision of 23 April 2025; *Apple Interoperability – Art. 6(7) DMA* (Case DMA.100203/204) Commission Decisions of 19 March 2025; *Alphabet - Online Intermediation services - app stores - Google Play - Art.5(4)* (Case DMA.100075) Commission Decision to open procedure of 25 March 2024.

⁷⁹ *Apple Interoperability – Art. 6(7) DMA* (Case DMA.100203/204) Commission Decisions of 19 March 2025.

⁸⁰ *Apple - Operating systems - iOS - Art. 6(3)* (Case DMA.100185) Commission Decision of 19 June 2025.

⁸¹ CMA, CMA's market study into mobile ecosystems: final report summary (2022).

⁸² Sec. 20(2) (e) and 20 (3) (e) DMCCA.

⁸³ CMA, SMS investigation into Apple's mobile ecosystem (2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-ecosystem> .

B. Evolution of business models fit to compete

Mobile ecosystems are not only at the core of digital regulation approaches such as the DMA and the DMCCA, they also exemplify that business users depending on the big tech mobile ecosystems benefit from the iterative, gradually staged approach adopted by the digital regulation regimes towards enhanced contestability, ultimately stimulating competition in digital markets. Following the mechanisms underpinning evolutionary theory, we highlight this dynamic by showing how the obligations in the DMA applicable to core platform services relevant in mobile ecosystems are offering variations to business users in itself. After selecting the rights and protections offered through one obligation, commercial incentives and eventually business models adapt to these new rights and protections granted vis-à-vis the gatekeepers. This evolution of business models changes again the selection incentives in relation to further obligations the DMA imposes on gatekeepers. Thus, the steps towards greater contestability are gradual in procedures. But they also lead to a gradual substantive shift in markets. Businesses that were originally built to fit into the gatekeeper's mobile ecosystems can gradually evolve into businesses models fit to compete with the gatekeepers on more equal terms.

First examples can already be observed in the dynamic between the compliance obligations contained in Art. 5(4), and 6(4) DMA.

Both Art. 5(4) DMA and Art. 6(4) DMA have been informed by common restrictive practices in mobile ecosystems.⁸⁴ Art. 5(4) DMA prohibits restrictive practices by gatekeepers, most notably in relation to the use of their app stores, which prevents business users, i.e. app publishers to steer their users to alternative sales channels with alternative offers. Both Apple as well as Alphabet had such rules in place.⁸⁵ Art. 6(4) DMA, on the other hand, forces

⁸⁴ Silke Heinz, 'Art. 5(4) DMA', in Rupprecht Podszun (ed.), *DMA Commentary* (Beck/Nomos/Hart 2024), 101 et seq. and Björn Herbers, 'Art. 6(4) DMA', in Rupprecht Podszun (ed.), *DMA Commentary* (Beck/Nomos/Hart 2024), 161 et seq.; Daniel Mandrescu and Damien Geradin (n 63).

⁸⁵ Daniel Mandrescu and Damien Geradin (n 63).

gatekeepers to allow alternative app stores and apps downloaded directly from the web to be installed by the user. Also, this possibility was not enabled by Apple and restricted by Google Android prior to the enforcement of the DMA.⁸⁶

Art. 5(4) and Art. 6(4) DMA have a reciprocal, complementary effect towards each other. Steering will become much more attractive for app publishers in mobile ecosystems if they can sell their products and services through alternative sales channels, most notably alternative app stores, which grant them more favourable business conditions, such as charging lower commission on in-app sales. This effect also applies vice versa. Thus, business users selecting to make use of - and push for - the freedoms to steer granted under Art. 5(4) DMA have a varied incentive to push for compliance of the gatekeeper with Art. 6(4) DMA, to fully exploit new business opportunities through the alternative sales channels granted by Art. 6(4) DMA.

This evolutionary, iterative logic behind the complementary obligations relating to mobile ecosystems in the DMA has already resulted in first expansions of business models on the business user side, showing initial indications of business users evolving into competing (mini-)ecosystems. Epic Games, one of the drivers behind competition law enforcement against Alphabet's and Apple's anti-steering and in-app payment policies has launched its own app store on Apple and Android devices in the EU.⁸⁷ This shows that app developers are adapting and seeking additional business opportunities to expand their offerings from merely offering apps to offering own sales channels in the form of app stores, to which they can steer users from the gatekeepers' app stores to by offering more attractive conditions. This, in turn, means that the "selection process" of business users to profit from certain compliance measures imposed by DMA obligations also evolves, likely resulting in a shift of enforcement priorities. This development of commercial incentives for the expansion of business users' business models

⁸⁶ Ibid.

⁸⁷ See Epic official website, 'Available in the European Union - Get the Epic Games Store on iPhone and iPad', available at <https://store.epicgames.com/en-US/mobile/ios>.

into new digital markets is not limited to alternative app stores and apps. The search engine Ecosia, for example, has announced the development of its own browser in April 2024, a development likely connected to enhanced browser choice on mobile devices as a result of Art. 6(3) DMA.⁸⁸

Even though the DMCCA does not provide identical conduct requirements in relation to mobile ecosystems as the DMA provisions examined above, most of the conduct requirements are formulated in a way that would allow for the creation of very similar new business opportunities for business users as enabled by the DMA obligations. In addition, once business users have strong commercial incentives to expand their new business opportunities gained under the DMA from the EU territory to the UK, they can become, again, the driver for shaping enforcement under the DMCCA. Recent calls for actions on the CMA from business users already hint at such a development.⁸⁹ In the CMA workshop, business users and competitors asked for possibilities to interoperate and the imposition of anti-steering rules.⁹⁰ Businesses – possibly based on their experiences in the EU – are requesting both direct access to the platforms of the gatekeepers and alternative venues for the development and distribution of their products in anticipation of new entry. If the CMA takes action to open up Apple’s mobile ecosystem to third-party devices and app stores, firms such as Epic will be able to launch their third-party app store in the UK rapidly.

To conclude, the design of the DMA obligations, with their reciprocal effects, expose a variation-selection-adaption dynamic with a view to the adaption of business users’ commercial

⁸⁸ See Ecosia Blog (22 April 2024), available at <https://de.blog.ecosia.org/browser/>.

⁸⁹ CMA, Strategic market status investigations into Apple’s and Google’s mobile ecosystems Mozilla submission, response to CMA’s invitation to comment, (23 January 2025); DuckDuckGo, DuckDuckGo’s Comments on the Market Study Interim Report Online Platforms and Digital Advertising (19 February 2020); DuckDuckGo, Submission to the Competition and Markets Authority on its Provisional Decision to Designate Google Search Under the Digital Markets, Competition and Consumers Act (25 July 2025).

⁹⁰ CMA, Mobile SMS Investigations – App Developer Workshop, Summary of the Workshop (25 May 2025), available at <https://www.gov.uk/cma-cases/sms-investigation-into-apples-mobile-platform>.

incentives once profiting from certain compliance measures by the gatekeeper. This, again, highlights the iterative nature of digital regulation towards more contestable markets and the journey of business users evolving into competitors. In a step-by-step approach, each of the obligations and their complementary effect enables businesses dependant on gatekeepers to gradually develop business models built to compete, expanding into other markets within the digital ecosystems dominated by big tech. This in turn will incentivize stakeholders in the form of businesses seeking expansion and commercial opportunities to drive enforcement of the DMA and DMCCA forward. Taking these dynamics into account can play a key role in recalibrating enforcement priorities to ensure that an evolution of business models can occur.

V. Conclusion

This article explains how both the DMA and the DMCCA are constituted by a regulatory dynamic involving an iterative process to opening up markets, gradually allowing the evolution of businesses built to compete with the dominant tech platforms, and how stakeholders are the essential drivers for this process. By influencing the variation-selection process characterising the field of digital regulation, these stakeholders have the capacity to shape the regulatory outcome significantly.

This stakeholder-driven engine behind the DMA and DMCCA is likely to lead to a convergence behind the enforcement outcomes of the two laws, despite their differences in design. The stakeholder-driven character is more visible within the legal framework of the DMCCA as it is explicitly cooperative and participatory. While the CMA is tasked with identifying distortions of competition in specific markets and developing conduct requirements to resolve these issues, the DMCCA presents itself as strongly engaging with stakeholders. The CMA must consult with stakeholders through public consultations before designating new entities, imposing conduct requirements, taking pro-competition interventions or altering the

applicable packages. This is also reflected in communications by the CMA, which focuses strongly on messaging related to the interests of business (including the regulated entities) and the role of the CMA in promoting the UK's competitiveness and innovativeness.

The regulatory mechanisms behind the DMA, conversely, are often characterised as top-down and self-executing. Its formalised designation procedures and enforcement procedures of an ex ante set of specific obligations and prohibitions, largely intended to be self-executing, do not foresee formalised stakeholder participation to a relevant extent. Instead, the gatekeepers have primary responsibility for effective compliance with the DMA, and the Commission is the sole enforcer of the law. This apparent conflict with the DMA's aim to promote the interests of business users is overcome by shifting the focus on the period after the gatekeepers have presented their compliance measures. Here, a closer look shows that the DMA is more stakeholder-driven than it presents itself. The question of whether the gatekeepers' compliance measures constitute effective compliance with the DMA will heavily depend on business users' views, who are the main beneficiaries of the DMA's obligations. A striking practice example for this dynamic is the Commission's specification decision concerning Apple's compliance measures with Art. 6(7) DMA. Thus, the DMA, while generally presenting itself as a top-down form of regulation, includes a stakeholder-driven bottom-up element and an iterative process toward achieving its objectives, empowering stakeholders to take the reins in the journey towards a new competitive landscape in digital markets.

The stakeholder-driven path to compliance represents a key point of convergence between the different frameworks of the DMA and the DMCCA. The same stakeholders that are drivers of enforcement in the EU will likely attempt to obtain and exert similar rights under the DMCCA. It is more beneficial for business users and access seekers to have similar regimes than fractured regulatory landscapes as this allows the business users or access seekers to

quickly launch their newly developed tools and features in new jurisdictions. As a result, convergence and symbiosis between the outcomes of these legal regimes becomes likely.

The analysis of the obligations under the DMA in mobile ecosystems reveals the reciprocal interaction between different, varying obligations that enforcement authorities must enforce. These obligations and their interplay allow businesses dependent on gatekeepers to select between different compliance measures imposed by certain obligations on gatekeepers, following their commercial incentives. Gradually, this selection-process will allow for the development of more competitive business models and expansion into other markets within Big Tech-dominated digital ecosystems. As the DMCCA and DMA share stakeholders, particularly specific business users, that will develop commercial incentives based on the new business opportunities gained under the DMA, this will likely influence enforcement of the DMCCA. As the CMA consults stakeholders periodically to identify good compliance solutions, stakeholders will attempt to extract the rights they already have under the DMA and anticipate which venues for competition they want to open up next.

The findings of this analysis underscore the critical role of stakeholder participation in the enforcement of the two digital regulatory initiatives that complement competition law - the DMA and the DMCCA. In particular, the involvement of those stakeholders whose competitive position these laws are intended to strengthen is essential. Without their active engagement, these landmark acts risk falling short of expectations in restoring contestability in digital markets. Advancing the evolution of regulatory success would therefore benefit from further institutionalising stakeholder involvement and establishing robust mechanisms for integrating diverse inputs across the stakeholder spectrum.

