

7 February 2022

Comments of

ACT | The App Association

to the

United Kingdom's Competition and Markets
Authority

on the

Mobile ecosystems study interim report

United Kingdom (UK) Competition and Markets Authority (CMA): Mobile ecosystems study interim report – ACT | The App Association response

I. Views and information on the CMA's understanding of the markets within the scope of the study

ACT | The App Association welcomes the CMA's inclusion of mobile applications and operating systems in its definition of mobile ecosystems, as we suggested in a previous submission. Like the CMA, the App Association believes that mobile devices have become fundamental to the daily lives of UK citizens, allowing users to access news, music, video streaming, health data, finances, games, shopping, and more. Mobile devices with internet connectivity, including smartphones, tablets, smart speakers, watches, home security, and lighting, are all part of what we consider the mobile ecosystem. There are substantially more than two providers of smart speakers, security systems, and wearables, and they use several operating systems, marketplaces for apps, and various programming interfaces. Therefore, studying mobile ecosystems should go beyond examining the business models of Apple and Google to avoid misrepresenting the large number of choices that exist, especially considering that platforms are not the main source of revenue for Google or Apple. While we could not agree more with the CMA that the app stores are an important gateway for developers to access consumers, we want to point out that app developers have a choice of platforms on which they can develop. Most apps are available on multiple platforms, such as the web and other mobile devices, and voice assistants. We thus encourage the CMA to broaden its understanding of the markets within the scope of its study to ensure it's useful in the long-term perspective and beneficial for future policy recommendations.

Concerning the CMA's understanding of the markets within the scope of the study, we are disappointed to see that the interim report does not note the multi-sidedness of mobile ecosystems, especially in the context of mobile apps. Overall, we would like to highlight the symbiotic relationship between software platforms, developers, and users and invite the CMA to consider this relationship as a significant benefit for developers in its investigation. Increased platform traffic attracts more developers, which brings in more consumers who then benefit from a higher quantity of high-quality apps. Furthermore, there is a significant difference in the benefits platforms bring to smaller app makers and startups compared to large developers with established global brands. For this reason, smaller developers have different interests than larger ones, and the CMA needs to take this into account. For small and medium-sized enterprises (SMEs) and startups, the network effects of this multi-sided market are particularly beneficial. They allow small developers to reach new consumers instantly across borders. To attract more developers, the platforms' investment in programming and advertising integration tools, ready-to-use payment, and billing services are particularly advantageous for the smallest app developers who would not otherwise have the resources to develop such features. The more attractive these offerings are, the

more app developers flock to platforms. Just like developers compete on platforms, software distribution services compete for developers and users. The stores try to differentiate themselves through various features such as prices, privacy, security, design, battery life, and others. No matter their size, all developers have access to the same built-in benefits and compete under the same terms and conditions. We urge the CMA to consider these positive dynamics in its understanding of the market, including the competition and level playing field for developers, the low switching costs for users, and the opportunities this creates for smaller developers.

II. Views and information on initial findings on the competition concerns under each theme:

a. Theme 1: Competition in the supply of mobile devices and operating systems (Chapter 3)

The CMA found that Apple produces just over half of all mobile devices in the UK. These devices come with Apple's iOS operating system, while practically all other smartphones and many tablets operate on Google's Android. Based on this finding, the CMA concludes there is an 'effective duopoly' and that Apple and Google have substantial and entrenched market power in the provision of mobile operating systems that run on mobile devices due to 'limited competitive constraints'. We don't agree with this notion. While other companies, such as Microsoft, RIM, and Nokia each at one point had considerable market dominance as an advantage, Google and Apple grew because they were responsive to the needs of app makers and consumers. In large part, they became successful because they have created a more consumer-friendly and user-friendly experience, higher quality, and easier access to their app stores than other providers.

The CMA also found that Apple and Google face limited user-driven competition from each other since most users are buying a replacement when purchasing a device, and existing iOS or Android users rarely switch to the rival operating system. The reason for this, the CMA states, are material barriers to switching, such as transferring data, apps, and subscriptions when switching devices. Further, these switching costs seem to be asymmetric, with iOS users generally facing higher switching costs than Android users. High switching costs between iOS and Android do not exist for users. In fact, nearly any app you can find on one store will be available in the other store or have several comparable apps on the other platforms that offer equivalent functionality, often even from the same app maker. We encourage the CMA to consider that most apps are available on multiple platforms. Most of our members develop their apps at least for two to three different platforms. Even apps created by platform companies are available for multiple operating systems. For example, Apple Music is available on Android, just like Gmail or Google Calendar are available on iOS. The cross-platform availability of apps also increasingly reduced switching costs between iOS and Android for users over the years.

In terms of barriers to entry and expansion, the CMA seems to only have studied negative aspects of this issue, reflected in the focus on the exit or failed entry of certain well-resourced companies in

smartphones such as Microsoft and Amazon. The CMA continues to only highlight perceived barriers to competition, for example, strong indirect network effects and economies of scale in the development and maintenance of mobile operating systems, and high switching costs. Again, we strongly encourage the CMA to also study the positive aspects, such as the numerous barriers to entry that the platforms have removed and continue to remove, including access to a global market, instant consumer trust, the ability to protect intellectual property, and significant reduction of overhead costs. SMEs and startups in particular benefit from the network effects of this multi-sided market. Network effects and multi-sidedness are key characteristics of platforms and conducting this study with a multi-sided scope will, therefore, produce a more complete result.

The app review process can take a long time which can negatively impact businesses that rely on speed. Only one point of contact exists and sometimes apps can get stuck for weeks at a time which can be frustrating for app developers. It is important to remember, however, that users were previously hesitant to download apps that they did not know about or from companies they had not heard of, which we expand on later in this submission. Overall, we disagree with the portrayal that Google's and Apple's service as a gateway between consumers and online content providers is harmful per se and the CMA's subsequent conclusion that an ex-ante regulatory invention towards gatekeepers in the style of the EU's Digital Markets Act (DMA) is necessary. Reasonable 'gatekeeping' of these gateways provides several benefits, particularly for smaller actors. Some gatekeeping is good and enhances safety and security in the online economy. Our members rely on a range of benefits the app stores provide for a small fee, including low entry barriers to reach consumers, a stable marketplace, and consumer trust in the app store review processes. While we support the introduction of new reporting and transparency requirements for large platforms, we believe the CMA's proposed interventions ignore the positive features of the app economy. In their current form, these interventions could risk reducing or eliminating the services on which our members rely. We have concerns that the CMA's proposed actions may raise entry barriers for smaller stakeholders or hinder inter-platform competition.

b. Theme 2: Competition in the distribution of mobile apps (Chapter 4)

The CMA found that the App Store on iOS and Google Play store on Android accounted for over 90 per cent of native app downloads between them in the UK in 2020, concluding that Apple and Google each have substantial and entrenched market power in the distribution of native apps within their ecosystems and face limited competitive constraints.

While we agree that it is important to identify relevant verticals, we note that the winner-takes-all/most dynamics or concentrated markets cannot inherently be categorised as problematic as it is a common phenomenon in most other industries. A firm's mere possession of 'significant' or 'relative' market power does not equal abuse of it or automatically mean that firm is causing competitive harm. A thorough investigation is critical to demonstrate an abuse of that market

power and how it yields harm to consumers and competitors. Demonstration of such abuse is critical to determining if antitrust remedies are appropriate, and if so, to what degree.

We disagree that the app stores face limited competition. Platforms have a great incentive to compete with each other to keep their services attractive for developers and consumers. The CMA should examine these incentives, as platforms want to offer the safest, highest-quality app choices possible to consumers. On the developer side, the platforms want to offer the best tools to make the apps that make the mobile device more useful. Digital markets are often multi-sided markets characterised by the presence of network effects. The utility users on one side of the market derive from their participation in the platform depends on the number of participants on the other side of the market. In the app economy context, this means both app developers and mobile app users benefit from this market structure. We, thus, strongly urge the CMA to consider the multi-sidedness of the app distribution market in its investigation into mobile ecosystems. As the CMA states, the largest developers see the platforms as complements rather than alternatives. This statement ignores the limited resources of small developers who may have to weigh the pros and cons of each platform before they develop their product because they cannot afford to launch their app on both operating systems immediately. So, initially, the stores do compete for new developers and the users they may bring.

Further, we again note that a concentrated market does not equal high switching costs. In the app economy, for example, small developers can reach thousands of consumers instantly around the world. Instead of making developers more dependent on app stores, the concentrated app market facilitates market entry and competition between smaller players. Developers also frequently multi-home on several platforms, implying low switching costs for both business users and consumers.

Concerning native app distribution, the CMA should also consider the risks associated with alternative app stores and sideloading in addition to the perceived material barriers to entry and expansion ‘rival app stores’ may face. Forcing platforms to allow sideloading and downloads from alternative app stores carries several significant risks. Large and already dominant players would likely make their apps exclusively available via sideloading or their own, potentially less privacy-focused app stores, which would disadvantage small developers and startups. Additionally, reports demonstrate that third-party app stores have fewer safeguards than well-known app stores and on some of these stores, malicious apps outnumber their safe offerings.¹ Consumers are willing to trust apps they download from the app stores because of years of positive experiences with the extra scrutiny and safeguards app stores offer. Simply being available on the app stores is now an indicator that an app is reasonably trustworthy for consumers. At the same time, especially small app developers benefit from this consumer trust immensely because they can operate on the same

¹ See, for example, this report from RiskIQ: <https://www.riskiq.com/resources/research/2020-mobile-threat-landscape-report/> or this report from the Lithuanian Ministry of National Defence https://kam.lt/en/news_1098/current_issues/things_your_smart_phone_does_without_your_awareness_investigation_into_three_china-made_5g_devices.html

playing field as bigger brands. We urge the CMA to investigate the security and privacy risks of alternative app stores and sideloading as well as examine the massive influence trust has on consumer and developer behaviour.

Considering the current development and usage of web apps, we note that it is substantially lower than native apps. However, they are not a dying non-alternative to mobile native apps. Web apps fulfil an important role in offering choices for different situations and preferences. Popular apps like Facebook, Airbnb, and Gmail offer both a web and a mobile app and different users can use them interchangeably.

Regarding control of the app stores in terms of ranking, lists, and discovery, we are disappointed that the CMA is not considering the positive effects of ranking systems. Such systems facilitate the search process by displaying the most relevant or highly rated results first, protect users from harmful content by increasing the likelihood that apps with poor reviews will not be downloaded by new users, and encourage app developers to be responsive to user feedback and improve their products, as apps with higher reviews are more likely to be downloaded. Again, we urge the CMA to conduct this study from multiple angles and consider the benefits as well as the disadvantages of a given issue. While the App Association supports ranking transparency, we caution against forcing platforms to reveal the exact specifics of their ranking algorithms.

Further, we note the focus on the 30 per cent commission is somewhat misguided. If developers leverage the app store/platform to gain or sell to a customer, then Apple/Google charges a 30 per cent commission (15 per cent in the second year) for the delivery of online content when that user purchases something in the app only for businesses that have revenues of over \$1 million annually. If a small developer with lower revenues makes the app, the commission is only 15 per cent. If the app is free and ad-supported, neither platform charges any commission (except if the ads shown are using Google's ad network, then some of the ad revenue goes to Google). Apple, for example, has been consistent with its original philosophy about who is charged a commission for years: it is about who brings the customer to whom. This was demonstrated as recently as April 2020, when Amazon (Prime Video) joined an Apple program that waives the commissions on certain video content sold on iPhones if you have an existing Amazon account (which means Apple didn't bring Amazon the customer). This is available to any company. Other businesses like Altice One or Canal+ also use this program.

At the end of the day, Apple and Google have to monetise their platforms: they built them, they have to maintain them, hire engineers, develop updates, etc. – and the way they are monetising it is by charging a commission. Most app developers don't disagree with this arrangement. They understand that the curation and management of the app stores require significant resources, and the current system works well for SMEs. If this practice is deemed unfair, discriminatory, or problematic and eventually prohibited, then the risk is that the platforms will need to find other ways to monetize their app stores. This could mean spreading fees over a larger proportion of

developers (i.e. even free, ad-supported apps, to avoid ‘discrimination’). Such a change as a result of regulators’ demands to stop charging a fee for in-app purchases (IAPs) may negatively disrupt the app economy and the app ecosystem as a whole.

c. [Theme 3: Competition in the supply of mobile browsers \(Chapter 5\)](#)

The CMA found the combined share of supply for Apple’s and Google’s browsers on mobile devices in the UK amounts to be around 90 per cent. While we agree that browser engines’ design is fundamental to the performance and capability of a browser to load and display content, we again note that market share alone does not equal abuse of market power. Ultimately, if there is significant anti-competitive behaviour in the supply of mobile browsers and browser engines, we welcome the CMA’s examination of the issue. Generally, considering the role of pre-installation and default settings, however, we point out that consumers reasonably expect phones to come with default settings and pre-installed apps. Apple and Google both develop several apps not pre-installed on devices, but available for download from app stores. It is now easier to uninstall pre-installed apps and change default settings. Further, policies like the introduction of choice screens for all pre-installed applications as recently proposed in the European Parliament risk locking small app developers out of the market and could seriously hamper innovation. Such an obligation would only benefit large developers that have the market power and the resources to make it into the selection options for choice screens, which will severely disadvantage the smallest ones.

d. [Theme 4: The role of Apple and Google in competition between app developers \(Chapter 6\)](#)

Based on its key findings of chapter 6, the CMA suggests that Apple’s and Google’s control over their respective mobile ecosystems allows them to set the ‘rules of the game’ for app developers that seek to use their app stores. The interim report found that in many cases, Apple and Google have the ability and incentive to provide their own apps with a competitive advantage. While it can be argued that there is indeed an advantage for apps that are pre-installed to be used, consumers now (reasonably) expect phones to come with certain things pre-installed. Apple and Google both develop apps that are not pre-installed (users have to download them from the app stores), and users can now remove most pre-installed apps. Both platforms also constantly highlight outstanding apps (which are often alternatives to their own) for users and many of them are much more successful than Google’s or Apple’s apps. For example, Spotify captures 35 per cent of total paid subscriptions, while Apple Music comes in second with 19 per cent. Similarly, Microsoft Office apps (Outlook, Excel, PowerPoint) have higher market shares than Google’s equivalents. The platforms’ primary concern is to preserve a great user experience and having the best quality apps on their stores is, therefore, in their interest. Concerning this issue of self-preferencing of a platform’s own apps, we believe it is important to also think about the strong incentive for both Apple and Google to be careful not to be ‘judge and player’ at the same time.

The CMA's concerns about opaqueness relating to ranking, review, and the terms and conditions were relevant in the past, but we believe they have since been addressed in the EU's P2B regulation. The P2B regulation requires platforms to disclose the main determining factors of their ranking algorithms to facilitate app store optimization and enable developers to tailor their products so they can be found more easily. When it comes to more transparency concerning organic or paid-for search ranking algorithms, we note that, on one hand, transparency is preferable but on the other hand, this may allow some companies (e.g. bigger companies with more resources) to 'game' the system or abuse it. Increasing the level of transparency could have both negative consequences as well as positive ones.

Further, the app stores, the review guidelines, and the terms and conditions are constantly updated in response to market changes, what app makers discover and innovate, and what consumers expect. It's an ongoing and evolving process that we don't expect to stop. The App Association is concerned that this natural evolution would slow down or even come to a halt if platforms are overregulated based on well-intended market studies like this one by the CMA.

We acknowledge that the app review process can take a long time which hurts businesses that rely on speed. Often apps get rejected because the review process is new to them, and developers do not know what the rules are and how to comply with them. Only one point of contact exists, and sometimes apps can get stuck for weeks at a time. Both Google and Apple have improved the situation by establishing official appeal processes and a phone helpline for developers. Additionally, although app developers are sometimes frustrated with the review process, it is important to remember that users were previously hesitant to download apps that they did not know about. This has benefitted less well-known brands, which are usually small businesses. Allowing sideloading and multiple app stores would mean that the level of trust would go down, which would impact smaller companies the most.

Additionally, the CMA's concerns around the sharing of consumer data fails to acknowledge the benefits of safeguarding privacy. For example, Apple's 'Sign-in with Apple' lets app makers send emails to customers without Apple having to reveal the actual addresses or private information of users. This benefits both consumers and app makers in terms of data protection and compliance with privacy laws like the General Data Protection Regulation (GDPR).

As for the use of Apple's or Google's payment systems, this, again, can be particularly helpful for smaller developers who are starting out and cannot set up their own payment systems. Thirty per cent is what most platforms charge for commission, and smaller app stores are unlikely to offer discounts, or lower fees, to small app developers. Both Apple and Google have implemented small business programs, lowering the commission from 30 per cent to 15 per cent for businesses that make less than \$1 million in revenues annually. In our experience, app developers care more about gaining consumer trust and reaching global markets easily than the fees that the app store charges, especially early in the app's lifetime. Our members rely on a range of benefits the app

stores provide for a small fee, including low entry barriers to reach consumers, a stable marketplace, and consumer trust in the app store review processes, as well as practical benefits such as payment mechanisms, IP protection, and various developer tools.

Concerning Apple's App Transparency Tracking (ATT) feature, there is clearly tension between advertising, tracking, and privacy protection. A significant proportion of our members have apps that use IAP on Apple's App Store and derive most of their revenue from it. We also have many members whose apps are not subject to IAP, e.g. apps that are free or that support another service (retailers, corporates, enterprise apps, and health apps, etc.). Our advocacy focuses on privacy because it helps build consumer trust that helps our members succeed, and we have, thus, welcomed the ATT feature.

Ultimately, we urge the CMA to examine the positive effects that platforms have had on competition by allowing developers to access a global market and reducing their overhead costs. We also encourage the CMA to expand its investigation to include the cases in which the app succeeded in preventing the distribution of apps that may have caused consumer harm.

III. [Merits and challenges of the range of potential interventions that the CMA has identified in this interim report](#)

The CMA's potential interventions include ensuring that Apple provides necessary application programming interfaces (APIs) to enable iOS users to migrate their apps and data to Android devices, requiring Apple and Google to allow users to make in-app payments to their app provider directly or allow greater choice of third-party payment providers, and increasing interoperability of Apple's first-party products. We worry about the possibility that access to ancillary services could extend to the gatekeepers' core underlying operating system features. An operator of a core platform service may reasonably limit access to some of its underlying technology. These valid reasons include, first and foremost, the protection of device integrity and end users' security and privacy. Operators need to balance these priorities with an adequate level of interoperability for third parties' services and devices. Providing full access to all the core features on a device to business users and providers of services and hardware could allow malicious third parties to reach sensitive device features and circumvent protections. For example, such actors could access cameras, contact lists, or virtual private networks without end user permission, or track other devices in the same facility and hijack the functionality of other apps, putting end users' security and privacy at serious risk.

Further, we note that different app store ecosystems offer distinct advantages for consumers and business users. For example, Google's Android system is more open and allows users to install third-party apps and application stores onto their devices. The Apple App Store ecosystem, on the other hand, is more vertically integrated and does not permit the installation of third-party content. The presence of malware on Android devices is considerably higher than on Apple devices while

the revenue developers enjoy is typically higher on Apple than Android devices. These statistics could partially speak to real differences in consumer preferences for one ecosystem over the other, and the trust they have in that ecosystem.

As most operating systems already allow third-party or ‘sideloaded’ apps and app stores, the aim of this intervention seems to be to make all devices and/or app stores the same. However, there are valid reasons why a model that is more protective of the user experience may be preferable to a more open system. Significantly, numerous academic and industry sources have reported that more open systems are considerably less secure than more vertically integrated ones.² Safeguards in such systems should go beyond taking measures to ensure that an open system does not endanger the integrity of the hardware or operating system. Any such intervention must consider user security, privacy, or data, instead of privileging blanket third-party access and sideloading over consumer protection. Removing the ability for users to choose between different app ecosystems by mandating that they are all the same likely comes at a loss of user privacy or security. If access to and interoperability with ancillary services compromises the integrity or security of the device or exposes features on which third parties build applications to malicious actors, regulators should avoid such interventions.

As the larger players like Google and Apple adjust their practices and offerings to comply with the potential interventions, small players will undoubtedly feel both the positive and negative consequences of such interventions. Although they would not directly be the subject, small app developers stand to lose several key benefits they currently enjoy if an intervention disrupts the app ecosystem. Pushing platforms to change the way they operate could threaten the availability of the numerous valuable services that benefit software developers, in particular the smaller ones. Google’s and Apple’s investments in cybersecurity and privacy features contribute to the trusted ecosystem on which small businesses rely. Their investments in research and the development of fully functioning API tools allow software developers to build their apps to create a virtuous circle of innovation. The provision of unified payment mechanisms, marketing, and advertising tools allow small businesses to offload overhead costs, all for a few low entry fees. If the companies that manage large app stores can no longer offer these services due to CMA interventions and compliance costs, small developers will suffer. To evaluate the full effect of interventions that target only a few players or business practices, a case-by-case approach is necessary. Such an approach can maintain the best aspects of the online platform economy and eliminate harmful practices effectively, enabling all actors to innovate, grow, and develop new technologies in a fair and competitive environment.

We thus believe that the potential interventions in addressing the competition concerns raised in Chapter 3 risk doing more harm than good without the necessary safeguards.

² See, for example, this [Academic Journal](#), an introduction to [Trojanized apps](#), a [NordVPN study](#), an [article](#) from Kaspersky and this [Tech Advisor review](#), among many others

a. Remedy Area 2: interventions relating to competition in the distribution of native apps

Small and medium-sized app developers and startups rely on consumer trust to compete with global brands on a level playing field. Building up consumer trust takes a long time and can make or break an app development company. Because consumers trust software distribution platforms, smaller, unknown app makers can gain almost instant consumer trust and access to a global market by having their apps available on these platforms.

Interventions like those the CMA proposes may unintentionally put consumer trust at risk. Focusing exclusively on access and market contestability in policy interventions could make it hard for a platform to combat illegal content or uphold security and privacy standards, opening the gate for malicious actors. Sideloads in particular would allow apps to be available for download without a thorough investigation into their inner workings, making it easier for bad actors to pirate apps, install malware on consumers' devices or access sensitive data and sensors on the device. As a result, consumers may stop trusting apps from unknown brands, which would be devastating for smaller app developers. The rigorous app review and security measures that the main software distribution platforms employ enable small developers to compete on the same footing as bigger companies with global name recognition. Preserving the current security environment on software distribution platforms is thus crucial to the success of SMEs and startups. If safeguards could be introduced to mitigate any security risks associated with the use of alternative app stores, they would need to preserve the integrity of the operating systems and users' experiences. This means that alternative app stores would have to employ at minimum the same level of app review and security measures that Apple's App Store and the Google Play store implement.

Besides security concerns, it is unclear whether measures to create a fully open and interoperable app economy will lead to additional burdens on smaller actors or if total interoperability is even technically or practically feasible. The rapid development of the sector particularly illustrates this point. If the app economy continues to evolve as fast as it has, interventions may not be future-proof. Choosing one of two business models over the other (a more open one over a more closed one), neither of which may work with new disruptive elements, assumes that the app economy of the future will look the same as today, and may set limits on long-term innovation in the sector. For instance, app stores currently charge developers a fee to access their marketplaces, wherein they provide different services depending on a developer's size and business model. With an increasingly homogenous app economy, will we start to see app store pools, higher entry fees, and fewer specialised services? Furthermore, how will innovations within the IoT sector or new disruptive elements such as the 'metaverse' interact with this legislation, especially if the app store model may itself change? A more known consequence for competition between multiple app stores is that simply increasing the number of platforms will neither increase the market size nor will it help smaller developers. On the contrary, multiple app stores will only increase smaller

developers' overhead, deplete their resources further, and decrease the consumer base they can reach instantly by being present in one store. We, therefore, do not believe that enabling sideloading per se would increase competition or benefit developers. We, thus, urge the CMA to carefully consider the long-term impacts of the proposed interventions and whether it is advisable to privilege any one model, setting a limit on both innovation and consumer protection. We advise instead for a more flexible obligation, based on a principle of secure access to various technologies rather than unrestricted access to applications and application stores.

b. [Remedy Area 3: interventions relating to competition in the supply of mobile browsers and browser engines](#)

A browser engine's design forms the basis of the performance and capability of a browser to load and display content. Thus, we welcome the CMA's examination of this issue if there is significant anti-competitive behaviour in the supply of mobile browsers and browser engines. Generally, our members are likely too small to be directly affected by solutions the CMA may choose to resolve any anti-competitive behaviour that may exist in the supply of mobile browsers. However, we note that any intervention the CMA introduces should explicitly consider SMEs and the impact it may have on them to ensure a well-intended intervention does not disadvantage them.

We are currently seeing this play out in the debate around the Digital Markets Act (DMA) in the European Union. For example, we have particular concerns with the European Parliament's continuous endorsement of software application choice screens as suggested in its amendments to the DMA in Article 5 (gb), which would require that users see a prompt on their devices to switch default apps and go through a list of the main third-party services available. So-called choice screens present an artificial choice to consumers, giving them the impression that only a limited number of apps are available for a certain service when there may, in fact, be dozens or hundreds of alternatives. Unlike larger actors, small developers cannot afford to buy their apps onto the list of choice screen options. They also may appear lower on rankings than larger competitors, even if they offer better services because their apps have fewer end-user ratings. The only developers that will benefit from choice screens are those large enough to be included in the choices. Whether fees or rankings determine the list of choice screens, such an intervention would only disadvantage small developers further or lock them out of the market entirely.

We strongly oppose choice screens and do not support giving large brands that already rely less on the app stores an additional opportunity to get ahead of smaller developers. We urge the CMA to consider SMEs and specifically this debate in its examination of interventions regarding the supply of mobile browsers.

c. Remedy Area 4: interventions relating to the role of Apple and Google in competition between app developers

While the App Association is a proponent of an open digital environment, we believe that there are certain risks attached to a completely open and/or interoperable market. Interoperability with ancillary services or other core service providers may compromise the integrity or security of an operating system. Interoperability is desirable but should not compromise safety and thus should only be enforced where appropriate. Especially in the context of app stores, this proposal raises several issues. Mandating interoperability between app stores may create large data pools and force the use of a universal programming language, for example, which could violate the General Data Protection Regulation's (GDPR) principle of data minimisation and weaken security, data privacy, and opportunities for innovation. The costs of entering a system of interoperable app stores will likely also be higher than current app store entry fees, raising the currently low entry barriers for smaller actors. Moreover, smaller or emerging app stores may be locked out of this marketplace entirely if they are required to follow the same security protocols for data pools as the larger app stores. Additionally, there is no guarantee that interoperable app stores will continue to be able to provide the same services to app developers as they do currently, especially if they are unable to generate as much revenue to support app store operations. This may lead to a situation in which app developers are not only paying higher entry fees but higher fees for fewer/lower quality services.

We have concerns that requiring broad interoperability and uncontrolled access could hinder platforms' ability to keep out malicious actors. CMA interventions should not undermine the value of platforms for smaller developers, and a potential influx of questionable third-party companies may reduce the trust that is crucial to the survival of small developers. Further, forced interoperability with ancillary services or other core service providers to hardware and software may compromise the integrity or security of an operating system or device. Interoperability is desirable but should not compromise safety and thus should only be enforced where appropriate.

Generally, we do not believe that Apple's and Google's ability to provide their apps as defaults is harmful to consumers. Consumers have come to expect certain functionalities from their devices upon purchases, and this isn't unreasonable. We note that users can remove most pre-installed apps and both Google and Apple develop several apps that do not come pre-installed on users' devices. We agree that consumers should have the freedom to uninstall applications that are not essential to the functioning of the operating system or of the device. However, banning all pre-installed apps, and, instead, offering choice screens to consumers to set each default on their device on their own misunderstands a central feature of the app economy. Complementary applications provide additional features that build upon or improve existing, popular apps and are a building block of the app economy. A few examples include:

- Photo apps: A complementary app built on the camera function may be able to add new filters to images saved in a user's photo gallery or allow users to communicate with others

via in-app functions to share photos. For example, drivers could inform others about dangerous road conditions on a route recommended by sharing photos through their map app.

- Health and wellbeing apps: Most health or wellbeing apps (meditation, workout, water management apps, etc.) use pre-installed software applications such as Apple’s Health App or Google Fit. They are built on top of these apps’ functionalities to create visualisations of the existing data (reading data) while contributing new analysis to it.
- File management apps: Consumers can use file management apps to access other services such as Dropbox or Google Drive data. Pre-installed file management applications already integrate with other apps and let users easily share their files between apps. One can imagine a scenario where a user gets a new phone and did not choose the Files app and can no longer find their files which would create confusion, fear of loss of data, and seriously worsen the user experience for all the apps that rely on these pre-installed applications.

Such apps form a ‘virtuous circle’ within the app economy, with the innovations of one developer inspiring new products by another.³

We further believe most consumers would likely find it more irksome than convenient to manually set all of their defaults before using a new phone.⁴ Such a system would disrupt the ability of small app developers or new market entrants to improve upon products that they know already exist. Moreover, small, still-unknown actors will not benefit from default choice screens as consumers will gravitate toward recognisable brands. While this presumed solution may, therefore, narrow the gap between gatekeepers and large app developers, it will only further disadvantage small app developers. We encourage the CMA to ensure that any interventions concerning pre-installed apps focus on a more flexible principle of user freedom that will not sacrifice either their convenience or the virtuous circle of the app economy.

We have previously noted the benefits of the platforms’ robust and secure app review process that aim to ensure all apps on the store guarantee user privacy and security. This process not only protects consumers, but also increases the reputation of all apps (and, consequently, app makers) that use the platform – thereby granting developers almost instant consumer trust. In the online platform economy, trust is the key to success, and especially small businesses benefit from consumers trusting major software distribution platforms.

Concerning a perceived lack of transparency in the app review process and algorithms, we note that the EU’s Platform-to-Business (P2B) regulation is effectively addressing the transparency issues previously present in the app economy. Direct or indirect influence over ranking algorithms, which benefit one or multiple actors to the detriment of the ecosystem at large, is dangerous for

³ For further reading, see, for example, this article from [Competition Policy International](#)

⁴ See, for example, this recent [academic study](#) on consumer understanding of online platforms, particularly pp. 48-49

stores, consumers, and the entire developer community. We, thus, encourage the CMA to consider the P2B regulation's ranking transparency guidelines as a useful resource in its efforts to increase transparency. Thanks to the P2B regulation, app developers can now gain a better understanding of the ranking algorithms and access information on differentiated treatment more easily. We also point out that app stores have little power to shape consumer preferences as consumer downloads and reviews play a large role in ranking positions.

Differentiated treatment is the 'application of dissimilar conditions to equivalent situations' (as defined by the EU Observatory on the Online Platform Economy). Due to the complexity of the online platform economy, most situations are non-equivalent. We acknowledge that differentiation is inherent in rankings. The function of app ranking is to list content in an order of importance or relevance. Particularly in the app economy, ranking algorithms make it possible for even the smallest app developer to be discovered by a large user base and increase the number of downloads. In this context, it is essential to preserve at least some forms of differentiated treatment in the app ecosystem.

Self-preferencing on the other hand, where a platform gives advantages to their own services over those of rivals, could be quite problematic in the app economy. The App Association points out, however, that the incentives to do this are very low for the providers of app stores. They have a strong interest in having the best quality apps to generate the highest-quality user experience, demonstrated by the fact that many of Apple's and Google's own apps are much less successful than third-party competitors.

Concerning restrictions on data sharing, the App Association agrees with the CMA that it is important to study the data practices of platforms and the impact these practices have on sellers and their incentives to innovate. Big platforms should not be able to unreasonably share information from one part of their business to another and hurt business users' companies in the process.

We also agree with the CMA that a requirement for consistent treatment of Apple's and Google's own apps and third-party apps for privacy purposes could be useful to ensure that all app developers operate on a level playing field.

Concerning a greater choice of in-app payment options and greater promotion of off-app payment options, we reiterate that Apple's and Google's ready-to-use payment and billing services are particularly advantageous for the smallest app developers who would not otherwise have the resources to develop such features. We, therefore, urge the CMA to carefully examine what potential impacts of such interventions would be and if there are any scenarios in which broadening the choice of payment options would disadvantage smaller developers. We have concerns that it would put smaller developers and larger developers who can afford to establish their own payment systems on an uneven footing.

We strongly oppose data separation and/or operational separation. Either of these interventions would severely disrupt the app economy, likely hurting small developers the most.

IV. The potential application of our preliminary findings to the framework of the proposed new pro-competition regulatory regime for digital markets (Chapter 8)

Given that the findings of this market study may inform strategic market status (SMS) designations by the Digital Markets Unit, and by extension, codes of conduct, as the new pro-competition regime proposes, we strongly urge the CMA to take a balanced and inclusive approach to this study. The potential interventions seem to assume the outcome of the final study, namely that there is an OS and platform ‘duopoly’ of which Apple and Google take advantage so they can provide lower quality services and charge higher prices. We believe any presumption of an outcome is detrimental to CMA’s efforts to accurately evaluate software distribution platforms and undercuts the effectiveness of its investigation into mobile ecosystems and the outcomes of that investigation, as well as any actions taken according to findings from the investigation. We encourage the CMA to use this study to objectively examine whether there is real competition between the wide diversity of platforms available to consumers and developers, whether any platform holds a monopoly position, and whether one or more display anti-competitive behaviours. Specifically, the categories for intervention indicate that the CMA is proposing ‘solutions’ before identifying the problem. In a system as complex as the app ecosystem, such an approach is very risky and suggests a possible imbalance in the results of the study.

As proposed in the new pro-competitive framework, strategic market status (SMS) in itself, i.e. the existence of a dominant market position, is not prohibited by competition law. Therefore, we believe it cannot be the sole criterion for an intervention by the Digital Markets Unit. If, however, the SMS position is used to restrict competition, this behaviour should fall into the remit of the new pro-competition regime. We recommend enshrining a monitoring function in the SMS regime to observe and identify such abuse. Similarly, pro-competitive interventions (PCIs) should only remedy sources of market power if a firm abuses them to distort competition.

Basing SMS designation predominantly on indicators like revenue wrongly equates success with power. This approach ignores the unique attributes of multi-sided platforms such as the ability to benefit from multiple services on the same platform, a low barrier to substitution, and ease of market entry by new competitors. Such characteristics minimise the lock-in effect on users. Similarly, we do not believe that activities with significant network effects are inherently anti-competitive. A large firm with strong network effects that provides an important access point can benefit users and consumers. This is especially the case for small businesses in the app economy. Any determination of anti-competitive harm should be highly fact-dependent and based on data-driven economic analysis and a strong evidence base, instead of basing it on a broad study of mobile ecosystems. Platforms are the most important intermediaries in digital ecosystems,

enabling businesses of all sizes and types to easily and immediately reach consumers all around the world. The nature of a platform and its size do not automatically make it harmful to competition.

As for the SMS criteria, only those terms based on data-driven economic analysis should play a role. They need to be well-defined, proportional, and in alignment with antitrust principles and practices. More substantive evidence than hypothetical and/or theoretical harms and edge use cases is necessary to ensure these terms meet the criteria. Any SMS designation should have a basis in actual anti-competitive behaviour, rather than putting companies on a watch list due to their size and market position.

We believe that the CMA can ensure sufficient flexibility, predictability, clarity, and specificity in the new regime by preceding any determination of SMS with a proper market definition. While a market definition should consider antitrust foundations such as the existence of substitutes, such an analysis must be fact-specific, and traditional antitrust analysis does not easily apply to platforms that often are multi-sided markets. Digital markets are complex, involving various players ranging from massive online platforms to one-person software development companies. In markets as complex as digital ones, the lack of a clear definition of SMS concerns us.

Once a market has an appropriate definition, an antitrust analysis should then turn to a determination of SMS designation. A firm's mere possession of 'significant' or 'relative' market power and potential SMS designation, however defined, is not enough to find competitive harm unless a thorough investigation demonstrates an abuse of that market power that yields harm to consumers and competitors. Demonstration of such abuse is critical to determining if antitrust remedies are appropriate, and if so, to what degree.

Further, to ensure flexibility and adaptability for each platform, the SMS concept must make sufficiently meaningful distinctions between different types of digital actors and markets. For example, SMS may look one way for one digital platform and entirely different for another, depending on the market. Each platform is a unique entity and has an ecosystem of related parties that are part of multi-sided markets. They operate across several industries with different business models. Amazon, for example, is not comparable with a platform like the Google Play store. Even Apple's App Store and Google's Play store are so different that the whole app ecosystem could suffer from a one-size-fits-all approach to app stores. For example, Google uses targeted advertising to link consumers with the products they want, whereas Apple's majority revenue comes from device sales. These distinctions impact the interactions of platforms with third-party business users as well as consumers. Unnecessary and/or overly broad application of antitrust laws on successful digital ecosystems like the app economy is likely to hurt those they intend to assist, namely business users of platforms and consumers. Setting out an exhaustive list of strategic position criteria in legislation could be beneficial to function as a frame of reference to ensure legal certainty for affected businesses.

The currently proposed SMS designation process has some beneficial elements such as a consultative process, length of designation, and firm representation. These provisions ensure that stakeholders' views are part of the process, offer legal certainty, and offer a venue to remedy wrongful designation.

While we understand the need for regulators to intervene quickly in rapidly evolving digital markets, we caution against shortening the original timelines proposed in the Taskforce's paper. These proposals fail to acknowledge that whatever impact the SMS designation and a code of conduct have for SMS firms, it will also take time for small business users to react and adapt to changes in the ecosystem. Due to their size and limited resources, SMEs cannot react as quickly, which policymakers need to consider. Applying the proposed framework to Apple and Google as is would, therefore, be detrimental to small and medium-sized app developers.

Further, we believe that all industry stakeholders must be able to participate in consultation periods and provide input to firm representations and appeals. A proper regulatory dialogue and reasonable timelines during which an affected company can justify its business practices would ensure that the government gains a clear understanding of the impact a code of conduct may have on the entire ecosystem. Additionally, shortening the deadlines could increase the risk of non-compliance by SMS firms and, therefore, increase the risk of litigation, in particular between larger actors in the app economy and SMS firms. Such legal disputes could significantly damage the environment in which small business innovators evolve and cause uncertainty, to the detriment of innovation and consumers.

Concerning the application of the procedural framework for designating firms with SMS abuse, reviews, evidentiary thresholds, and rights of appeal, we strongly encourage the implementation of a predictable and publicly available framework. This framework should incorporate fair timeframes that allow for responses on complex questions (a minimum of 60 days for responses to formal inquiries, for example), with mechanisms in place to provide flexibility in timelines based on hardships. The process for designing a code of conduct should include opportunities for public input. Evidentiary thresholds to designate SMS abuse should be high, based on data, and economic analysis. Firms should also have the option to appeal an SMS designation or finding of noncompliance with the code of conduct through the regulatory process and, as a last resort, through the judicial system. Because of the changing nature of digital markets, a review should occur no more than every two (2) years.

In conclusion, we are highly concerned by the potential application of the CMA's preliminary findings to the framework of the proposed new pro-competition regulatory regime for digital markets as it currently stands.

V. The further work we propose to do over the second half of the study, as indicated throughout this report, and summarised later in this chapter

We welcome the CMA's interest in mobile ecosystems and support its efforts to maintain the UK's fair and competitive digital economy. Based on this interim report, we again urge the CMA to examine both the positive as well as the negative aspects of the platform ecosystem to ensure a fully inclusive study and arrive at an unbiased result. Focusing predominantly on potentially negative aspects risks discounting the reasons why the current system has created unprecedented value, innovation, and competition. Additionally, we encourage the CMA to examine how it can continue to foster existing competitive dynamics in the app economy. A balanced and positive approach to this study and future regulation that promotes natural competition and leverages productive incentives would boost the digital economy and innovation. We believe the scope of the study could benefit most from studying the following points further: the competition between developers and between platforms for developers and consumers, the barriers platforms remove to lower switching costs for users and overhead costs for developers, the level-playing field dynamics for developers, and the opportunities this creates for smaller developers. We welcome the CMA's commitment to obtaining further evidence to develop its assessment during the second half of the study. Robust evidence is essential to reach future proof conclusions.

We share the CMA's ambition to preserve competitive digital markets and support the effort to identify specific market failures and assess structural issues in detail before determining policy recommendations. This path of action will help to avoid unintended consequences that would negatively impact SMEs. In the context of a new pro-competitive framework, we believe an evidence-based, fair, and coherent regulatory approach is essential to guarantee that small businesses have a strong voice in the UK's digital economy.