



Before the National Telecommunications and Information Administration

Docket No. NTIA-2022-0001, *Developing a Report on Competition in the Mobile App Ecosystem*

## **Comments of Epic Games**

### ***Introduction***

The National Telecommunications and Information Administration (NTIA) has been directed by Executive Order (EO) to seek comment on, and develop a report to submit to the Chair of the White House Competition Council regarding, competition in the mobile application ecosystem.<sup>1</sup> The EO observes that the “American information technology sector has long been an engine of innovation and growth, but today a small number of dominant internet platforms use their power to exclude market entrants, to extract monopoly profits, and to gather intimate personal information that they can exploit for their own advantage. Too many small businesses across the economy depend on those platforms and a few online marketplaces for their survival.”<sup>2</sup>

Epic Games welcomes the opportunity to comment on these important issues, and specifically on the gatekeeper power that Apple and Google leverage over mobile operating systems and app stores to undermine open and fair competition in the mobile app economy. Epic has experienced Apple's and Google's anti-competitive actions firsthand in its capacity as an app developer and as a potential provider of a competing mobile app store.

The problems with gatekeeper control over the mobile app economy are well-documented and solutions to address these problems have been identified. For example, the House and Senate have introduced the bi-partisan Open App Markets Act (OAMA), which takes a comprehensive approach to app store competition by addressing the underlying cause of gatekeeper power (*i.e.*, monopoly of app distribution on mobile devices) as well as some of its most pernicious symptoms (*e.g.*, tying in-app payment (“IAP”) mandates for digital goods to App Store and Play

---

<sup>1</sup> NTIA, Notice and Request for Comment, *Developing a Report on Competition in the Mobile App Ecosystem*, 87 FR 24134 (April 22, 2022).

<sup>2</sup> Executive Order 14036, *Promoting Competition in the American Economy*, 86 FR 36987, Section (r) (iii) (July 9, 2021).

Store access on mobile devices).<sup>3</sup> The OAMA passed with overwhelming support out of the Senate Judiciary committee earlier this year.<sup>4</sup>

Epic looks forward to NTIA's forthcoming report, but stresses that the report and its findings are not a prerequisite to Congress or the administration taking timely action to address anticompetitive mobile app store practices. Epic anticipates that the NTIA's report will contribute to the already strong evidentiary foundation demonstrating that the United States must be a leader in ensuring a competitive mobile app space that works to the benefit of all – not just Apple and Google.

### **About Epic Games**

Founded in 1991, Epic is a software development company based in Cary, North Carolina. Epic develops and distributes gaming and entertainment applications for personal computers, gaming consoles and mobile devices.

Epic is the creator of *Fortnite*, an online social entertainment experience where hundreds of millions of people from across the world play, talk, compete, dance, or attend concerts and cultural events. *Rocket League* and *Fall Guys* are other popular titles published by Epic Games.

Epic develops and licenses Unreal Engine, a powerful software suite available to third-party developers that allows them to create and distribute three-dimensional and immersive digital content and apps, movies, and other digital environments. Software developers can use Unreal Engine to develop software for many platforms, including Windows PCs, Apple Macs, PlayStation, Xbox, Nintendo Switch, Android, and iOS.

Epic also offers the Epic Games Store. The Epic Games Store is a marketplace for video games and other apps for PCs and Macs. The Epic Games Store is operated via a website where consumers can browse and download individual apps. It currently provides access to over 900 apps from more than 200 developers. The Epic Games Store has accrued over 190 million users on PCs and offers users personalized features such as friends list management and game matchmaking services.<sup>5</sup> Epic has not been permitted to offer a version of the Epic Games Store for distribution of mobile apps on Android or iOS.

---

<sup>3</sup> Draft bill available at:

<https://www.blumenthal.senate.gov/imo/media/doc/8.11.21%20-%20Open%20App%20Markets%20Act%20-%20Bill%20Text.pdf>.

<sup>4</sup> Ashley Gold, "App store bill sails out of Senate Judiciary Committee," *Axios* (Feb. 3, 2022), <https://www.axios.com/app-store-bill-sails-out-of-senate-judiciary-committee-c49c22bf-c9ae-41f4-b23e-55a3ce8caace.html>.

<sup>5</sup> *Epic Games Store 2021 Year in Review*, <https://store.epicgames.com/en-US/news/epic-games-store-2021-year-in-review>.

Finally, Epic has developed its own payment solution, Epic Direct Payment. Epic Direct Payment is the default payment method in the Epic Games Store for PCs and Macs for paid app purchases. Epic takes a 12% fee for use of its payment system and takes no fee if a developer chooses a different payment system. Epic offers, but does not require developers to use, Epic Direct Payment for in-app purchase within apps they make available in the Epic Games Store, providing developers the freedom to choose the payment solution that best suits their needs.

**I. Apple and Google's app store policies artificially limit the development of a competitive, alternative mobile app distribution market**

Apple and Google's control of their mobile OS means they have power to unilaterally determine which app distribution channels are available to developers and consumers on iOS and Android. On iOS, Apple has ensured through interlocking technical and contractual restrictions that the only way to distribute and download apps is through its App Store. On Android, despite its purported openness, Google's Play Store is by far the largest app store, largely because of various artificial restrictions that inhibit competing app stores' ability to challenge Google. By taking advantage of their privileged position as mobile OS providers, and by abusing the dominant positions of their app stores on iOS and Android, Apple and Google have foreclosed competition for app distribution within their ecosystems.

Because of their dominance in app distribution on iOS and Android, Apple and Google have complete discretion to impose the terms under which app distribution takes place in their respective mobile ecosystems. App developers have no choice but to accept these terms. If they don't, they are unable to distribute apps on iOS and Android, and would forgo access to these large user bases. One of the key restrictions that Apple and Google impose on developers is the mandatory use of Apple's and Google's own in-app payment solutions.

The iOS and Android ecosystems complete lack of competition at these two critical layers – app distribution and in-app payment – harms competitors, developers, and consumers alike. Introducing competition at the app distribution level would give developers and consumers the ability to decide how best to distribute and download apps as well as incentivize innovation and would free them from the monopolistic terms of service that Apple and Google impose. Competition in in-app payment solutions would similarly lead to higher quality services, increased innovation, and lower prices for developers and consumers.

While competition in app-payment solutions is important, competition in mobile app distribution is essential to creating a functioning mobile app marketplace. Absent a free market for mobile app distribution, Apple and Google will find ways to introduce charges for use of their app stores that are less efficient or result in harmful unintended consequences. This risk is not theoretical. These scenarios are currently playing out in other jurisdictions and highlight the fact that IAP reform is a necessary but insufficient condition for restoring competition to the mobile

app ecosystem—alternative app store distribution will be required in concert with in-app payment alternatives.

For example, in recent months, Apple and Google have developed underhanded workarounds in attempts to superficially “comply” with South Korea’s Telecommunications Business Act <sup>6</sup> and a recent order by the Dutch Authority for Consumers & Markets (ACM).<sup>7</sup> While it is important to establish clear rules that make Apple and Google offer third party payment services, payments are just one part of a broader pattern of Apple and Google’s monopolist behavior. Their ability to leverage supracompetitive ‘rents’, whether levied through API access, App Store dominance or payment rules, are an indication of their respective monopolies, and requires comprehensive action to prevent them from simply finding new ways to charge or allocate commissions in response to enforcement measures.

#### **A. Apple imposes anti-competitive restrictions in relation to iOS app distribution and iOS in-app payment solutions**

Apple engages in anti-competitive conduct in relation to app distribution on iOS. Apple imposes its contractual restrictions by requiring that iOS developers agree to the Apple Developer Program License Agreement (“DPLA”). Via the DPLA, Apple prohibits developers from distributing their apps through any channel other than Apple’s App Store, and prohibits anyone from offering a competing app distribution channel on iOS.

First, Apple conditions all app developer access to the App Store, and hence iOS, on the developer’s agreement to distribute their apps solely through Apple’s App Store.<sup>8</sup> By contractually conditioning developer access to iOS on their agreement to distribute apps solely through the App Store, developers are prevented from choosing to offer their iOS apps through third-party app stores or their websites.

Second, Apple conditions app developer access to the App Store, and hence iOS, on their agreement not to distribute third-party app stores.<sup>9</sup> In other words, to access the iOS userbase, app developers must agree not to distribute app stores that could compete with Apple’s App Store – irrespective of whether the developer would distribute its own competing app store through Apple’s App Store or through the developer’s own website. By prohibiting both (i) the distribution of iOS apps *through* a competing app store and (ii) the distribution *of* competing app

---

<sup>6</sup> Reuters, Apple submits plans to allow alternative payment systems in S.Korea (11 Jan 2022), <https://www.reuters.com/article/southkorea-apple-idCAKBN2JL0F1>.

<sup>7</sup> ACM, Apple fails to satisfy requirements set by ACM (24 Jan 2022), <https://www.acm.nl/en/publications/apple-fails-satisfy-requirements-set-acm>.

<sup>8</sup> Section 3.1(g) of the Apple Developer Program License Agreement, <https://developer.apple.com/support/downloads/terms/apple-developer-program/Apple-Developer-Program-License-Agreement-20211213-English.pdf>.

<sup>9</sup> *Id.* at Section 3.3.2(b).

stores, Apple has created a double lock system that guarantees exclusivity for Apple's own App Store.

iOS consumers must exclusively use Apple's App Store to download any apps to their devices, app developers must exclusively use Apple's App Store to distribute their apps to consumers, and would-be app distribution channels are unable to offer apps or competing app stores for download and distribution. Epic has faced these restrictions firsthand. When Epic sought to bring its popular app store – the Epic Games Store – to iOS, Apple refused. To date, Epic has not been permitted to compete with Apple in offering an app distribution service to iOS users and developers.

Another way in which Apple's power manifests itself is through Apple's requirement for exclusive use of Apple's IAP for purchases of in-app digital content. The App Store Guidelines, with which iOS app developers are required to comply pursuant to the DPLA, provide that *"if you [the developer] want to unlock features or functionality within your app, (by way of example: subscriptions, in-game currencies, game levels, access to premium content, or unlocking a full version), you must use in-app purchase. Apps may not use their own mechanisms to unlock content or functionality."*<sup>10</sup>

Notably, these requirements do not apply to purchases of physical goods – a distinction that imposes an arbitrary and discriminatory tax on developers selling digital goods. One of the most common revenue models is for a developer to offer apps to consumers at a low cost or even for free, while charging for certain features or content. But in-app purchases of digital content or functionality from *within* an iOS app are heavily taxed by Apple. App developers are required to pay Apple a 30% commission on each in-app purchase. This conduct harms consumers as app developers often pass this additional charge on to consumers in the form of higher prices. Subjecting Apple to competition for in-app payment solutions would significantly benefit not only app developers but also consumers, through more choice and innovation as well as lower prices and better quality.

## **B. Google imposes anti-competitive restrictions in relation to Android app distribution and Android in-app payment solutions**

Much like Apple, Google offers its own app store – the Google Play Store – and imposes anti-competitive restrictions in relation to competing app distribution channels on Android mobile devices. Unlike Apple, Google does not prohibit the use of alternative app distribution channels outright, yet its Play Store is by far the largest app distribution channel on Android devices. This dominance in the market for Android app distribution is not the result of a superior product, but rather the result of anti-competitive restrictions that effectively prevent developers and others from using or offering competing app distribution channels that might otherwise pose a competitive threat to the Play Store.

---

<sup>10</sup> Section 3.1.1 of the App Store Guidelines, <https://developer.apple.com/app-store/review/guidelines/>.

First, Google requires original equipment manufacturers ("OEMs") to enter into a Mobile Application Distribution Agreement ("MADA"), which ensures the prominent pre-installation of the Play Store on virtually all Google Android devices, giving it a significant competitive advantage vis-à-vis any alternative app distribution channels.

Second, Google imposes restrictions on OEMs that make downloading from sources outside of the Play Store (so-called direct downloading (as explained above) or pejoratively "sideloading" by Google) technically complex, confusing, and even scary, filled with dire warnings about possible security threats regardless of the reputability of the source that cause consumers to abandon the process, rendering competing app distribution channels entirely ineffective.

Epic Games has firsthand experience of the harm caused by Google's restrictions.<sup>11</sup> Users have to go through as many as 16 steps to download Fortnite and change their default settings, while navigating multiple intimidating warnings. Once downloaded, users also need to update apps manually as this process does not allow apps to use the automatic update functionality of the Google Play Store. Epic Games updates its popular game Fortnite every other week (with smaller updates being available as frequently as daily) and a user can only play if they are operating the most recent version, making Google's restrictive process burdensome and time-consuming.

Third, Google has entered into agreements with OEMs pursuant to which it provides monetary compensation in exchange for a commitment from the OEM not to pre-install app stores on their devices other than the Google Play Store. Google reached these agreements after recognizing the potential competitive pressure from other app distribution channels including the Epic Games Store to its Android app distribution dominance. As a result of Google's agreements, Epic had to abandon plans for pre-installation agreements with multiple OEMs.

Fourth, Google prevents competitors from making their app stores available through the most important distribution channel on Google Android devices, the Play Store. Google imposes this restriction through provisions of the Google Play Developer Distribution Agreement (the "DDA"), which Google requires all app developers to sign before they can distribute apps through the Google Play Store. Section 4.5 of the DDA provides that developers "may not use Play to distribute or make available any Product that has a purpose that facilitates the distribution of software applications and games for use on Android devices outside of Google Play."<sup>12</sup> Google's dominant position in the market for Android app distribution is the result of these separate but related restrictions.

---

<sup>11</sup> Google, Submission to UK Competition and Markets Authority, Mobile Ecosystem Market Study – Statement of Scope, Google's perspective, p. 6 (2 August 2021), <https://assets.publishing.service.gov.uk/media/617aa590e90e071981081653/Google.pdf>.

<sup>12</sup> Section 4.5 of the Google Play Developer Distribution Agreement, <https://play.google.com/about/developer-distribution-agreement.html>.

In addition to restrictions on Android app distribution, Google also imposes restrictions on Android in-app payment solutions. Like Apple and the App Store, Google requires developers distributing apps through the Google Play Store to agree to exclusive use of Google's in-app payment solution, Google Play Billing ("GPB"), for in-app purchases of digital content. Thus, Google prohibits developers from using third-party payment solutions for in-app purchases of digital content on the Play Store.

### **C. Apple's and Google's restrictive conduct eliminates competition and inflates prices**

Apple's and Google's restrictive conduct eliminates competition at multiple layers of their mobile ecosystems, harming developers and consumers. In Epic's case, Apple's and Google's app store practices prevent Epic from competing against them at three levels: (i) as a would-be competing app distribution channel, (ii) as a would-be competing in-app payment solution provider, and (iii) as an app developer forced to use exclusively Apple's and Google's app stores and in-app payment solutions.

But for Apple and Google's restrictions, Epic would compete with Apple and Google in app distribution by creating an app store for iOS and Android. But for Apple and Google's restrictions prohibiting competing in-app payment solutions, Epic would offer consumers an Epic payment system. But for Apple and Google's restrictions, Epic could distribute its own apps, including *Fortnite*, through app distribution channels that offer the best quality and most competitive terms, while offering their customers competitive in-app payment solutions.

Epic is but one example. There are a multitude of other potential Apple and Google competitors who are similarly stymied and unable to launch innovative and alternative products and services in the mobile app ecosystem. Introducing competition for app distribution and in-app payment would result in greater choice for developers and consumers, lower prices, better quality, and more innovation.

To be clear, Epic has never suggested that Apple and Google are not entitled to monetize their app stores. Developers benefit from App and Play Store distribution. However, Apple and Google also derive significant value from the apps available in their app stores. An app store without apps is a store with empty shelves. Indeed, Apple and Google originally introduced the App Store and Play Store because apps were necessary to make their operating systems attractive, and the investments of app developers are major contributors to the success and popularity of iOS and Android devices.

The core issue is whether unilateral control over mobile app distribution on iOS and Android devices entitles Apple and Google to limit competition and charge supracompetitive rents. For example, though Apple has argued that its "30% rate is commensurate with the value developers

get from the App Store,”<sup>13</sup> a U.S. district court in *Epic v. Apple* found to the contrary:

“[A]bsent competition, however, it is impossible to say that Apple’s 30% commission reflects the fair market value of its services. Indeed, at least a few developers testified that they considered Apple’s rate to be too high for the services provided....Apple has provided no evidence that the rate it charges bears any quantifiable relation to the services provided. To the contrary, Apple started with a proposition, that proposition revealed itself to be incredibly profitable and *there appears to be no market forces to test the proposition or motivate a change.*”<sup>14</sup>

The district court further concluded that:

“[L]ooking at the combination of the challenged restrictions and Apple’s justifications, and lack thereof, the Court finds that common threads run through Apple’s practices which unreasonably restrain competition and harm consumers, namely the lack of information and transparency about policies which effect [sic] consumers’ ability to find cheaper prices, increased customer service, and options regarding their purchases. Apple employs these policies so that it can extract supracompetitive commissions.”<sup>15</sup>

**II. Left unchecked, Apple and Google’s unfair app store policies will unilaterally set the course of entire industries, as well as the mobile app ecosystem, for the foreseeable future.**

Mobile apps are already essential to consumers in the United States and around the world. They will become even more so in the years ahead. Apple and Google’s ability to set terms and prices, as well as control the availability of mobile apps to consumers, is shaping the development of products and services, companies, emerging business models and industries.

Consumers increasingly access the internet via their mobile devices, and their internet experience is increasingly defined by the apps available on their phones. Likewise, developers’ ability to reach consumers and create a viable business may be largely determined by their ability to secure distribution on mobile devices, a sector where Apple and Google are by far and away the dominant players. Because Apple and Google each unilaterally set the terms of app distribution, a consumer’s experience of “the internet” will be determined by Apple and Google and whichever apps those companies permit in their app stores or mobile devices.

Opening mobile devices to alternate means of downloading applications and software is foundational to the creation of a more open ecosystem, whether it be alternative app stores or direct downloading of applications from the web. These solutions already exist and are regularly

---

<sup>13</sup> *Epic Games v. Apple*, Rule 52 Order at 98.

<sup>14</sup> *Id.* at 99-100 (emphasis added).

<sup>15</sup> *Id.* at 118.



and safely used by consumers every day when they use their laptop or desktop computers, including PCs, Macs and Chromebooks. It is only when consumers shift from the computer on their desk to the computer in their pocket that they are limited to software installation through the App Store and Play Store. These limits are the product of commercial decisions by Apple and Google – not of safety or technical necessity.

**A. Alternative mobile app stores would inject price competition, innovation and consumer choice into a closed mobile app ecosystem**

Currently access to alternative app stores is severely limited or outright prohibited on the dominant mobile operating systems, Android and iOS. These restrictions artificially limit competition and consumer choice. The availability of alternative app stores available on mobile devices would result in a more open ecosystem that gives consumers and developers better choice and value. For example, Epic Games charges a substantially lower commission (12%) for games distributed via the Epic Games Store, than the 30% charged by Apple's App Store and Google's Play Store and also permits alternative payment processing.

Consumers are not the only ones who would benefit from competition-induced price discipline. In *Epic v. Apple*, the court found that "Apple's restrictions on iOS game distribution have increased prices for developers. In light of Apple's high profit margins on the App Store, a third-party store could likely provide game distribution at a lower commission and thereby either drive down prices or increase developer profits."<sup>16</sup>

Price is not the only element that would be improved by app store competition. That same U.S. district court determined that "a third-party app store could put pressure on Apple to innovate by providing features that Apple has neglected."<sup>17</sup> The court specifically found that:

The parties agree that the App Store provides features besides distribution, including search and discoverability to help users discover games, in-app payment processing, developer tools, and security. Competition could improve each of these features: a third-party app store could provide better "matchmaking" between users and developers, could have simpler in-app payments, and could impose a higher standard for app review to create more security. . . . Notably, Apple conducted developer surveys in 2010 and 2017. Comparing the two indicates that Apple is not moving quickly to address developer concerns or dedicating sufficient resources to their issues. Innovators do not rest on laurels. . . . Apple's slow innovation stems in part from its low investment in the App Store.<sup>18</sup>

---

<sup>16</sup> *Epic Games, Inc. v. Apple Inc.*, 4:20-cv-05640-YGR (N.D. Cal.), Rule 52 Order after Trial on the Merits (Dkt. No. 812), at 99.

<sup>17</sup> *Id.* at 102.

<sup>18</sup> *Id.* at 100-102.

**B. Claims that alternative mobile app distribution would jeopardize security are a pretext to justify anticompetitive practices**

Anticompetitive app store policies should not get a free pass from scrutiny just because Apple or Google invoke privacy and security justifications. Often these justifications are pretextual or exaggerated.

For example, Apple argues that “if third-party app stores were able to operate on iOS devices, the level of protection against malware would move from Apple’s high standard of review to the lowest standard offered by a third party app store, creating a risk for the individual device and the overall ecosystem.”<sup>19</sup> Apple self-servingly mischaracterizes the risk and the function of the App Store app review process and its impact on device security. It also makes the baseless assertion that competition in app distribution would be a security “race to the bottom,” rather than a “race to the top” where rivals with more innovative and secure app stores challenge Apple to do better. To the contrary, Apple’s app review protections could be replicated—and even improved—by third parties.

The choice between promoting competition and promoting security is not a binary one. Competition is likely to drive innovation and improvement in security and consumer privacy. As the Electronic Frontier Foundation explains in its brief in support of Epic in the U.S. Court of Appeals, “Apple’s security rationale is weak and does not overcome the harm its policies cause to innovation, including innovation that would enhance consumers’ security and privacy.... Apple’s policies actively thwart developers’ attempts to meet other user needs relating to privacy, security, trustworthiness, and access to information.”<sup>20</sup>

Opening the mobile ecosystem to the same level of competition and openness that consumers and developers experience on desktop computers will help ensure that self-determination and market forces – rather than the unilateral preferences of two companies – set the terms by which these products, services and industries evolve to meet consumer needs and demands.

**C. Direct downloading of applications from the web is a safe and effective way for developers and consumers to avoid dominant app store gatekeepers’ anti-competitive terms and fees**

As a threshold matter, Epic stresses that “side loading” is just direct downloading of applications on mobile devices outside of the Apple App Store or Google Play Store. Application “sideloading” is identical to the routine application “downloading” that millions of consumers

---

<sup>19</sup> *Id.* at para 7.56.

<sup>20</sup> See *Brief of The Electronic Frontier Foundation as Amicus Curiae Supporting Appellant, Cross-Appellee Epic Games and Reversal* at 12, 17, *Epic Games, Inc. v. Apple, Inc.*, (Nos. 21-16506 and 21-26695), (9th Cir. Jan. 27, 2022).

safely perform everyday on their Macs, Chromebooks and PCs. There is nothing exotic or nefarious about it.

Apple insists that its App Store review process provides important security protections. While Apple often conflates App Store review and security review, they are not the same thing. The primary function of App Store review is to ensure compliance with app store guidelines – including commercial terms – not to provide a critical security function. Core security functions are executed at the operating system and hardware level. There is no technical reason to mandate App Store review and distribution on iOS devices. Indeed, Apple does not require this on Mac devices where users are free to download apps and software outside of the App Store, and security screens are executed via Apple’s notarization process.

### **1. The operating system – not the app store – provides critical security functions on a device**

Security is ensured first and foremost by the operating system (“OS”) and hardware. The OS is the entity that controls how applications interact with each other, a device’s hardware, and the OS itself. Regardless of the mechanism by which an application arrives on a phone, and regardless of whether the application was reviewed for security risks or other problems ahead of time by either human app review or automated mechanisms, the OS is ultimately the entity that determines what the application is or is not allowed to do.

iOS is based on the same kernel<sup>21</sup> as the MacOS. Consumers who use Macs are able to download third-party software from a variety of digital stores or directly from a developer’s website, with a choice of payment methods. Apple uses a notarization system on MacOS software that “gives users more confidence that the Developer ID-signed software you distribute has been checked by Apple for malicious components.”<sup>22</sup> Per Apple, the notary service “is an automated system that scans software for malicious content, [and] checks for code-signing issues.”<sup>23</sup>

There is no technical reason that the iPhone requires different or higher security standards than the Mac. Indeed, Macs can access any sensitive content present on iPhone by syncing via iCloud, so any vulnerability differences between iOS and MacOS would be exploited by the iCloud function. However, Apple has consistently represented the Mac as secure and safe from

---

<sup>21</sup> A “kernel” is the computer program at the core of an operating system, providing basic services for all other parts of the OS, and generally has complete control over all functions in the system.

<sup>22</sup> “Notarizing MacOS Software Before Distribution,” Apple Article, [https://developer.apple.com/documentation/security/notarizing\\_Macos\\_software\\_before\\_distribution](https://developer.apple.com/documentation/security/notarizing_Macos_software_before_distribution).

<sup>23</sup> *Id.* For greater discussion on the arbitrary policies controlling direct downloading on iOS vs. MacOS, see Coalition for App Fairness, *Should iOS users be allowed to download apps via direct downloads or third-party app stores? An Analysis of Apple’s recent claims* (2021), [https://appfairness.org/wp-content/uploads/2021/12/iOS\\_Users\\_and\\_Third\\_Party\\_App-Stores.pdf](https://appfairness.org/wp-content/uploads/2021/12/iOS_Users_and_Third_Party_App-Stores.pdf).

malware, and there are no credible arguments to suggest that alternative app distribution would be less safe on an iPhone than it is on a Mac.<sup>24</sup>

Similarly, there is no technical reason why app review needs to be linked to app distribution. Apple and Google both have the ability to review apps for security vulnerabilities and then allow those vetted apps to be distributed on their platform through distribution channels *other* than their own app stores, as evidenced by Apple's notarization process on the Mac.

## **2. App Store Review provides marginal protections against malicious apps**

Apple's arguments are even more disingenuous when accounting for the multiple analyses that have found that Apple allows malware and fraudulent apps to proliferate throughout the App Store, bilking consumers out of their money and displacing legitimate independent developer apps.

In 2021, *The Washington Post* reported that, of the 1,000 top-grossing apps in the App Store, 2% were fraudulent and had conned consumers out of roughly \$48M USD – of which Apple took a 30% commission.<sup>25</sup> Quoting multiple authorities on the issue, *The Post* noted that "Apple's monopoly over how consumers access apps on iPhones can actually create an environment that gives customers a false sense of safety, according to experts. Because Apple doesn't face any major competition and so many consumers are locked into using the App Store on iPhones, there's little incentive for Apple to spend money on improving it."<sup>26</sup>

In another analysis, an iOS developer, Kosta Eleftheriou, undertook an extensive review of the App Store apps and found many fraudulent apps submitted by scam artists – none of which were caught by Apple's purported "high standard of review." Eleftheriou attributed the abundance of scam apps to "inconsistently enforced App Store rules and lazy moderation."<sup>27</sup>

The district court in *Epic v. Apple* was likewise unpersuaded by Apple's pretextual security justifications, finding, "Apple argues that its policies protect consumers against fraudulent attacks. The data is far from clear. What is certain is Apple's decision prohibits information from

---

<sup>24</sup> <https://www.apple.com/macOS/security/>.

<sup>25</sup> Reed Albergotti and Chris Alcantara, "Apple's tightly controlled App Store is teeming with scams," *The Washington Post* (6 June, 2021), <https://www.washingtonpost.com/technology/2021/06/06/apple-app-store-scams-fraud/>. See also, Reed Albergotti, "He believed Apple's App Store was safe. Then a fake app stole his life savings in bitcoin," *The Washington Post* (30 Mar, 2021), <https://www.washingtonpost.com/technology/2021/03/30/trezor-scam-bitcoin-1-million/>.

<sup>26</sup> *Id.*

<sup>27</sup> Nick Stat, "Apple's App Store is hosting multimillion-dollar scams, says this iOS developer," *The Verge* (8 Feb, 2021), <https://www.theverge.com/2021/2/8/22272849/apple-app-store-scams-ios-fraud-reviews-ratings-flicktype>.

flowing directly to the customer so that customers can make these choices themselves.”<sup>28</sup>

**Conclusion**

Epic appreciates the NTIA and administration’s commitment to examining and promoting competition in the mobile app ecosystem. We anticipate that the NTIA’s report will further contribute to the already sizable evidence that the dominant mobile platform practices are limiting the growth of a healthy and competitive mobile app ecosystem.

Respectfully Submitted,

/s/ Corie Wright

Corie Wright  
Vice President of Global Public Policy

/s/ Bakari Middleton

Bakari Middleton  
Director of Global Public Policy

**Epic Games**

---

<sup>28</sup> *Epic Games v. Apple Inc.*, Rule 52 Order at 41.