



**ACCC DIGITAL PLATFORM SERVICES INQUIRY - MARCH 2021 REPORT INTO APP
MARKETPLACES**

SUBMISSION IN RESPONSE TO THE ACCC'S ISSUES PAPER

19 OCTOBER 2020

Introduction and Executive Summary

Google welcomes the opportunity to provide comments on the ACCC's Issues Paper for its March 2021 report on app marketplaces as part of its ongoing Digital Platform Services Inquiry.

As the Issues Paper notes, apps play a fundamental role in the operation of many businesses and in the lives of consumers. App marketplaces provide an easily accessible platform to efficiently connect developers with users on a global scale. Developers and users can choose from a multitude of options, and app distribution channels compete vigorously for both developers and users.

This thriving and highly dynamic environment is the result of a relatively recent revolution in the mobile ecosystem. Before the 2007 release of Android, spearheaded by Google, mobile device manufacturers offered only a narrow range of devices, with few tightly controlled app stores (or controlled by carriers or the mobile operating system licensor). The launch of Android, as the first truly open and comprehensive mobile platform, disrupted and opened up the stagnant mobile industry by lowering barriers to entry and expansion, and creating choice at every platform level. Android's openness allows: anyone to freely and independently use the Android source code to create differentiated products; device manufacturers to decide which and how many apps to preinstall on their devices; developers unfettered choice to distribute their apps via one or multiple channels (preinstallation, a variety of Android app stores, and downloading from the Internet); and users to fully customise their devices irrespective of any initial app preinstallations by device manufacturers.

This diversification has, in turn, led to a surge of competition and innovation in the app development and distribution space, to the benefit of users, who enjoy lower prices, better safety, enhanced quality and functionality, and more choice. In 2019, there were 204 billion app downloads globally, reflecting a 45% increase since 2016.¹ This significant growth would not have been possible without the massive investment of ecosystem developers like Google or Apple, which, in turn, encourages investment by other participants in the mobile economy.

Despite arriving relatively late to the marketplace, Android has been able to thrive based on principles of openness, innovation, and competition. However, Google's choice of an open platform design means that Android must manage the interests of all the various platform participants (device manufacturers, carriers, app developers, users, and Google). Such balancing of interests is central to Android's competitiveness and continued commercial viability.

The same is true of Google Play (**Play**), Google's app marketplace for Android devices. To be successful, an app store must attract both developers and users. That means finding the right balance between their interests. Every aspect of Play, including its business model and policies, is driven by the need to serve and balance the interests of all its stakeholders, including Google's as an app developer and app store operator. To make its platform attractive to other app developers and users alike, Google offers app developers tools and services to enable them to efficiently and successfully develop and distribute high-quality apps to users, while also protecting users' safety and their privacy.

In this submission, Google describes Play's role within the dynamic mobile ecosystem, including the value it provides, the intense competition it faces for the distribution of apps, its significant ongoing investment in developing its offering, and how it balances the interests of all stakeholders in every

¹ Statista, *Number of mobile app downloads worldwide from 2016 to 2019 (billions)*, 17 January 2020, <https://www.statista.com/statistics/271644/worldwide-free-and-paid-mobile-app-store-downloads/>.

aspect of its business. These competitive dynamics provide important context for many of the areas raised in the ACCC's Issues Paper.

Android stands for choice at every level -- including apps and app stores

In the early 2000s, Google -- an app developer itself -- faced the same practical challenges as other app developers around the world: mobile device manufacturers (also known as Operating Equipment Manufacturers or OEMs) only offered a narrow range of devices; device manufacturers, together with mobile carriers, controlled which apps were allowed onto devices (either via preinstallation or download from exclusive, proprietary app stores); and app developers had to invest significant resources to specifically design apps for multiple versions and subversions of the various mobile operating systems. For example, at one point Google had approximately 100 different versions of its Google Maps app to ensure interoperability with the various devices (and operating systems) in the marketplace. Development costs for app developers were high, output and quality were restricted, and distribution options limited. User experience varied widely across devices.

In November 2007, a group of companies, led by Google, announced the formation of the Open Handset Alliance and the development of Android as the first truly open and comprehensive platform for mobile devices. The alliance shared a common goal of “*fostering innovation on mobile devices and giving consumers a far better user experience.*” They described Android as:

hold[ing] the promise of unprecedented benefits for consumers, developers and manufacturers of mobile services and devices. Handset manufacturers and wireless operators will be free to customize Android in order to bring to market innovative new products faster and at a much lower cost. Developers will have complete access to handset capabilities and tools that will enable them to build more compelling and user-friendly services, bringing the Internet developer model to the mobile space. And consumers worldwide will have access to less expensive mobile devices that feature more compelling services, rich Internet applications and easier-to-use interfaces — ultimately creating a superior mobile experience.²

Since the launch of the first Android smartphone in September 2008,³ Android has lived up to that promise and contributed to greater competition, innovation, and choice at every level of the mobile ecosystem:

- Device manufacturers can obtain Android free of charge, under an open-source license. Anyone can download and use (as well as modify) the Android source code, to create unique, differentiated products, without the need for any authorisation or consent from Google.
- Device manufacturers can also freely choose which and how many apps and app stores (whether Play and/or other app stores) they want to preinstall on their devices. Android is available without any proprietary apps, including from Google. Google's own apps are licensed separately from Android and share “shelf space” on devices with non-Google apps.

² Open Handset Alliance, *Industry Leaders Announce Open Platform for Mobile Devices*, 5 November 2007, http://www.openhandsetalliance.com/press_110507.html.

³ John Callaham, *The History of Android: The evolution of the biggest mobile OS in the world*, Android Authority, 13 September 2020, <https://www.androidauthority.com/history-android-os-name-789433/>.

- App developers need to write their apps only once for Android. They can then be distributed and will work across the entire compatible Android ecosystem. To avoid the fate of Symbian⁴ and other open-source projects, Google encourages platform participants to support a baseline of compatibility.
- App developers can freely choose how they distribute their apps on Android, including via preinstallation, distribution via one or more app stores, and direct downloads from their own (and third-party) websites.
- Users are able to freely customise their devices irrespective of any initial app preinstallations by device manufacturers.

Through Play, Google itself offers app developers one of these distribution choices. Play is a non-exclusive distribution channel in every sense: Play is one of many Android app stores, and one of the different distribution options listed above (i.e., preinstallation, Android app stores, and downloading from the Internet). Ultimately, app developers can use Play, other Android (and non-Android) app stores, and additional distribution channels simultaneously.

Despite being a new entrant, Android succeeded in competing with and outperforming some long-standing industry incumbents, as it overcame some of the fundamental limitations prevailing in the mobile industry at the time. There are two main reasons for Android's success:

First, Android has deliberately been designed to be different from other prevailing operating systems, such as vertically integrated and closed models (e.g., Apple's iOS, which develops the mobile operating system, its exclusive app store, and the devices that they are used on) or proprietary licensing options (e.g., Microsoft's Windows Mobile or Nokia's Symbian, both of which are now defunct). These different ecosystems compete with each other. Therefore, to obtain buy-in from partners (to adopt a then-new platform), Android offered, and continues to offer, the flexibility and autonomy for each participant and at every level of the ecosystem, as described above. This is unlike any competing platform.

Second, Google, in developing Android, has carefully managed the interests of the various platform participants. The choice of an open platform design requires a delicate and constant balancing of all stakeholders' interests, namely users, app developers, device manufacturers, carriers, as well as the commercial interests of Google:

- Android users expect access to a large variety of popular, high-quality, and safe apps from a variety of developers. They also want the ability to customise their devices to meet their individual needs, while trusting the device will be safe from malware. In 2018, Australians had an average of 103 apps installed on their Android devices and used 39 different apps in a given month (more than in the US, Japan, the UK, and India).⁵

⁴ Symbian was the leading platform in 2007 with an estimated 73% share of the mobile operating system (OS) business (Metrics 2.0, *Nokia Leads Smartphone Market with 56% Share; Symbian Has 73% of OS Share*, 26 March 2007,

http://www.metrics2.com/blog/2007/03/26/nokia_leads_smartphone_market_with_56_share_symbian.html).

Owned by several major OEMs, including Nokia, Ericsson, and Motorola, it was licensed without defining a common compatibility baseline for apps to call on. The subsequent creation of different, incompatible versions of Symbian by various OEMs caused the OS to fragment and implode. App developers were reluctant to write apps for multiple incompatible versions of Symbian and, by 2013, Symbian had almost entirely disappeared.

⁵ App Annie, *The Data Behind 10 Years of Google Play*, 15 October 2018, <https://www.appannie.com/en/insights/market-data/google-play-all-time/>.

- Android app developers want to efficiently design apps that work across the highest possible number of Android devices. They also want to optimise the distribution of their apps to obtain a return on their development costs.
- Device manufacturers want to create their own differentiated Android devices to better compete with other device manufacturers (both for Android and other platforms such as iOS) at multiple price points.
- Mobile carriers want to offer their customers high-quality devices at multiple price points and with a good Internet experience that encourages consumers to use their networks.⁶
- Google needs to ensure the platform's technical and financial stability and the viable distribution of Google's own apps and services, many of which are provided for free (e.g., Search and Chrome) -- this in turn enables Google to monetise its investment and to continue to invest in the Android ecosystem.

Balancing the interests of Android's different stakeholders is central to Android's competitiveness and continued commercial viability.

The same is true of Play. To be successful, an app store must invest to attract both developers and users. Therefore, every aspect of Play's business, including its policies, is driven by the need to serve and balance the interests of all of its stakeholders, including Google's as the app store operator.

All app distribution channels, on and off Android, compete with each other

Play, as just one of many distribution options on Android, competes with other distribution channels in the Android ecosystem. It also competes head-to-head with distribution options on other platforms, such as Apple's App Store.

Play competes with other app distribution channels on Android

Play competes with a multitude of other distribution methods, which are available on, and enabled by, Android. Unlike iOS, Android provides app developers with numerous distribution options. By encouraging a baseline of compatibility across Android implementations, Google tries to minimise any costly and disruptive distribution friction for developers across Android devices developed by different device manufacturers. As highlighted above, on Android, developers are free to choose how they best distribute their apps and are not limited to any particular distribution channel:

- Android app developers can negotiate preinstallation deals with device manufacturers to preinstall their apps on devices so that users will have access to them out-of-the-box.
- Besides, or instead of Play, app developers can also choose to distribute through numerous other Android app stores and app subscription services (such as the Samsung Galaxy Store and Amazon Appstore).⁷

⁶ Apple's biggest selling smartphone model in 2020 (being the iPhone 11) is double the price (\$1200 v \$599) of Android's top selling model (Samsung's Galaxy A51)

<https://www.afr.com/technology/why-apple-may-be-forced-to-release-a-cheap-iphone-12-20201004-p561xs>.

⁷ In addition to Play, other Android app stores include Samsung Galaxy Store, Opera Mobile Store/Bemobi, Amazon App Store, Aptoide, 1Mobile Market, AC Market, Anzhi, AppBrain, AppChina, Appland, AppsLib, AppZone, Aptoide, Baidu App Store, Bazaar, Best Apps Market, BlackMart, Brophone Market, Camangi Market, D.cn Games Center, F-Droid, Get5, GetJar, gFan, GoodeReader, HiAPK, Lexibook Market, LG Smart World, Maopao, MiKandi, Mobango, Mobile9, Mobo Market, MTN Play, Mumayi.com, Naver NStore, N-Duo Market, neXva, OpenAppMkt, PandaApp, Pdassi, Phoload, Pinoy App Shop, SlideMe, Soc.io Mall, Taobao App Market,

- Android app developers can also distribute via direct downloads from their own (and third-party) websites. For example, the popular messaging app WhatsApp is available via WhatsApp's direct download page,⁸ or can be downloaded from Play. The same is true of thousands of other apps, which are either available directly from developer websites or on popular app repositories such as APKMirror.⁹

Play is, therefore, a non-exclusive marketplace for Android users. In contrast, Apple does not allow other app stores on iOS, does not preload non-Apple apps on its devices, and does not permit app installations outside of the App Store.

Play competes with other app stores on other platforms

Play is subject to strong and close competition from Apple's App Store on iOS. Play was created, amongst other reasons, to allow Android to better compete against Apple's iOS and App Store.

In response to competition from Apple for users and app developers, Google constantly invests in developing and improving Play and prices its service competitively. For example, Play and Apple's App Store compete in relation to their safety and security as well as the tools developers can use to create, release, and manage their apps.

This strong competition between Play and the App Store is reflected by the fact that 46% of apps by Australian developers are available on both app stores.¹⁰ For Australian developers, this means that half of their apps are either available on Play or the App Store, and both app stores compete head-to-head to attract the best talent to their distribution platform.

Google competes to attract app developers to Play

Android and Play¹¹ first became available to consumers approximately one year after Apple launched the first iPhone. The first version of Play only offered a few apps, all of which were free. Paid apps were only available a year later, and initially only in the USA and the UK.

For more than a decade, Google has both triggered and responded to vigorous competition with Apple and its other rivals by offering a high-quality and safe platform for developers to distribute their apps at a competitive price point and by providing users with access to a catalog of high-quality apps. Developing and improving upon Play is a continuous process.

Tencent My App, TorrApk, Uptodown Market, Wandoujia, Xiaomi Market, and Yandex.Store. This list may not cover all the app stores that users can access.

⁸ This download page, available at: <https://www.whatsapp.com/android/>, can be visited on a mobile device browser and then the "APK" can be downloaded directly by users. An APK (an Android application package) is the package file format used by the Android OS, and a number of other Android-based OSs, for distribution and installation of mobile apps. Such APKs can also be shared via file transfer such as email.

⁹ Available at: <https://www.apkmirror.com/>. For example, UK based Pokémon enthusiasts were able to obtain earlier access to the popular Pokémon Go game (when it was available on the Australian but not UK Play Store) by downloading through app repositories such as APKmirror (see The Guardian, *How to get Pokémon Go right now in the UK on Android*, 11 July 2016, <https://www.theguardian.com/technology/2016/jul/07/how-to-get-pokemon-go-uk>).

¹⁰ 42matters, *Australian App Market Statistics in 2020*, 13 October 2020, <https://42matters.com/australia-app-market-statistics>.

¹¹ Play was initially named Android Market.

Android baseline compatibility reduces development costs

App developers benefit from Google's investment in the Android baseline compatibility, as it greatly reduces their initial app development costs compared to a more fragmented ecosystem, in which numerous incompatible Android versions coexist. Cost savings stem from the fact that programming a single Android version of an app can reach the same number of users, without having to develop different app versions to function on different devices for each Android device manufacturer. A recent report by AlphaBeta into the economic impact of the Android OS in Korea found that development time falls by roughly 30%, if instead of having to adapt an app to 12 incompatible versions¹² an app developer can build to one compatible Android version.¹³

Play provides numerous tools and services to help app developers

Google strives to offer efficient tools and services for Play to make it attractive to developers and users alike and to enable developers to successfully create and distribute Android apps and content. These tools and services include in particular:

- **Development and Support:** Through Android and Play, Google provides cutting-edge app development, analytics and testing, as well as quality control tools. These include the Android Software Development Kit, Android Studio, and the Play Console.
- **Hosting and Distribution:** Play provides the technical infrastructure to host and distribute apps globally, and to keep those apps updated.
- **Discovery:** Play provides an important channel for users to discover apps and for developers to gain access to a large, global customer base.
- **Compliance:** Play manages a wide variety of regulatory compliance requirements for developers, which enables them to safely distribute their apps globally.
- **Payments:** For developers choosing to charge for their apps, the Play billing infrastructure provides a consistent, safe, and secure system that gives users the choice among a variety of payment options.

Providing these tools has tangible benefits for developers. Public data indicates that, globally:

- downloads have increased by 27% on Play from 1H 2019 to 1H 2020;
- developers' revenues on Play have increased by almost 20% from H1 2018 to H1 2019; and
- total consumer spend on Play has increased by 21% from 1H 2019 to 1H 2020.¹⁴

All developers have access to the tools and services offered by Google, and there is no obligation that developers ultimately distribute apps through Play. Thus, app developers can use these tools, develop Android apps, and, ultimately, decide to distribute them through channels other than Play.

¹² Reflecting the number of Android device manufacturers with a global share larger than 1%.

¹³ AlphaBeta, *Android Impact: How the Android Ecosystem supports Economic Impact in South Korea*, p 18, https://www.alphabeta.com/wp-content/uploads/2017/08/South-Korea-Android-Economic-Impact_Aug2017.pdf.

¹⁴ Sensor Tower, *Global App Revenue Reached \$39 Billion in the First Half of 2019, Up 15% Year-Over-Year*, 22 July 2019, <https://sensortower.com/blog/app-revenue-and-downloads-1h-2019>.

Google enables quick, easy and efficient access to Play

Play is designed to make it easy for developers to upload and distribute their apps.

Developers uploading an app to Play for the first time must first create a Play Console account,¹⁵ which requires paying a one-time registration fee and agreeing to comply with the Play Developer Distribution Agreement (DDA).¹⁶ Google requires, *inter alia*, that developers and their apps adhere to the Developer Programme Policies (DPP).¹⁷

Once registered, developers can start uploading their apps for review to ensure that they comply with the DDA and DPP and are not harmful to consumers or the Android ecosystem generally. Based on this initial review process, apps (other than those which are deemed non-compliant with the DDA and/or DPP) can be distributed through Play. The review criteria, as set out in the DPP, include:

- **Restricted content:** Google does not permit apps that contain certain restricted content, including child endangerment, deceptive or harmful financial products and services, and certain other inappropriate content such as hate speech, sexual content, and profanity.
- **Impersonation and Intellectual Property:** Google does not permit apps that:
 - use another app's or entity's brand, title, logo, or name in a manner that may mislead users;
 - infringe upon intellectual property rights (including trademark, copyright, patent, trade secret, and other proprietary rights); or
 - encourage or induce the infringement of intellectual property rights.
- **Privacy, deception and device abuse:** Google does not permit apps that are deceptive, malicious or intended to abuse or misuse any network, device or personal data. If an app collects user data, the developer must clearly disclose what data it collects and why, and include the developer's privacy policy in the store listing and the app.
- **Store Listing and Promotion:** App developers must describe their app appropriately and accurately. Any misleading metadata or promotions that are harmful to users are not permitted.
- **Spam and Minimum Functionality:** At a minimum, apps should provide users with a basic degree of functionality and a respectful user experience. Therefore, Google does not allow apps that exhibit behaviour that is not consistent with a functional user experience, or that serve only to spam users or Play.

To ensure that apps are quickly and efficiently available for distribution through Play, the app review process involves automation as well as input from human reviewers. On average, new apps are uploaded within a few hours of their submission for review.

Play provides a flexible and proportionate intervention and appeal process for non-compliant apps

Google reviews thousands of apps a day using a combination of automated and human reviews. Reviews are conducted to identify violations of the DDA and/or DPP only. It should be noted that whether an app might compete with a Google app is not a relevant review criterion. If upon review,

¹⁵ Google, *Google Play Console*, <https://play.google.com/apps/publish/signup/>.

¹⁶ Google, *Google Play Developer Distribution Agreement*, 15 April 2019, <https://play.google.com/about/developer-distribution-agreement.html>.

¹⁷ Google, *Developer Policy Center*, <https://play.google.com/about/developer-content-policy/>.

Google determines an app does not meet the criteria set forth in the DDA and/or DPP, developers are typically notified and given the opportunity to fix the problem. Once a developer uploads an app to Play, it may be subject to further review by Google. This typically occurs when Google receives a complaint from a third-party (e.g., a user), a developer uploads a new version of an app, or Google launches a new policy.

Where Google finds an app is in breach of the DDA and/or DPP, Google acts in accordance with an escalating enforcement process as outlined on the DPP Centre Page.¹⁸ The level of enforcement is proportional to the seriousness of the violation and accounts for whether a developer's violations are habitual.

Developers can appeal all enforcement actions using an online form, which takes just a few minutes. Google typically responds to appeals within two to three days depending on the volume of pending queries and the type of enforcement action taken. If a developer's appeal of an app removal or app rejection is denied and the developer's Play Console account is still in good standing, the developer may upload a new, policy compliant version of its app.

Google's interests in the app review process and in enforcing its policies are closely aligned with those of developers and users. Android users want a variety of high-quality apps and both Google and developers benefit when more users are happy with the Android experience. In this regard, Google is incentivised to ensure that consumers have access to as many high-quality apps as possible -- so that they try, or keep using, Play. All of Google's policies are designed with users' and developers' interests in mind -- they promote a safe and secure environment for all stakeholders.

App organisation on Play rewards quality and innovation

There are a number of ways for users to discover apps that are available on Play. Users can discover apps by searching on Play and through lists and ranking-based recommendations in Play's "Top Charts" section.¹⁹

In addition, as many other app stores and digital markets do, Play has a team of editors and merchandisers that manually select content for featuring and promotion and create custom placements. When selecting content to be featured in Play, the editorial and merchandising teams focus on the quality of the app experience, and also consider criteria such as the novelty, design, and usefulness of the content as well as how broadly appealing the app is.

Apps are ranked or recommended to users in Play according, in particular, to their relevance to users and their quality.²⁰ To appropriately assess these parameters, Google reviews the information developers provide about their apps when submitting them to Play and user feedback (e.g., user ratings, reviews, and engagement) to understand an app's content and functionality.

¹⁸ Google, *Google Play Developer Program Policies: Enforcement Process*, <https://play.google.com/about/enforcement/enforcement-process/>.

¹⁹ Ranking-based recommendations can be found in the 'Top Charts' section of Play. There are various lists ("Top Charts") in which an app could be "featured" in Play, for example, "Top Free" apps (i.e., most popular free apps over the prior seven days, based on the number of installs) or "Trending Apps" (apps showing installation growth in the last 24 hours). See Google Play, *Play Console Help webpage: Types of featured app lists*, <https://support.google.com/googleplay/android-developer/answer/1295940?hl=en>.

²⁰ Google Play, *Play Console Help webpage: App Discovery and Ranking*, https://support.google.com/googleplay/android-developer/answer/9958766?hl=en&ref_topic=9958765.

Google also considers user experience when designing how to present and organise apps within Play, including how to group them, where and how many ads to serve in results, and the formats used to present apps (e.g., display apps in lists with small icons or in content-forward formats).

Regardless of whether apps are developed by third-parties or by Google, Google uses the same standards in deciding which apps to promote in Play. In fact, Google regularly promotes apps developed by its competitors in the 'Editors Choice' list within Play. Similarly, Google's algorithms rank third-party apps and games using the same criteria they use to rank Google's own apps.

Ultimately, the best strategy a developer can adopt to increase discoverability within Play is to build an app that users enjoy and recommend to others.

Play's business model is designed to enhance user experience, drive revenues for developers, and support the Play ecosystem

As highlighted in the ACCC's Issues Paper, apps generally fall under four models: (1) free apps (including free apps monetised by developers through advertising); (2) free apps that offer additional paid functionality on top of a free basic version (referred to as 'freemium' apps); (3) paid apps that require a one-off payment to access the app; and (4) subscription apps that require recurring payments to access or use the app.

Google requires that certain purchases of digital goods and services are made using Play's billing system. For a small percentage of all apps available through Play (i.e., less than 3%²¹), Google charges a 30% service fee when a user pays for an app, signs up for an app-based subscription via Play, and/or makes in-app purchases of digital content. With respect to subscriptions, the initial 30% service fee drops to 15% after the first year.

Importantly, the service fee enables Google to maintain its investment in Play and the Android ecosystem. Google invests substantial resources in creating, developing and maintaining Android and Play, and monetises its investment to continue to provide a high level of service and to keep the platform commercially viable. Thus, through this business model, the majority of developers (especially new developers trying to build a user base) can access Play's app development tools, the distribution channel, and the broader Android ecosystem for free.

Play's billing system provides users with a safe, convenient, and consistent way to make purchases through Play, including by managing the buy flow to ensure all necessary information is clear to the user prior to purchase, providing a uniform payment processing system, making available multiple forms of payment, and ensuring users can manage purchases including cancelling subscriptions and obtaining refunds. All of this increases user trust, which in turn increases user willingness to make purchases, which is to the benefit of developers. Play's billing system also enables developers to easily launch monetisation globally, e.g., there are over 200 local forms of payment available via Play's billing system.

Other fee models may significantly harm certain developers and deprive them of the many benefits available to them under the current structure. For instance, a flat rate fee would negatively impact developers of free or cheaper apps. Similarly, a hosting fee, or a fee for each service Google offers on Play, would disproportionately impact developers that are struggling to attract users. Further, such a

²¹ Android Developers Blog, *Listening to Developer Feedback to Improve Google Play*, 28 September 2020, <https://android-developers.googleblog.com/2020/09/listening-to-developer-feedback-to.html>.

fee structure could also render developers reluctant to distribute their apps for free. In comparison, the current service fee model (based on developers being charged a proportion of consumer spend) has allowed many of the apps distributed on Play to be downloaded for free, which ultimately benefits and attracts more users.

Android and Play keep users safe

Protecting users' safety and their privacy is fundamental to Google to ensure optimal user experience.

User security is key to the Android ecosystem, including for Play

Android provides multiple layers of app protection, enabling users to download apps to their devices with the confidence that they are shielded from malware, security exploits, and attacks.²²

Google uses a range of security features (e.g., Safe Browsing, Security Checkup, and 2-Step Verification) to protect users' accounts. Also, Google Play Protect, which is provided on all devices with Play installed, is a powerful threat detection service that actively monitors a device to protect it, its data, and apps from malware. It now scans over 100 billion apps on users' devices every day to ensure that these apps are not behaving in harmful ways and uses the information it gathers to improve the detection of malicious apps. If Google Play Protect identifies an app containing malware, it notifies the user. Last year, Google Play Protect helped to prevent 1.9 billion malware installs. In addition, as described above, Play enforces policies to protect users from malicious actors trying to distribute harmful apps. Users on Play are better protected against cybersecurity threats such as phishing and other harmful behaviour.

Play ensures users have control over their data

As provided in Google's privacy policy,²³ Google may collect certain data to provide the Play service as well as to provide users a personalised experience on Play (such as customised search results and recommendations). Google may also use data, typically in aggregate form, to improve its services and maintain the quality of Play. For instance, through Play, Google collects information about app usage based on interactions with Google surfaces (e.g., app installation data and app purchase data) to help ensure that apps run correctly and securely and that users receive from developers what has been requested (e.g., in-app features and subscriptions).

Further, Google provides developers access to an extensive set of data²⁴ through the Play Console, in downloadable formats and APIs,²⁵ and continually invests to make metrics and visualisations more helpful. For example, the data shared with developers helps them understand the lifecycle of their app: from how it is discovered in Play, to how users engage with it, and what users pay for. The data Google provides to developers is generally aggregated and anonymised to protect user privacy.

Ultimately, users can control how, and whether, Google uses their data. Google provides

²² Android Enterprise Security White Paper, January 2020, https://static.googleusercontent.com/media/www.android.com/en/static/2016/pdfs/enterprise/Android_Enterprise_Security_White_Paper_2019.pdf.

²³ Google, *Privacy & Terms*, <https://policies.google.com/>.

²⁴ Google, Play Console Help, *View reports, statistics, & insights*, <https://support.google.com/googleplay/android-developer/topic/3450942>.

²⁵ Google, Play Console Help, *Download & export monthly reports*, <https://support.google.com/googleplay/android-developer/answer/6135870>.

industry-leading tools for users to review, manage and control their data:

- Users can decide what type of data collection activity is associated with their account and subsequently pause the collection and/or the use of specific types of data.
- Users can manage privacy settings within a specific Google application or product.
- Google provides the Privacy Checkup, where a user can review and adjust important privacy settings.²⁶
- Through “Google Dashboard”, authenticated users can view in a single place the Google services they use and the data they involve. Users can review their Google activity over the previous month, see how many emails, documents and photos they have, and check the parameters of their Gmail account as well as those of any other relevant Google service.
- Users have control over how their Play activity may be used for any recommendations in their “My Activity” page (<https://myactivity.google.com>). The information Google collects, and how that information is used, depends on how a user uses Google’s services and how a user manages the privacy controls.

Final remarks

Google appreciates the opportunity to provide comments on the competitive ecosystem within which Play operates, as well as more detail on how Play works with developers in order to create the best user experience possible, for the ultimate benefit of developers, users and Google. We look forward to working constructively with the ACCC as it prepares its March 2021 Report.

²⁶ Google, *Privacy and Terms*, <https://policies.google.com/privacy?hl=en&gl=us#infochoices>.