# **Appendix A: Market outcomes**

### Introduction

A.1 This appendix presents data on market outcomes. We first present data on outcomes relating to Mobile Devices and operating systems including shares of supply and the prices of Mobile Devices. We then set out outcomes relating to native app distribution including summary statistics for the Play Store and usage of sideloading and Progressive Web Apps (**PWAs**). Finally, we present data on shares of supply for mobile browsers and browser engines.

# Mobile devices and operating systems outcomes

As explained in Chapter 4, there is one Android operating system available on both smartphones and tablets. There are, however, differences in market outcomes between smartphones and tablets and so for completeness, this section sets out shares of supply for Mobile Ecosystems across all Mobile Devices, and a more detailed breakdown of shares of supply in mobile operating systems and devices, separately for smartphones and tablets. We also consider device pricing separately for smartphones and tablets, and the revenues generated by Google across different smartphone price segments in the UK and globally.<sup>2</sup>

# Mobile Ecosystem shares of supply

#### Source of data

A.3 We consider that end-users effectively make a choice as to which Mobile Ecosystem they use when purchasing a mobile device as that device will come pre-loaded with an operating system associated with a given ecosystem. The number of users of a Mobile Ecosystem is therefore consistent with the number of users of the associated mobile operating system(s). This analysis is based on data relating to operating systems.

<sup>&</sup>lt;sup>1</sup> PWAs refers to particular versions of web apps which aim to create an experience even more similar to native apps compared to normal web apps.

<sup>&</sup>lt;sup>2</sup> This data was not provided for tablets.

- A.4 The data underlying this analysis comes from market participants and Statcounter.
- A.5 We received yearly data on the volume of (i) active Mobile Devices, and (ii) sales of Mobile Devices from Amazon, Apple, Google and Huawei. The data provided covered the four main operating systems available on Mobile Devices in the UK in the last decade. Namely, it included data from Amazon on its Fire OS tablets, data from Apple on iPhones and iPads, data from Google on all Android smartphones and tablets, and data from Huawei on its HMS smartphones and tablets.<sup>3</sup>
- A.6 We have also sourced data from Statcounter; a web analytics service which uses tracking code to record page views to over 1.5 million 'member websites' globally. It uses the data this generates to publish Global Stats, including shares of supply for mobile operating systems, smartphones, and tablets based on active devices.<sup>4</sup>
- A.7 We consider that Statcounter's methodology may include the following limitations:
  - (a) The 'member websites' for which Statcounter records data may not be representative of the population of websites. Statcounter does not reweight its data to correct for any potential issues.
  - (b) Some consumers' adblockers and browser preferences may prevent data on those consumers' page views from being sent to Statcounter.
- A.8 Further, Statcounter does not produce any material assessing the extent of measurement error in its data. We have compared shares of supply calculated using Statcounter data with those calculated using market participant data on active Mobile Devices and found that they are broadly similar, albeit there are some differences. Therefore, we have primarily relied on data provided by market participants and use Statcounter data to look at:
  - (a) Historical trends: as it is available over a longer period (in some cases as far back as 2009). We consider historical trends to be relevant to the

<sup>&</sup>lt;sup>3</sup> Huawei's HMS devices are a version of Android that meets Google's compatibility requirements but uses Huawei Mobile Services instead of GMS.

<sup>&</sup>lt;sup>4</sup> For more detail see FAQ | Statcounter Global Stats, accessed 30 June 2025.

<sup>&</sup>lt;sup>5</sup> Both datasets feature the same market participants and result in similar shares of supply in Mobile Ecosystems. However, Statcounter data shows Apple's and Google's Mobile Ecosystems having much closer shares of supply in recent years and Amazon's Mobile Ecosystem as having a smaller share compared to market participant data.

- assessment of whether Google meets the SMS condition of substantial and entrenched market power as they can inform whether the firm's market power has persisted over a significant period.<sup>6</sup>
- (b) Global trends: As set out in Chapter 6, Google competes over certain parameters of competition on a global basis, as Google's Mobile Platform is broadly the same worldwide. Therefore, we consider global trends to be relevant to the SMS assessment to the extent that some of Google's incentives to compete will likely be determined globally, such as its incentives to innovate and improve the quality of its Mobile Platform.

## **Mobile Ecosystems**

- A.9 Figure A.1 shows the shares of supply based on data from market participants for Google, Apple, Amazon, and Huawei's Mobile ecosystems in terms of active Mobile Devices in the UK for the period 2017 to 2024. This shows that:
  - (a) Google's Mobile Ecosystem has accounted for between [ $\gg$ ] [30 40]% and [ $\gg$ ] [40 50]% of active Mobile Devices in each year of the period;<sup>10</sup>
  - (b) Apple's Mobile Ecosystem has accounted for between [ $\gg$ ] [50 60]% of active Mobile Devices in each year of the period;<sup>11</sup>
  - (c) Amazon's Mobile Ecosystem has accounted for between [ $\gg$ ] [5 10]% of active Mobile Devices in each year of thbe period;<sup>12</sup>
  - (d) Huawei's HMS Mobile Ecosystem has accounted for a very small amount ([ $\gg$ ] [0 5]%) of active Mobile Devices in each year of the period.<sup>13</sup>

<sup>7</sup> Google stated that it develops Android, Google Play, Blink and Chrome as global products and, accordingly, innovations and improvements for Android are designed to benefit users across the world. Google's response to section 69 notice [≫]. We note that there are some differences between Google's Mobile Platform between jurisdictions. For example, the apps offered on the Play Store vary between jurisdictions.

<sup>&</sup>lt;sup>6</sup> See CMA194, paragraph 2.61.

<sup>&</sup>lt;sup>8</sup> Google stated that the features and functionalities of Android, Google Play, Blink and Chrome are not tailored specifically to the UK or any other individual country (Google's response to section 69 notice [\*], and that Android competes with iOS on a global basis (Google's response to the Proposed Decision, footnote 12).

<sup>&</sup>lt;sup>9</sup> The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [≫]. Google's response to section 69 notice [≫]. Amazon's response to section 69 notice [≫]. Huawei's response to section 69 notice [≫].

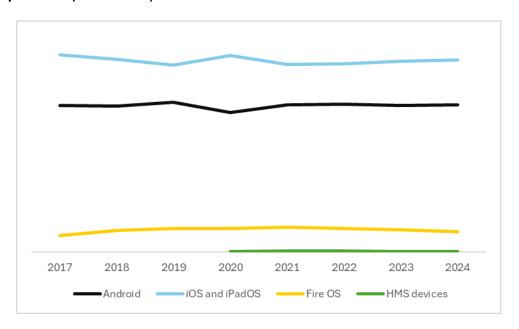
<sup>&</sup>lt;sup>10</sup> CMA analysis of data from market participants including Google's response to section 69 notice [×].

<sup>&</sup>lt;sup>11</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [ $\gg$ ].

<sup>12</sup> CMA analysis of data from market participants including Amazon's response to section 69 notice [ ].

<sup>13</sup> CMA analysis of data from market participants based on Huawei's response to section 69 notice [ន].

Figure A.1: Mobile Ecosystem shares of supply in active Mobile Devices in the UK – market participant data (2017 – 2024)



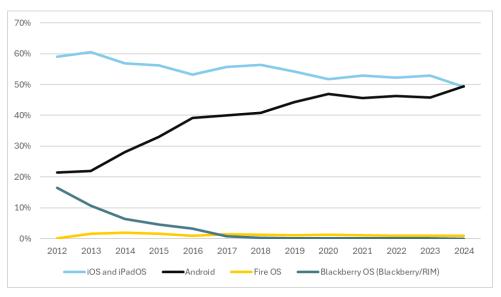
Source: CMA analysis of data from market participants.

Notes: (i) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (ii) HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS). Huawei was only able to provide this data from 2020.

- A.10 Figure A.2 below shows the shares of supply based on Statcounter data on active Mobile Devices for Google, Apple, Amazon and Blackberry's Mobile Ecosystems in the UK since 2012. This shows that:
  - (a) Google's Mobile Ecosystem has accounted for between 40% and 49% of active Mobile Devices since 2017. Before this its share grew each year since 2012, increasing from 21% and reaching 39% in 2016;
  - (b) Apple's Mobile Ecosystem has accounted for between 49% and 61% of active Mobile Devices since 2012;
  - (c) Amazon's Mobile Ecosystem has accounted for a maximum of 2% of active Mobile Devices in any year since 2012;
  - (d) Blackberry's Mobile Ecosystem accounted for 16% of active Mobile Devices in 2012. Its share in active Mobile Devices declined as Google's

Mobile Ecosystem increased in share, reaching less than 1% in 2017. Blackberry is no longer active in the supply of mobile operating systems.<sup>14</sup>

Figure A.2: Mobile Ecosystem shares of supply in active Mobile Devices in the UK – Statcounter data (2012 – 2024)



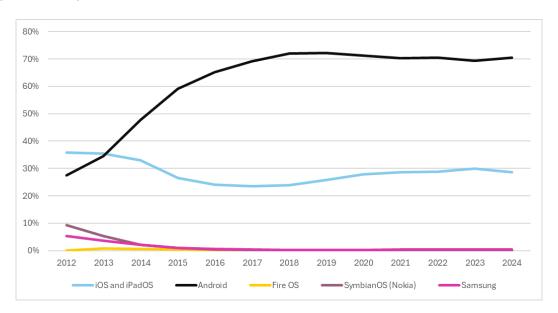
Source: <u>Mobile & Tablet Operating System Market Share United Kingdom | Statcounter Global Stats</u>, accessed 30 June 2025. Notes: Only Mobile Ecosystems with a share of 5% or more in any one year according to Statcounter data have been included, except Fire OS which is included for consistency. Due to its use of a version of Android, Huawei's HMS devices are likely to be included within Android.

- A.11 Figure A.3 below shows the shares of supply based on Statcounter data on active Mobile Devices for Apple, Amazon, Google, Symbian OS, and Samsung's Mobile Ecosystems globally since 2012. This shows that:
  - (a) Google's Mobile Ecosystem has accounted for between 65% and 72% of active Mobile Devices since 2016. Before this its share grew each year since 2012, increasing from 27% in 2012 and reaching 59% in 2015. It has been the largest Mobile Ecosystem in the world since 2014.
  - (b) Apple's Mobile Ecosystem has accounted for between 23% and 36% of active Mobile Devices since 2012. It has been the second largest Mobile Ecosystem in the world since it was overtaken by Google in 2014.
  - (c) Amazon's Mobile Ecosystem accounted for at most 1% of active Mobile Devices since 2012.

<sup>&</sup>lt;sup>14</sup> Blackberry announced that it would stop supporting Mobile Devices using its operating systems from 4 January 2022 (see <u>BlackBerry 10 and BlackBerry OS Services FAQ — End of Life</u>, accessed 30 June 2025).

(d) Symbian OS (9%) and Samsung (5%) provided the third and fourth largest Mobile Ecosystems in 2012, at which their shares peaked. These Mobile Ecosystems declined quickly, reaching 1% by 2015. Symbian OS and Samsung are no longer active in the provision of mobile operating systems.<sup>15</sup>

Figure A.3: Mobile Ecosystem shares of supply in active Mobile Devices worldwide – Statcounter data (2012 – 2024)



Source: Mobile & Tablet Operating System Market Share Worldwide | Statcounter Global Stats, accessed 8 August 2025.

Notes: Only Mobile Ecosystems with a share of 5% or more in any one year according to Statcounter data have been included, except Fire OS which is included for consistency. Due to its use of a version of Android, Huawei's HMS devices are likely to be included within Android. This graph excludes the Series 40 operating system as it was not made available on smartphones (see Microsoft is killing off Nokia's feature phones in favor of Windows Phone | The Verge, accessed 12 August 2025).

# Mobile operating system shares of supply

#### Source of data

A.12 The data underlying this analysis is the same as that used for Mobile ecosystem shares of supply above (for a description see 'Source of data' within the 'Mobile Ecosystem shares of supply' sub-section).

<sup>&</sup>lt;sup>15</sup> Nokia announced that it would stop using Symbian as its main mobile operating system in 2011 and it released the last mobile device using Symbian OS in 2012 (see <a href="From birth to death: why Nokia's Symbian was the future of mobile tech | TechRadar</a> and 'Android before Android': The long, strange history of Symbian and why it matters for Nokia's future | ZDNET, accessed 30 June 2025). Samsung released its final smartphone using the Tizen mobile operating system in 2017, having merged its Linux-based Bada operating system with Tizen in 2012 (see <a href="Samsung Electronics Eventually Abandons Tizen OS - Businesskorea">Samsung's Tizen smartphone OS: Dead or alive? | ZDNET, accessed 30 June 2025)</a>.

# **Smartphones**

- A.13 Figure A.4 shows the shares of supply based on data from market participants for Android, iOS, and Huawei's HMS devices in terms of active smartphones in the UK for the period 2015 to 2024. 16 This shows that:
  - (a) Between [ $\gg$ ] [50 60]% of active smartphones in each year of the period have been Apple's iOS devices;<sup>17</sup>
  - (b) Between [≫] [40 50]% of active smartphones in each year of the period have been Android devices; 18 and
  - (c) A very small amount ([ $\gg$ ] [0 5]%) of active smartphones in each year of the period have been Huawei's HMS devices.<sup>19</sup>

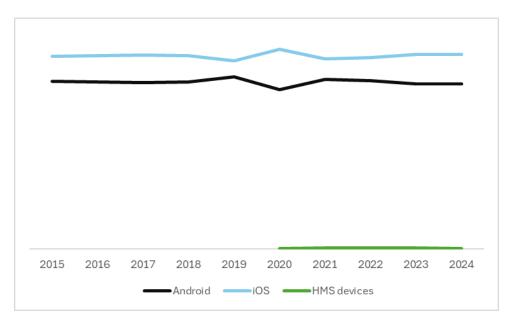
<sup>&</sup>lt;sup>16</sup> The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [≫]. Huawei's response to section 69 notice [≫].

<sup>&</sup>lt;sup>17</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>18</sup> CMA analysis of data from market participants including Google's response to section 69 notice [»].

<sup>19</sup> CMA analysis of data from market participants including Huawei's response to section 69 notice [※].

Figure A.4: Operating system shares of supply in active smartphones in the UK – market participant data (2015 – 2024)



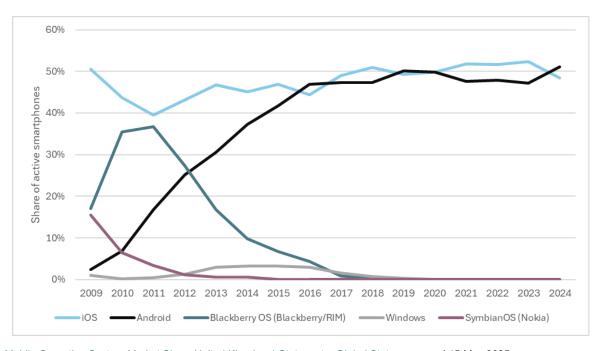
Source: CMA analysis of data from market participants.

Notes: (i) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (ii) HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS). Huawei was only able to provide this data from 2020.

- A.14 Figure A.5 below shows the shares of supply based on data from Statcounter for Android, iOS, Blackberry OS, Symbian OS and Windows in the UK since 2009. This shows that:
  - (a) Apple's iOS devices have had a share of supply between 40% and 52% throughout the period. It has been the largest provider of operating systems for active smartphones in every year since 2009 except 2016, 2019 and 2024.
  - (b) Google's Android was the fourth largest provider of operating systems for smartphones in 2009 with a share of just 2%. Its share grew rapidly to 25% in 2012, and it became the second largest provider of smartphone operating systems by 2013. Since 2015 Google's Android operating system has had a share of over 40%, reaching a peak of 51% in 2024.
  - (c) Blackberry OS (17%) and Symbian OS (16%) were the second and third largest providers of operating systems in 2009. Blackberry OS initially grew its share to a peak of 37% in 2011, before declining rapidly as Android devices increased in share. During this period Symbian OS was owned by Nokia, and its share of supply declined quickly from 2009, falling

by more than half between 2009 and 2010, and reaching 1% by 2012. Blackberry OS, Symbian OS and Windows (whose share peaked at 3% between 2013 and 2016) are no longer active in the supply of smartphone operating systems.<sup>20</sup>

Figure A.5: Operating system shares of supply in active smartphones in the UK – Statcounter data (2009 – 2024)



Source: <u>Mobile Operating System Market Share United Kingdom | Statcounter Global Stats</u>, accessed 15 May 2025.

Notes: Only operating systems with a share of 5% or more in any one year have been included, except Windows which is included for illustrative purposes. Due to its use of a version of Android, Huawei's HMS devices are likely to be included within Android. In addition, Fire OS is likely to be included within Android as it is an Android fork, however we understand Fire OS was only used in Amazon's Fire Phone, which was on the market between September 2014 and 2015.<sup>21</sup>

A.15 Figure A.6 below shows the global shares of supply based on data from Statcounter for Android, iOS, Blackberry OS, Symbian OS and Samsung since 2009. This shows that:

<sup>&</sup>lt;sup>20</sup> Blackberry announced that it would stop supporting Mobile Devices using its operating systems from 4 January 2022 (see BlackBerry 10 and BlackBerry OS Services FAQ — End of Life, accessed 30 June 2025). Nokia announced that it would stop using Symbian as its main mobile operating system in 2011 and it released the last mobile device using Symbian OS in 2012 (see From birth to death: why Nokia's Symbian was the future of mobile tech | TechRadar and 'Android before Android': The long, strange history of Symbian and why it matters for Nokia's future | ZDNET, accessed 30 June 2025). Microsoft announced that there would be no further updates to its last mobile operating system (Windows 10 Mobile) in 2017 and that it would no longer support the operating system in 2019 (see Saying goodbye to Windows 10 Mobile: Microsoft ends support for its mobile OS - GSMArena.com news and Windows Phone was a glorious failure - The Verge, accessed 30 June 2025).

<sup>&</sup>lt;sup>21</sup> See Amazon Fire Phone UK Release: Handset launches today | Trusted Reviews and Amazon stops selling Fire smartphone - BBC News, accessed 30 June 2025.

- (a) Google's Android has been the largest provider of mobile operating systems for active smartphones on a global basis since it overtook Symbian OS in 2012 with a share of 27%. Its share quickly grew to 64% in 2015 and has ranged between 69% and 75% in the years since.
- (b) Apple's iOS devices have had a share of supply between 19% and 34% throughout the period, and it has been the second largest supplier of mobile operating systems for active smartphones on a global basis since overtaking Symbian OS in 2012.
- (c) Symbian OS (35%) was the largest global supplier of operating systems in 2009. Its share declined quickly from 2011, reaching 1% by 2015. Symbian OS is no longer active in the supply of smartphone operating systems.<sup>22</sup>
- (d) Blackberry OS reached a peak share of supply (17%) in 2010, making it the third largest global mobile operating system in that year only. After this its share declined quickly, falling to 1% by 2015. Blackberry is no longer active in the supply of smartphone operating systems.<sup>23</sup>
- (e) Samsung's mobile operating system reached its peak global share in active smartphones in 2012 (6%) and declined steadily from then, reaching 1% by 2015. Samsung is no longer active in the supply of smartphone operating systems.<sup>24</sup>

<sup>&</sup>lt;sup>22</sup> Nokia announced that it would stop using Symbian as its main mobile operating system in 2011 and it released the last mobile device using Symbian OS in 2012 (see From birth to death: why Nokia's Symbian was the future of mobile tech | TechRadar and 'Android before Android': The long, strange history of Symbian and why it matters for Nokia's future | ZDNET, accessed 30 June 2025).

future | ZDNET, accessed 30 June 2025).

23 Blackberry announced that it would stop supporting Mobile Devices using its operating systems from 4 January 2022 (see BlackBerry 10 and BlackBerry OS Services FAQ — End of Life, accessed 30 June 2025).

<sup>&</sup>lt;sup>24</sup> Samsung released its final smartphone using the Tizen mobile operating system in 2017, having merged its Linux-based Bada operating system with Tizen in 2012 (see <u>Samsung Electronics Eventually Abandons Tizen OS - Businesskorea</u> and <u>Samsung's Tizen smartphone OS: Dead or alive? | ZDNET, accessed 30 June 2025).</u>

80%

70%

60%

40%

20%

10%

Figure A.6: Operating system shares of supply in active smartphones worldwide – Statcounter data (2009 – 2024)

Source: Mobile Operating System Market Share Worldwide | Statcounter Global Stats, accessed 8 August 2025.

Notes: Only mobile operating systems with a share of 5% or more in any one year according to Statcounter data have been included. This graph excludes the Series 40 operating system as it was not made available on smartphones (see Microsoft is killing off Nokia's feature phones in favor of Windows Phone | The Verge, accessed 12 August 2025), and Sony Ericsson's mobile operating system as it is reported that this was a user interface based on Symbian (see The story behind Sony Ericsson and UIQ Technology, accessed 12 August 2025). Due to its use of a version of Android, Huawei's HMS devices are likely to be included within Android. In addition, Fire OS is likely to be included within Android as it is an Android fork, however we understand Fire OS was only used in Amazon's Fire Phone, which was on the market between September 2014 and 2015. 25

2016

2017

2018

2019

SymbianOS (Nokia)

2020

2021

2022

Samsung

2023

2024

2009

2011

Android

2012

2013 2014

2015

Blackberry OS (Blackberry/RIM)

- A.16 We have calculated shares in the supply of smartphone operating systems in the UK using additional data sources (market participant data on the volume of sales of new devices, and IDC data on unit shipments) and have elected to set out the above shares of supply based on market participant data and Statcounter data on active devices because:
  - (a) Market participants are likely to be the most accurate data source, and data on active smartphones provides an overall view of shares of supply (including new and existing devices); and
  - (b) Statcounter data is available over a longer time period and therefore shows historical trends.

<sup>&</sup>lt;sup>25</sup> See Amazon Fire Phone UK Release: Handset launches today | Trusted Reviews and Amazon stops selling Fire smartphone - BBC News, accessed 30 June 2025.

A.17 While the various shares of supply calculated using different data sources differ slightly,<sup>26</sup> they show consistent findings: Apple's iOS and Google's Android have been the largest suppliers of smartphone operating systems for at least a decade, accounting for around half of supply each in the UK.

#### **Tablets**

- A.18 Figure A.7 shows the shares of supply based on data from market participants for Android, iPadOS, Amazon's Fire OS and Huawei's HMS devices in terms of active tablets in the UK for the period 2017 to 2024.<sup>27</sup> As can be seen:
  - (a) Between [≫] [50 60]% of active tablets in each year since 2017 have been Apple iPads;<sup>28</sup>
  - (b) Between [ $\gg$ ] [20 30]% of active tablets in the period have been Android tablets;<sup>29</sup>
  - (c) Between [≫] [10 20]% and [≫] [20 30]% of active tablets in the period have been Amazon's Fire OS tablets. Its share in active tablets increased from 2017 until it became tied with Android as the second largest supplier of operating systems for active tablets in 2021 and 2022, before decreasing again more recently;<sup>30</sup> and
  - (d) A very small amount ([ $\gg$ ] [0 5]%) of active tablets in each year have been Huawei's HMS devices.<sup>31</sup>

<sup>&</sup>lt;sup>26</sup> This is expected given the different data sources and basis of the measurements.

<sup>&</sup>lt;sup>27</sup> The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [≫]. Google's response to section 69 notice [≫]. Amazon's response to section 69 notice [≫]. Huawei's response to section 69 notice [≫].

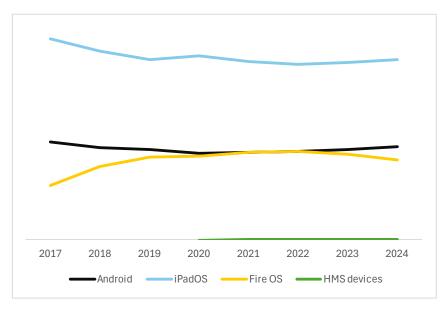
<sup>&</sup>lt;sup>28</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [ ].

<sup>&</sup>lt;sup>29</sup> CMA analysis of data from market participants including Google's response to section 69 notice [»].

<sup>&</sup>lt;sup>30</sup> CMA analysis of data from market participants including Amazon's response to section 69 notice [×].

<sup>&</sup>lt;sup>31</sup>CMA analysis of data from market participants including Huawei's response to section 69 notice [ន:].

Figure A.7: Operating system shares of supply in active tablets in the UK – market participant data (2017 – 2024)



Source: CMA analysis of data from market participants.

Notes: (i) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (ii) HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS). Huawei was only able to provide data from 2020.

- A.19 Figure A.8 below shows the global shares of supply based on data from Statcounter for Android, iPadOS and Fire OS since 2009. This shows that:
  - (a) Google's Android has been the second largest provider of mobile operating systems for active tablets throughout the period. Its share increased from a low of 15% in 2012 and stabilised more recently, fluctuating between 39% and 42% since 2021.
  - (b) Apple's iPadOS devices have had a share of supply between 53% and 84% throughout the period. It has been the largest supplier of mobile operating systems for active tablets on a global basis in each year although its share has been declining throughout the period.
  - (c) Amazon's Fire OS has been the third largest provider of mobile operating systems for active tablets throughout the period. Its share has remained relatively low, stabilising recently around a peak of 5% since 2020 (decreasing once in 2023 to 4%).

90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2012 2013 2014 2016 2018 2019 2022 2023 2024 Android Fire OS iOS

Figure A.8: Operating system shares of supply in active tablets worldwide – Statcounter data (2012 – 2024)

Source: <u>Tablet Operating System Market Share Worldwide</u> | <u>Statcounter Global Stats</u>, accessed 8 August 2025. Notes: Only mobile operating systems with a share of 5% or more in any one year according to Statcounter data have been included.

- A.20 We have calculated shares in the supply of tablet operating systems in the UK using additional data sources (market participant data on the volume of sales of new devices, IDC data on unit shipments, and Statcounter data on the volume of active devices) and have elected to set out shares of supply based on market participant data on active tablets because:
  - (a) market participant data is likely to be the most accurate, and data on active tablets provides an overall view of shares of supply over time (including new and existing devices); and
  - (b) historically there have been fewer tablet operating systems that have gained a share of 5% or more in the period covered by Statcounter data than smartphone operating systems,<sup>32</sup> such that UK shares of supply for tablets calculated using Statcounter data and market participant data show the same set of operating systems.

<sup>&</sup>lt;sup>32</sup> Statcounter data covers the period 2010 to present for smartphone manufacturers and 2012 to present for tablet manufacturers.

- A.21 While the various shares of supply calculated using different data sources show some differences in the positions of the different tablet operating systems,<sup>33</sup> they show that:
  - (a) Apple has been the largest supplier of tablet operating systems in the UK since at least 2018, accounting for around half of supply in more recent years (since around 2021);
  - (b) By most measures, Android has been the second largest supplier of tablet operating systems since at least 2019. Only shares of supply based on data from market participants on active tablets showed Fire OS as competing with Android for this position in more recent years (2020 to 2022).

## Mobile device shares of supply

#### Source of data

- A.22 The data underlying this analysis comes from market participants, IDC, and Statcounter.
- A.23 We received yearly data on the volume of sales of Mobile Devices from Amazon, Apple, Google, Huawei and Samsung.<sup>34</sup> While we requested data from a limited number of manufacturers, as noted previously in 'Source of data' within the 'Mobile Ecosystem shares of supply' sub-section, the data provided covered the four main operating systems available on Mobile Devices in the UK in the last decade. This meant we were able to estimate total supply using operating systems data, and then estimate shares of supply for the five manufacturers listed above.
- A.24 We have also sourced data from IDC, a global market intelligence firm.<sup>35</sup> We used data from IDC's Worldwide Quarterly Mobile Phone Tracker and Worldwide Quarterly Personal Computing Device Tracker.<sup>36</sup> This data covered

<sup>&</sup>lt;sup>33</sup> This is expected given the different data sources and basis of the measurements.

<sup>&</sup>lt;sup>34</sup> We also received yearly data for the same market participants relating to active devices, however we have not estimated volume shares based on active devices for manufacturers. This is because we were not able to obtain robust data on the number of active devices from all market participants.

<sup>&</sup>lt;sup>35</sup> For more detail see <u>IDC - About - Home</u>, accessed 30 June 2025

<sup>&</sup>lt;sup>36</sup> See Worldwide Quarterly Mobile Phone Tracker and Worldwide Quarterly Personal Computing Device Tracker, accessed 30 June 2025.

Mobile Devices in the UK for the period 2015 to 2024, in particular (i) smartphones and feature phones,<sup>37</sup> and (ii) tablets.

- A.25 We consider that IDC data may have the following limitations:
  - (a) IDC's tracking methodology for indirect sales (ie those not direct to endusers) is based on a mixed approach of sales-in, sales-through, and sales-out projections. This may result in discrepancies with sales-out data on a monthly or quarterly basis due to the time gap and inventory management.
  - (b) IDC's pricing data reflects the end-user price level, and its value calculations are the result of unit shipments multiplied by the average selling price (ASP) for each model. The ASP is an estimate of the final price paid by the average end-users from multiple channels. It includes all shipping and handling fees (such as freight, insurance and tariff costs) but not point-of-sale taxes (eg value-added tax (VAT)). Specific purchasing conditions and channel rebates are also not taken into account (eg discounts offered by mobile network operators) however high-volume purchases by a retailer or large business will weigh into the average selling prices of devices.
- A.26 Despite these potential limitations, we understand that IDC data is widely used within the industry, and that IDC itself conducts and provides clients with analysis based on price bands similar to that which we have conducted.
- A.27 We have compared IDC data on device shipments with the data received from market participants on the number of new device sales in the UK. We note that there are some differences in volumes of Mobile Devices across the two datasets. This is to be expected as the datasets are based on different measures. We have presented our analysis based on IDC data for the period (i) 2016 to 2024 for smartphones, and (ii) 2019 to 2024 for tablets. In these years the difference in volumes across the IDC data and market participant data was less than 25% for smartphones and less than 30% for tablets.
- A.28 We have also sourced data from Statcounter. The Statcounter data underlying this analysis is the same as that used for the mobile operating system shares of supply provided above (albeit for different market participants). We describe this data and potential limitations in 'Source of data' within the 'Mobile Ecosystem

<sup>&</sup>lt;sup>37</sup> Our analysis has focused on smartphones only. Feature phones are mobile phones with reduced features and functionality compared to smartphones, which may come with a small non-touch screen and press buttons.

shares of supply' sub-section. In line with the approach taken for mobile operating system shares of supply, we have primarily relied on data provided by market participants and use Statcounter data to look at historical trends.

### **Smartphones**

- A.29 Figure A.9 shows the shares of supply based on data from market participants for Apple, Google, Huawei and Samsung in terms of new smartphones in the UK for the period 2015 to 2024.<sup>38</sup> As can be seen:
  - (a) Apple has been the leading manufacturer of new smartphones in the UK in each year of this period, with a share of supply between [ $\gg$ ] [40 50]%.<sup>39</sup>
  - (b) Between [≫] [20 30]% of new smartphones sold in each year of the period have been Samsung phones, such that Samsung has been the second largest manufacturer of smartphones and largest manufacturer of Android smartphones.<sup>40</sup>
  - (c) Huawei was the third largest manufacturer of smartphones and second largest manufacturer of Android smartphones in 2018 and 2019, with its share peaking at [≥ [5 − 10]%.<sup>41</sup> Huawei's sales declined since it moved to using Huawei Mobile Services in 2019 and no new Huawei smartphone models have been made available in the UK market since early 2023.<sup>42</sup>
  - (d) Google has been the third largest manufacturer of smartphones and second largest manufacturer of Android smartphones since it overtook Huawei in 2021. Nonetheless, a small amount of new smartphones in each year have been Google Pixels since it was released in October 2016,<sup>43</sup> with its share of supply peaking at [≫] [0 – 5]% in 2023.<sup>44</sup>

<sup>&</sup>lt;sup>38</sup> The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [≽]. Samsung's response to section 69 notice [≽]. Huawei's response to section 69 notice [≽]. Google's response to section 69 notice [≽].

<sup>&</sup>lt;sup>39</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [≫].

<sup>&</sup>lt;sup>40</sup> CMA analysis of data from market participants including Samsung's response to section 69 notice [ន].

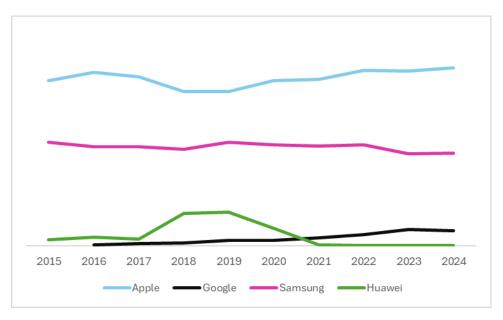
<sup>&</sup>lt;sup>41</sup> CMA analysis of data from market participants including Huawei's response to section 69 notice [≫].

<sup>&</sup>lt;sup>42</sup> Huawei's response to section 69 notice [ ].

<sup>&</sup>lt;sup>43</sup> Google's response to section 69 notice [ ].

<sup>&</sup>lt;sup>44</sup> CMA analysis of data from market participants based on Google's response to section 69 notice [ន].

Figure A.9: Manufacturer shares of supply in the sale of new smartphones in the UK – market participant data (2015 – 2024)



Source: CMA analysis of data from market participants.

Notes: (i) As we have received data from a limited number of manufacturers, we have based the total volume of new devices on operating systems data (which covers all devices). As such, the shares shown for this set of manufacturers do not add to 100%. We have received data from smartphone manufacturers with a share of supply of at least 10% in any year since 2015 according to Statcounter data, and Google. (ii) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (iii) Huawei's data includes both its GMS and HMS devices. HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS).<sup>45</sup>

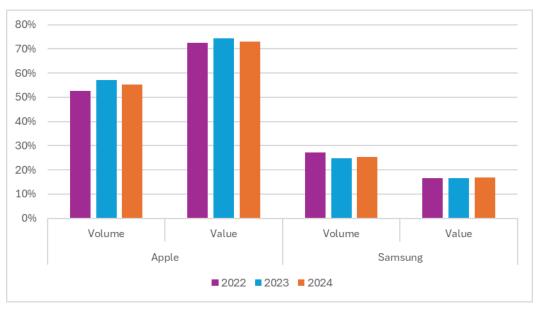
- A.30 Figure A.10 shows the shares of supply based on data from IDC for Apple and Samsung in terms of both the total number of units and total value of smartphones shipped into the UK for the period 2022 to 2024. As can be seen:
  - (a) Apple has the largest share of supply in terms of volume (between 53% and 57%) and value (between 72% and 74%) throughout the period. Consistent with the pricing analysis set out below, Apple's share of total value is higher than its share of total volume of devices shipped into the UK. Since 2022 the ratio of Apple's share of supply in volume to value share has been fairly stable.<sup>46</sup>
  - (b) Samsung is the second largest supplier in terms of volume (between 25% and 27%) and value (17%) throughout the period. Its share of total value is lower than its share of total volume of devices shipped into the UK. Since

<sup>&</sup>lt;sup>45</sup> Overview of the market section in Chapter 3 of MEMS.

<sup>&</sup>lt;sup>46</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

2022 Samsung's share of supply in value has remained constant, while its share in volume fell slightly between 2022 and 2023.<sup>47</sup>

Figure A.10: Apple and Samsung shares of supply based on total volume and value of smartphones shipped into the UK – IDC data (2022 – 2024)



Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

Notes: [ ] and [ ] have not been included on this graph as their volume and value shares based on this data were less than 10% in any year shown, and neither was found to have a larger share in value than volume for any year during the period. Other manufacturers have been excluded as they did not have a share of supply of more than 5% in value or volume in any year shown. As noted in 'Source of data' in this sub-section on 'Mobile device shares of supply', IDC figures for value exclude VAT.

- A.31 Figure A.11 shows the shares of supply based on data from Statcounter for Apple, Google, Samsung, Huawei, RIM (more widely known as Blackberry), Sony, HTC and Nokia in the UK since 2010. This shows that:
  - (a) Apple has consistently been the largest manufacturer of active smartphones over the last fifteen years, with a share of over 40%;
  - (b) Samsung has been the second largest manufacturer for the last twelve years, since it overtook RIM (Blackberry) in 2013; and
  - (c) Google's share in active smartphones has grown in recent years but it remains small at 4%.

<sup>&</sup>lt;sup>47</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025". These findings are consistent with MEMS which analysed Apple and Samsung shares of supply in smartphone shipments into the UK by volume and value in 2019 and 2021 (see the 'Mobile device shares of supply' sub-section of MEMS <u>Appendix B: Market outcomes</u>).

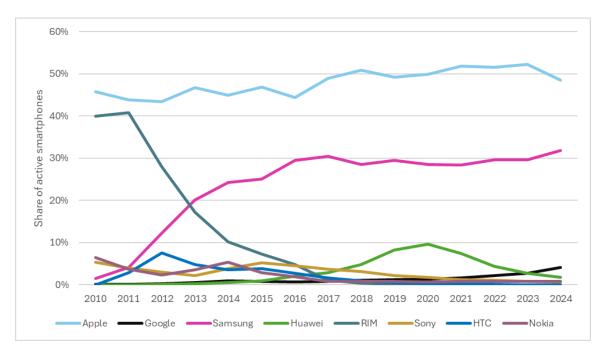


Figure A.11: Manufacturer shares of supply in active smartphones in the UK – Statcounter data (2010 – 2024)

Source: <u>Mobile Vendor Market Share United Kingdom | Statcounter Global Stats</u>, accessed 15 May 2025. Notes: apart from Google, only manufacturers with a share of 5% or more in any one year have been included.

- A.32 While the various shares of supply calculated using different data sources differ slightly, 48 they show consistent findings:
  - (a) Apple has been the leading smartphone manufacturer for at least a decade, accounting for around half of supply.
  - (b) Samsung has been the second largest smartphone manufacturer and largest manufacturer of Android smartphones for at least a decade, accounting for at least a quarter of supply.

#### **Tablets**

A.33 Figure A.12 shows the shares of supply based on data from market participants for Amazon, Apple, Google, Huawei and Samsung in terms of new tablets in the UK for the period 2015 to 2024.<sup>49</sup> This figure is included for illustrative purposes only, and we note that Google has been excluded from this chart as it has had a

<sup>&</sup>lt;sup>48</sup> This is expected given the different data sources and basis of the measurements.

<sup>&</sup>lt;sup>49</sup> The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [≽]. Amazon's response to section 69 notice [≽]. Samsung's response to section 69 notice [≽]. Huawei's response to section 69 notice [≽]. Google's response to section 69 notice [≥].

very small share ([ $\gg$ ] [0 – 5]%)<sup>50</sup> in active tablets since it released its Pixel tablet in 2023.<sup>51</sup> As can be seen:

- (a) Apple has been the largest tablet manufacturer for every year in the period except 2017. Its share has fluctuated over time, between a low of [≫] [30 40]% in 2017 and a peak of [≫] [40 50]% in 2022. Its share has been fairly stable since 2021, ranging between [≫] [40 50]%.<sup>52</sup>
- (b) Amazon has been the second largest tablet manufacturer for most of the period considered. Its share has fluctuated over time, growing materially from [≫] [10 – 20]% in 2015 to [≫] [30 – 40]% in 2017 before declining to [≫] [10 – 20]% in 2024.<sup>53</sup>
- (c) Samsung has been the largest manufacturer of Android tablets throughout the period, and the third largest tablet manufacturer for most of the period. In 2023, it overtook Amazon as the second largest manufacturer of new tablets. Its share of new tablets has been fairly consistent over time, ranging between [≫] [10 – 20]% and [≫] [10 – 20]%.<sup>54</sup>
- (d) Huawei's sales declined since it moved to using Huawei Mobile Services in 2019, with a very small share (between [≫] [0 – 5]%) of new tablets being sold by Huawei since 2020.<sup>55</sup>

<sup>&</sup>lt;sup>50</sup> CMA analysis of market participant data including Google's response to section 69 notice [ ] ...].

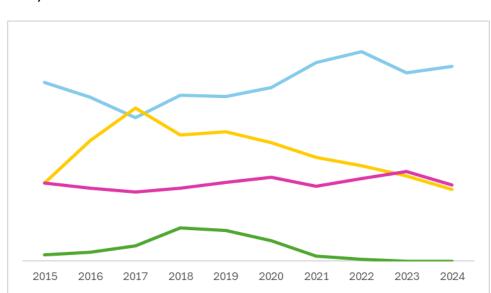
<sup>&</sup>lt;sup>51</sup> Google released its Pixel tablet in June 2023 (see <u>Google Pixel Tablet Release Date, Price & Specs - Tech Advisor,</u> accessed 30 June 2025).

<sup>&</sup>lt;sup>52</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>53</sup> CMA analysis of data from market participants including Amazon's response to section 69 notice [×].

<sup>&</sup>lt;sup>54</sup> CMA analysis of data from market participants including Samsung's response to section 69 notice [※].

<sup>&</sup>lt;sup>55</sup> CMA analysis of data from market participants including Huawei's response to section 69 notice [≫].



Amazon

Figure A.12: Manufacturer shares of supply in new tablets in the UK – market participants data (2015 – 2024)

Source: CMA analysis of data from market participants.

Apple

Notes: (i) As we have received data from a limited number of manufacturers, we have based the total volume of new devices on operating systems data (which covers all devices). As such, the shares shown for this set of manufacturers do not add to 100%. We have received data from tablet manufacturers with a share of supply of at least 10% in any year since 2015 according to Statcounter data, and Google and Huawei. Google has been excluded from this chart as it has had a very small share ([] [0 – 5]%) in active tablets since it released its Pixel tablet in 2023. (ii) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (iii) Huawei's data includes both its GMS and HMS devices. HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS).

Samsung

Huawei

- A.34 Figure A.13 shows the shares of supply based on data from IDC for Amazon, Apple and Samsung in terms of both the total number of units and total value of tablets shipped into the UK for the period 2022 to 2024. As can be seen:
  - (a) Apple has the largest share of supply in terms of volume (between 48% and 54%) and value (between 69% and 74%) throughout the period. Consistent with the pricing analysis set out below, Apple's share of total value is higher than its share of total volume of devices shipped into the UK. Since 2022 the ratio of Apple's share of supply in volume to value has been fairly stable.<sup>58</sup>

<sup>&</sup>lt;sup>56</sup> CMA analysis of market participant data including Google's response to section 69 notice [≫]. Google released its Pixel tablet in June 2023 (see <u>Google Pixel Tablet Release Date, Price & Specs - Tech Advisor,</u> accessed 30 June 2025).

<sup>&</sup>lt;sup>57</sup> Overview of the market section in Chapter 3 of MEMS.

<sup>&</sup>lt;sup>58</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025".

- (b) Samsung is the second largest supplier in terms of volume (between 17% and 18%) and value (between 14% and 16%) for most of the period. Its share of total value is slightly lower than its share of total volume of devices shipped into the UK in each year of the period. Its share in volume was consistent between 2022 and 2023 before falling in 2024, and its share in value fell between 2022 and 2023 and remained stable in 2024.<sup>59</sup>
- (c) Amazon is the third largest supplier in terms of volume (between 12% and 21%) and value (between 4% and 8%) for most of the period. It had a larger volume but not value share compared to Samsung in 2022. Its share of total value is considerably lower than its share of total volume of devices shipped into the UK in each year of the period. Over time its share in volume and value has decreased.<sup>60</sup>

<sup>59</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025".

<sup>&</sup>lt;sup>60</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025". These findings are consistent with MEMS which analysed Amazon, Apple and Samsung's shares of supply in tablet shipments into the UK in 2021 (see the 'Mobile device shares of supply' sub-section of MEMS Appendix B).

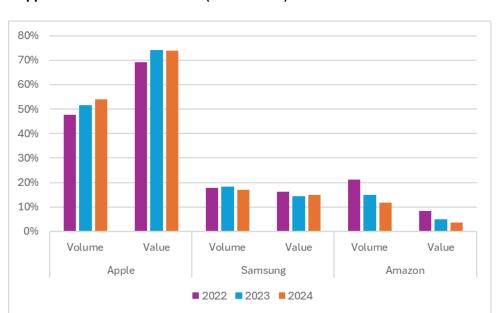


Figure A.13: Apple, Samsung and Amazon shares of supply based on total volume and value of tablets shipped into the UK – IDC data (2022 – 2024)

Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025"

Notes: consistent with tablet shares estimates based on data from market participants, shares of supply based on IDC data exclude Windows and Chrome tablets. [ ] and [ ] have not been included on this graph as their volume and value shares were 5% or less in any year shown, and neither was found to have a larger share in value than volume for any year in the period. Other manufacturers have been excluded as they did not have a share of supply of more than 10% in value or volume in any year shown. As noted previously in 'Source of data' in this sub-section on 'Mobile device shares of supply', IDC figures for value exclude VAT.

- A.35 We have calculated manufacturer shares in the supply of tablets using an additional data source (Statcounter data on active tablets) and have elected to set out shares of supply based on the above data sources because:
  - (a) Market participants are likely to be the most accurate source of data.
  - (b) The IDC was the only data source containing information on device pricing and value for all Mobile Ecosystems, and therefore we present volume and value shares based on IDC data. We only present these shares for Apple, Samsung and Amazon as no other manufacturer had volume or value shares above 10%. We do not present value shares at the operating system level due to the differences in Apple and Google's business models in relation to their respective operating systems and how they obtain value from these (Apple does not license its operating system to other mobile device manufacturers, whereas Google does).
  - (c) Historically there have been fewer tablet manufacturers that have gained a share of 5% or more in the period covered by Statcounter data than

smartphone manufacturers,  $^{61}$  such that shares of supply of tablets calculated using Statcounter data and market participant data show the same set of manufacturers. In addition, since 2015 tablets have represented only [ $\gg$ ] - [ $\gg$ ] [10 – 25]% of UK mobile device sales.  $^{62,63}$ 

- A.36 While the various shares of supply calculated using different data sources differ slightly,<sup>64</sup> they show consistent findings:
  - (a) Apple has been the largest tablet manufacturer since at least 2018 and has accounted for around half of supply in recent years.
  - (b) Amazon and Samsung are the next largest tablet manufacturers.
  - (c) By all measures, Samsung has been the second largest tablet manufacturer in 2023 and 2024, and the largest Android tablet manufacturer for at least a decade.

### Mobile device pricing

#### Source of data

- A.37 The data underlying this analysis comes from Google and IDC.
- A.38 We received data from Google covering (i) active Android Mobile Devices, and (ii) total revenue (Play fee revenue and Search ad revenue) generated across different Android device price ranges, in the UK and globally. The data supplied covers 2024 and relates to smartphones only.
- A.39 The data captures the majority of active Android devices and Google's revenues. In particular:
  - (a) It covers approximately [≫] [70 80]% of active UK Android devices and
     [≫] [80 90]% of active global Android devices, as of December 2024;
     and

<sup>&</sup>lt;sup>61</sup> Statcounter data covers the period 2010 to present for smartphone manufacturers and 2012 to present for tablet manufacturers.

<sup>&</sup>lt;sup>62</sup> CMA analysis of data from market participants including Google's response to section 69 notice [≫].

<sup>&</sup>lt;sup>63</sup> CMA analysis of data from market participants including Apple's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>64</sup> This is expected given the different data sources and basis of the measurements.

- (b) It covers approximately [ $\gg$ ] [70 80]% of UK revenue [ $\gg$ ] [80 90]% of global revenue in 2024.<sup>65</sup>
- A.40 We have also sourced data from IDC. The IDC data underlying this analysis is the same as that used for mobile device shares of supply provided above (for a description see 'Source of data' within the 'Mobile device shares of supply' subsection).

### **Smartphones**

- A.41 Table A.1 shows the share of supply for Android, iOS and overall in new smartphones sold for £300 or less, between £300 and £600, and for more than £600, based on IDC data on the total number of units of smartphones shipped into the UK in 2024. The IDC data shows:
  - (a) No new iOS smartphones were sold for £300 or less and new smartphones using Google's Mobile Platform accounted for 100% of this category in 2024. This has been the case since 2020. Smartphones that sell for less than £300 account for 23% of all smartphone sales in the UK in 2024.<sup>66</sup>
  - (b) Android had a higher share of smartphones that sold in the £300 to £600 range in 2024, accounting for 61% of all sales in this category. This category of smartphones accounted for 19% of all UK smartphone sales in 2024.<sup>67</sup>
  - (c) iOS smartphones accounted for 82% of new smartphones that sold for over £600 in 2024, whilst Android accounted for 18%. These shares have been fairly stable since 2021. Smartphones priced at over £600 accounted for 58% of all UK smartphone sales in 2024.<sup>68</sup>

<sup>65</sup> Google noted that the dataset does not capture the full population of active devices and revenues because (i) phone models are not specified for part of the underlying data, or (ii) there is insufficient price range data for some phone models in the data. Nonetheless, Google submitted that the dataset is highly reliable and representative of the full population. Google's response to section 69 notice [≫].

<sup>&</sup>lt;sup>66</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

<sup>&</sup>lt;sup>67</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

<sup>&</sup>lt;sup>68</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

(d) We also note that, when smartphones priced above £300 are considered altogether, iOS held a share of 71% (and Android's was 29%) in 2024, and this has been fairly consistent since 2020.<sup>69</sup>

Table A.1: Operating system and overall shares of supply by price segment based on total volume of smartphones shipped into the UK – IDC Data (2024)

Price Segment	Android	iOS	All smartphones
£0 - 300	100%	0%	23%
£300 - 600	61%	39%	19%
£600+	18%	82%	58%

Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025". Notes: for the purposes of this analysis we have not split out Huawei's HMS devices from Android devices.

- A.42 Figure A.14 shows the proportion of new smartphones shipped into the UK by £100 price bands in 2024, separately for Android and iOS. The evidence is consistent with iOS devices holding a higher share of higher priced smartphones, and devices using Google's Android holding a higher share in the sale of lower priced devices. In particular, the IDC data shows:
  - (a) 51% of new Android smartphones were sold for £300 or less in 2024, and new iOS smartphones did not feature in this price range.<sup>70</sup>
  - (b) Android and iOS are both active in new smartphones priced between £300 and £600 in 2024, with 27% of new Android smartphones and 14% of new iOS smartphones being sold in this price range.<sup>71</sup>
  - (c) Android and iOS are also both active in new smartphones priced at £600 or more in 2024. The majority of new iOS smartphones (86%) were sold in this price range compared to a much smaller proportion of new Android smartphones (23%).<sup>72</sup>

<sup>69</sup> CMA's analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025"

<sup>&</sup>lt;sup>70</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025".

<sup>&</sup>lt;sup>71</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025".

<sup>&</sup>lt;sup>72</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025". These findings are consistent with MEMS which analysed the proportion of iOS and Android smartphones shipped into the UK by £100 price bracket in 2017 and 2021 (see the 'Mobile device pricing' sub-section of MEMS Appendix B). However we note that (i) [≫], and (ii) [≫].

£1400+ £1300-1400 £1200-1300 £1100-1200 £1000-1100 £900-1000 £800-900 ■ Android £700-800 ■ iOS £600-700 £500-600 £400-500 £300-400 £200-300 £100-200 £0-100 5% 0% 25% 15% 5% 15% 20%

Figure A.14: Proportion of smartphones shipped into the UK by £100 price bracket for iOS and Android respectively – IDC data (2024)

Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker, February 2025" Notes: for the purposes of this analysis we have not split out Huawei's HMS devices from Android devices.

- A.43 As previously noted, the IDC is the only source of data that features information on device pricing for all Mobile Ecosystems.
- A.44 We have conducted additional smartphone pricing analysis for the UK based on IDC data for Apple and Samsung (as Samsung has been the largest Android smartphone manufacturer for at least a decade). This analysis is consistent with that for iOS and Android: Apple iPhones hold a higher share in the sale of higher priced smartphones and Samsung smartphones hold a higher share in the sale of lower priced smartphones in 2024 and over time. This is also consistent with the analysis of Apple's and Samsung's volume and value shares of supply set out earlier in this appendix, which shows that Apple's share of supply by value has been larger than its share by volume and Samsung's share by value has been smaller than its share by volume in each year since 2022.<sup>73</sup>
- A.45 IDC data therefore suggests that smartphone supply is largely segmented between iOS and Android and has been over time, with sales of the majority of smartphones using these operating systems falling in different price segments.

<sup>&</sup>lt;sup>73</sup> These findings are also consistent with MEMS, which analysed smartphone pricing in 2017 and 2021 (see the Mobile device pricing sub-section of MEMS Appendix B).

- A.46 Table A.2 below shows the share of (i) active Android end-users, and (ii) total revenue generated by Google in Android smartphones sold for \$400 or less, \$400 to \$700, and sold for more than \$700, in the UK and globally.<sup>74</sup> It shows:
  - (a) End-users of Android smartphones priced at \$400 or less represented [≫] of Android smartphone users and generated [≫] of Google's revenue from smartphones in the UK in 2024. Globally, this group accounted for [≫] of end-users and [≫] of revenue.
  - (b) End-users of Android smartphones priced between \$400 and \$700 accounted for [≫] of Android smartphone users and generated [≫] of Google's revenue from smartphones in the UK in 2024. Globally, this group accounted for [≫] of end-users and [≫] of revenue.
  - (c) End-users of Android smartphones priced over \$700 accounted for [≫] of Android smartphone users and generated [≫] of Google's revenue from smartphones in the UK in 2024. Globally, this group accounted for [≫] of end-users and [≫] of revenue.
  - (d) End-users of higher priced Android smartphones generate more revenue per user on average and this is particularly the case for end-users of smartphones priced over \$700. In the UK, smartphones in this price segment generate the largest share of search ads and Play fee revenue at [≫] of revenue, followed by the \$400 or less price segment which contributes [≫] of Android's revenues. Android smartphone end-users with devices priced between \$400 and \$700 make up [≫]. Globally the revenue contribution is led by Android smartphone owners with low-priced devices (<\$400) with a [≫] share, and end-users of devices costing over \$700 contribute [≫] and those with devices priced between \$400 and \$700 generate the smallest share of [≫].
  - (e) Our analysis also found that the UK represents a small share of global Android end-users (approximately [≫]) and revenues (approximately [≫]). In total, Google had approximately [≫] million active Android smartphone end-users in the UK and [≫] billion globally.

<sup>&</sup>lt;sup>74</sup> CMA analysis of data submitted by Google in response to section 69 notice [≫], and section 69 notice [≫].

Table A.2: Active Android end-users and revenues generated by smartphone price tier in the UK and globally – market participant data (2024)

Price Segment	UK		Global		
	Share of active Android end-users	Share of Search Ads and Play fee revenue	Share of active Android end-users	Share of Search Ads and Play fee revenue	
\$0 - 400	[%]	[%]	[%]	[%]	
\$400 - 700	[》<]	[%]	[%]	[%]	
\$700+	[%]	[%]	[%]	[%]	

Source: CMA analysis of data from Google in response to section 69 notices [>=], and [>=].

Note: As set out earlier in this section in 'Source of data', this analysis covers the majority (but not all) active Android devices. This analysis presents the currency in dollars as the data includes global figures and this is how Google presents data in its internal documents. The price segments are broadly consistent with those used in other CMA analysis when converted into GBP. We note that \$400 is approximately £313 and \$700 is approximately £547 based on the Bank of England's year average exchange rate for Pounds Sterling against the US Dollar in 2024 (<u>USD exchange rates | Bank of England | Database</u>, accessed 12 August 2025).

#### **Tablets**

- A.47 Figure A.15 shows the volume of new tablets shipped into the UK by £100 price bands in 2024, separately for Android, Fire OS and iPadOS. The evidence is consistent with iPadOS devices holding a higher share of higher priced tablets, and devices using Google's Android and Fire OS holding a higher share in the sale of lower priced tablets. In particular, the IDC data shows:
  - (a) The majority of new Android tablets (86%) and all new Amazon Fire OS tablets (100%) were sold for £300 or less in 2024, compared to 24% of new Apple iPads.<sup>75</sup>
  - (b) Android and Apple are both active in tablets priced between £300 and £600 in 2024, although a much larger proportion of new Apple iPads (56%) were sold in this price range compared to new Android tablets (8%). No new Fire OS tablets were sold in this price range.<sup>76</sup>
  - (c) Android and Apple are both active in tablets priced for more than £600 in 2024. 20% of new Apple iPads were sold in this price range, compared to only 6% of new Android tablets. No new Fire OS tablets were sold in this price range.<sup>77</sup>

<sup>&</sup>lt;sup>75</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025",

<sup>&</sup>lt;sup>76</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025".

<sup>&</sup>lt;sup>77</sup> CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025". These findings are consistent with MEMS which analysed the proportion of iOS, Android and Fire OS tablets shipped into the UK by £100 price bracket in 2019 and 2021 (see the Mobile device pricing sub-section of MEMS Appendix B).

1,400,000

1,200,000

1,000,000

800,000

400,000

200,000

200,000

Android iPadOS Fire OS

Figure A.15: Volume of tablets shipped into the UK by £100 price bracket for iPadOS, Android and Fire OS respectively (2024)

Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker, February 2025"

Notes: Consistent with shares estimates based on data from market participants, this analysis excludes Windows and Chrome tablets.

- A.48 As noted above in relation to smartphones, the IDC is the only source of data that features information on device pricing for all Mobile Ecosystems.
- A.49 We have also conducted analysis based on IDC data on: (i) operating system shares of supply by volume of new tablets shipped into the UK in devices sold for £300 or less and devices sold for more than £300 between 2019 and 2024, and (ii) tablet pricing analysis based on IDC data for Amazon, Apple and Samsung (as Samsung has been the largest Android tablet manufacturer for at least a decade). These analyses are consistent with that set out above: Apple's iPads hold a higher share in the sale of higher priced tablets, and devices using Google's Android (including Samsung devices) and Amazon's Fire OS hold a higher share in the sale of lower priced tablets in 2024 and over time.<sup>78</sup>
- A.50 IDC data therefore suggests that tablet supply is largely segmented between Android and Amazon's Fire OS, and iPadOS and has been over time, with sales

<sup>&</sup>lt;sup>78</sup> These findings are also consistent with MEMS, which analysed tablet pricing between 2019 and 2021 (see the Mobile device pricing sub-section of MEMS Appendix B).

of the majority of tablets using these operating systems falling in different price segments.

# Native app distribution outcomes within Google's Mobile Ecosystem

# Mobile app store shares of supply

#### Source of data

- A.51 The data underlying this analysis comes from market participants, Google, Apple, Samsung, Amazon, Huawei, Xiaomi, Oppo, and Aptoide.
- A.52 We received either monthly or annual data from those market participants on the volume of first-time native downloads<sup>79</sup> and daily or monthly data for the number of users that downloaded a native app.<sup>80</sup> The data was gathered in respect of each of smartphones and tablets which collectively represent Mobile Devices.<sup>81</sup>
- A.53 The data covered the period from June 2015 to December 2024 with some differences between market participants.<sup>82</sup>

### **Outputs**

A.54 Figure A.16 shows the shares of supply of native app downloads within Google's Mobile Ecosystem in the UK for the period 2020-2024.<sup>83</sup> As can be seen:

(a) The Play Store is the primary app store, with [≫] [1,500 – 2,000] million downloads in 2024. In comparison, there were [≫] [0 – 100] million downloads across all other app stores in 2024.

<sup>&</sup>lt;sup>79</sup> Monthly data was provided by Google, Apple, Samsung, Amazon, and Huawei. Annual data was provided by Xiaomi, Oppo and Aptoide.

<sup>&</sup>lt;sup>80</sup> Daily data was provided by Google, and monthly data was provided by Samsung. Data on the number of users was not gathered from Xiaomi, Oppo and Aptoide.

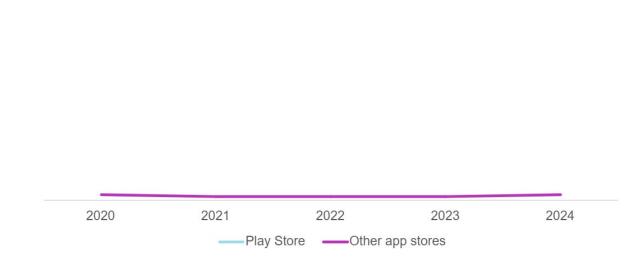
<sup>&</sup>lt;sup>81</sup> Disaggregated data was provided by Google (volume of first-time downloads), Apple, Amazon, and Huawei. Data received from Google (number of users that downloaded a native app), and Samsung was aggregated.

<sup>&</sup>lt;sup>82</sup> Google's data on volume of first time downloads covered period Mar 2020-Dec 2024 and data on the daily number of users that downloaded a native app covered period Jan 2019-Dec 2024; Huawei's data on volume of first time downloads covered the period Nov 2023-Dec 2024; Xiaomi's data covered period 2019-2024; Oppo's data covered period 2024 and Aptoide's data covered period 2020-2024.

<sup>&</sup>lt;sup>83</sup> Google's response to section 69 notice [≫]. Samsung's response to section 69 notice [≫]. Xiaomi's response to section 69 notice [≫]. Aptoide's response to section 69 notice [≫].

- (b) This meant that the Play Store represented [≫] [90 100]% of native app downloads in the UK in 2024, whilst the combined number of native app downloads through alternative app stores in 2024 accounted for [≫] [0 -10]%.
- (c) The Play Store's share holds relatively consistent over the period of 2020-2024, with a range of [≫] [90 100]%.

Figure A.16: The proportion of native app downloads by app store within Google's Mobile Ecosystem in the UK (2020-2024)



Source: CMA analysis of data from Google, Samsung, Xiaomi, Oppo and Aptoide. Notes:

A.55 The vast majority of downloads occurred on smartphones with [ $\gg$ ] [1.5 – 2] billion first-time downloads through the Play Store compared to [ $\gg$ ] [0 – 100] million across all other app stores in 2024.<sup>84</sup> The shares of supply based on

<sup>1.</sup> Based on first-time downloads.

<sup>2.</sup> We have estimated the number of downloads for Google in the period Jan-Feb 2020 using the monthly average from the data covering Mar-Dec 2020.

<sup>3.</sup> Data from Oppo only covers 2024.

<sup>&</sup>lt;sup>84</sup> Due to the lack of device specific data available, the proportion of active Samsung Mobile Devices accounted for by smartphones was applied to the total number of Galaxy Store downloads to estimate the number of downloads on smartphones.

first-time smartphone downloads over the five-year period were consistent with those observed on tablets – as noted below.

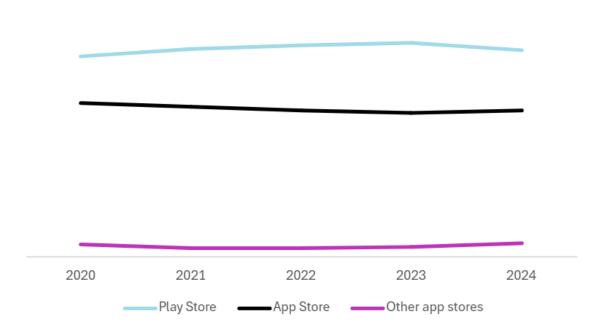
- A.56 On tablets, first-time downloads from the Play Store reached [≫] [0 0.5] billion in 2024, while downloads from alternative app stores totalled [≫] [0 50] million.<sup>85</sup> Between 2020 and 2024, the Play Store accounted for between [≫] [90 100]% of first-time downloads on tablet.
- A.57 In terms of user activity, an average of [≫] [2 3] million users downloaded a native app from the Play Store each day in 2024. 86 This figure remained reasonably consistent throughout the period from 2022 to 2024. 87
- A.58 Figure A.17 shows the shares of supply of native app downloads across app stores in the UK for the period 2020-2024.88 As can be seen:
  - (a) The Play Store's share downloads remained relatively stable, ranging from  $[\approx] [50 60]\%$  to  $[\approx] [50 60]\%$  in the period between 2020-2024.
  - (b) The App Store represented between [ $\gg$ ] [30 40]% and [ $\gg$ ] [40 50]% of downloads over the five-year period.
  - (c) Alternative app stores represented between [ $\gg$ ] [0 5]% and [ $\gg$ ] [0 5]% of downloads for the period 2020-2024.

<sup>85</sup> Due to the lack of device specific data available, the proportion of active Samsung Mobile Devices accounted for by tablets was applied to the total number of Galaxy Store downloads to estimate the number of downloads on tablets 86 Google's response to section 69 notice [≫].

<sup>&</sup>lt;sup>87</sup> We have not aggregated this data to calculate a monthly number as at least some users are likely to have downloaded native apps on multiple days during the period.

<sup>&</sup>lt;sup>88</sup> Google's response to section 69 notice [※]. Apple's response to section 69 notice [※]. Samsung's response to section 69 notice [※]. Huawei's response to section 69 notice [※]. Xiaomi's response to section 69 notice [※]. Oppo's response to section 69 notice [※]. Aptoide's response to section 69 notice [※].





Source: CMA analysis of data from Google, Apple, Samsung, Amazon, Huawei, Xiaomi, Oppo and Aptoide. Notes:

- A.59 Samsung provided monthly data for its user activity of the Galaxy Store.<sup>89</sup> On average [≫] [0 − 1] million monthly users downloaded a native app from the Galaxy Store in 2024, with some variation over the three-year period.
- A.60 While not directly comparable due the difference in data format, the data shows that a significantly lower number of users downloaded a native app through the Galaxy Store in an average month than the number of users that downloaded an app in an average day through the Play Store in 2024.

<sup>1.</sup> Based on first-time downloads.

<sup>2.</sup> We have estimated the number of downloads for Google in the period Jan-Feb 2020 using the monthly average from the data covering Mar-Dec 2020.

<sup>3.</sup> Data from Huawei covers Nov 2023- Dec 2024. Data from Oppo only covers 2024.

<sup>&</sup>lt;sup>89</sup> Samsung's response to section 69 notice [><].

### Availability of native apps and app developers

#### Source of data

- A.61 The data underlying this analysis comes from market participants, Google, Samsung, Xiaomi, Oppo, Aptoide, and Epic.
- A.62 We received either monthly or annual data from those market participants on the total number of native apps available through the app store and total number of app developers with a native app available through the app store.
- A.63 The data covered the period from January 2015 to December 2024 with some differences between parties.<sup>90</sup>

### **Outputs**

- A.64 Tables A.3 and A.4 show the average monthly number of native apps available on Mobile Devices and the average number of app developers with a native app on Mobile Devices through app stores in the UK for the period 2020-2024 based on data from market participants Google, Samsung, Xiaomi, Oppo and Aptoide. As can be seen:
  - (a) The Play Store had the largest number of native apps and app developers, ranging from [ $\gg$ ] [2 3] million [3 4] million and [ $\gg$ ] [0 1] million [ $\gg$ ] [1 2] million, respectively over the five-year period.<sup>91</sup>
  - (b) All other app stores maintained an average annual figure of under [≥] [0 1] million native apps and under [≥] [0 50,000] app developers over the five-year period.

<sup>&</sup>lt;sup>90</sup> Google's data for number of app developers with a native app available through the app store covered period Jun 2017-Dec 2024; Xiaomi's data covered period 2020-2024; Oppo's data covered period 2024; Aptoide's data did not include the number of native apps available through its app store; and Epic's data covered the period 2024 for the number of native apps available through its app store.

<sup>&</sup>lt;sup>91</sup> The decline in the Play Store's number of apps available and app developers in 2024 is in part due to [ $\gg$ ]. Google's response to section 69 notice.

Table A.3: Annual average number of native apps available each month on Mobile Devices on app stores in the UK (2020-2024)

					Millions
Portv			Time period		
Party	2020	2021	2022	2023	2024
Play Store <sup>92</sup>	[%] [2-3]	[%] [3-4]	[%] [3-4]	[%] [3-4]	[%] [2-3]
Samsung Galaxy Store <sup>93</sup>	[≫] [0-1]	[》[0-1]	[≫] [0-1]	[≫] [0-1]	[》<] [0-1]
Other app stores <sup>94</sup>	[‰] [0-1]	[‰] [0-1]	[》] [0-1]	[》] [0-1]	[‰] [0-1]

Source: CMA analysis of data from Google, Samsung, Xiaomi, and Oppo.

Note: The Other app stores row in the table is comprised of data from Xiaomi, and Oppo. Data from Epic was not included in the above table. In 2024 Epic had 3 native apps available on its app store. 95

Table A.4: Annual average number of app developers with a native app on Mobile Devices through app stores in the UK (2020-2024)

					Thousands
Party			Time period		
	2020	2021	2022	2023	2024
Play Store <sup>96</sup>	[≫] [0-	[≫] [0-	[》] [1,000-	[》] [1,000-	[≫] [0-
0	1,000]	1,000]	2,000]	2,000]	1,000]
Samsung Galaxy Store <sup>97</sup>	[》] [0-50]	[》] [0-50]	[%] [0-50]	[%] [0-50]	[》] [0-50]
Other app stores <sup>98</sup>	[》] [0-50]	[%] [0-50]	[》] [0-50]	[%] [0-50]	[%] [0-50]

Source: CMA analysis of data from Google, Samsung, Xiaomi, Oppo and Aptoide.

Note: The Other app stores row in the table is comprised of data from Xiaomi, Oppo and Aptoide.

# Mobile app store revenues and commission rates

#### Source of data

A.65 The data underlying this analysis comes from market participants Google, Apple, Samsung, Amazon, and Huawei.

<sup>&</sup>lt;sup>92</sup> Google's response to section 69 notice [>=].

<sup>&</sup>lt;sup>93</sup> Samsung's response to section 69 notice [><].

<sup>&</sup>lt;sup>94</sup> Xiaomi's response to section 69 notice [≫]. Oppo's response to section 69 notice [≫].

<sup>&</sup>lt;sup>95</sup> Epic's response to section 69 notice [ ].

<sup>&</sup>lt;sup>96</sup> Google's response to section 69 notice [ ]<1.

<sup>&</sup>lt;sup>97</sup> Samsung's response to section 69 notice [>=].

<sup>&</sup>lt;sup>98</sup> Xiaomi's response to section 69 notice [ $\gg$ ]. Oppo's response to section 69 notice [ $\gg$ ]. Aptoide's response to section 69 notice [ $\gg$ ].

- A.66 We received monthly data on the total value of customer billings<sup>99</sup> made through the proprietary payment system, the total value of revenue earned by app stores from the customer billings through the proprietary payment system ('net revenue') and the average commission rates on Mobile Devices in the UK. This data was gathered in respect of each of smartphones and tablets which collectively represent Mobile Devices.<sup>100</sup>
- A.67 The data covered the period from January 2015 to December 2024 with some differences between parties. 101
- A.68 The data on customer billings and net revenue from each of these parties was provided in USD. We converted this into GBP using an exchange rate index from the Bank of England. 102
- A.69 Additionally, we received annual data on the proportion of app developers and customer billings that incurred each commission rate (including zero commission where applicable) on the Play Store, from market participant Google. The data covered the period 2020-2025.
- A.70 We also received annual data on the proportion of UK Play Store revenue generated from service fees and adverts respectively, from market participant Google. The data covered the period 2023-2024.

### **Outputs**

A.71 In response to the Proposed Decision, Google submitted that the estimates for average commission rates on the Play Store were incorrect as the underlying

The data provided by Google includes customer billings and net revenue from other device types, in addition to Mobile Devices, [ $\gg$ ]. However, we understand that customer billings and net revenue from other device types account for a very small proportion of this data, so we have not sought to apply an apportionment to it. Google's response to section 69 notice [ $\gg$ ].

The data provided by Apple also includes customer billings and net revenue from first-party apps transacted via the App Store, in addition to third-party apps. However, the proportion that first-party apps account for in this data is [ $\gg$ ]. Apple's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>99</sup> Customer billings refers to the total billings processed through proprietary payment systems on Mobile Devices. The data received from Samsung reflects consumer spend on in app-purchases and subscriptions, but does not include consumer spend on paid app purchases. Submission from Samsung, [ $\approx$ ].

<sup>&</sup>lt;sup>100</sup> Disaggregated data was provided by Google, Apple, Amazon and Huawei. Data received from Samsung was aggregated. A subset of Google's data ([≫]) was aggregated [≫].

<sup>&</sup>lt;sup>101</sup> Data from Google on customer billings and net revenue covers the period January 2019 – December 2024. Data from Amazon on customer billings and net revenue covers the period January 2020 – December 2024. Data from Huawei on customer billings and net revenue covers the period from Jan 2021 – December 2024.

<sup>&</sup>lt;sup>102</sup> The index used is the 'End month Spot exchange rate, US\$ into Sterling', XUMLUSS <u>Bank of England | Database</u>, accessed 22 September 2025.

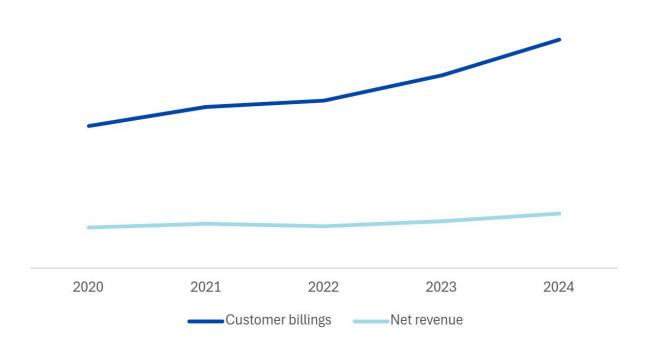
revenue data (customer billings and net revenue) omitted [ $\gg$ ] – which meant the figures presented were an overestimate for the level of the commission rates. <sup>103</sup> Including that revenue source in the revenue data presented in this appendix has resulted in updated figures for the following revenue variables:

- (a) Total customer billings and net revenue on the Play Store.
- (b) The proportion of customer billings and net revenue by app store.
- (c) Annual average Play Store commission rates.
- (d) Total value of revenue on the Play Store.
- A.72 Figure A.18 shows changes in customer billings and net revenue on the Play Store 104 through Google's proprietary payment system on Mobile Devices in the UK for the period 2020-2024. As can be seen:
  - (a) As of 2024, the value of customer billings and net revenue on the Play Store were  $\pounds[\gg]$  [0 5] billion and  $\pounds[\gg]$  [0 2] billion.
  - (b) Customer billings and net revenue on the Play Store increased year on year from 2020 values of  $\mathfrak{L}[\gg]$  [0 5] billion and  $\mathfrak{L}[\gg]$  [0 2] billion, with the exception of 2022, when net revenues slightly declined.

<sup>&</sup>lt;sup>103</sup> Google response to Proposed Decision, [ $\gg$ ].

<sup>&</sup>lt;sup>104</sup> Google's response to section 69 notice [≫]. Google's response to section 69 notice [≫].

Figure A.18: The value of customer billings and net revenue through Google's proprietary payment system on the Play Store in the UK (2020-2024)



Source: CMA analysis of data from Google.

- A.73 In comparison, customer billings and net revenue on the Galaxy Store reached  $\mathfrak{L}[\gg] [0-50]$  million and  $\mathfrak{L}[\gg] [0-50]$  million, respectively in 2024.<sup>105</sup>
- A.74 This also represented year on year increases in customer billings and net revenue from 2020 figures of £[ $\gg$ ] [0 5] million and £[ $\gg$ ] [0 5] million respectively, with the exception of 2022, when customer billings and net revenue fell. <sup>106</sup>
- A.75 Tables A.5 and A.6 show the shares of customer billings made through app store's proprietary payment systems and the shares of net revenue earned by app stores from customer billings through their proprietary payment systems on Mobile Devices in the UK for the period 2020-2024. 107 As can be seen:

<sup>&</sup>lt;sup>105</sup> Samsung's response to section 69 notice [≫].

<sup>&</sup>lt;sup>106</sup> Samsung's response to section 69 notice [≫].

<sup>&</sup>lt;sup>107</sup> Analysis is based on data from market participants Google, Apple, Samsung, Amazon, and Huawei. Customer billings made through proprietary payment systems, and net revenue on customer billings, submitted by Google, Apple, Amazon, and Huawei include user spend on paid app downloads, in-app purchases, and subscriptions, whereas we understand that figures submitted by Samsung reflect only in-app purchases and subscriptions. As a

- (a) The Play Store's share of customer billings and net revenue decreased from [ $\gg$ ] [30 40]% and [ $\gg$ ] [30 40]% respectively in 2020 to [ $\gg$ ] [30 40]% and [ $\gg$ ] [20 30]% respectively in 2024.
- (b) By contrast, the App Store's share of customer billings and net revenue increased from  $[\approx] [60 70]\%$  and  $[\approx] [60 70]\%$  respectively in 2020 to  $[\approx] [60 70]\%$  and  $[\approx] [60 70]\%$  in 2024.
- (c) The combined share of customer billings and net revenue for other app stores remained constant within the [0 5]% range.

Table A.5: The proportion of customer billings by app store across Mobile Devices in the UK (2020-2024)

Party			Time period		
	2020	2021	2022	2023	2024
Play Store <sup>108</sup>	[30 – 40]%	[》] [30 – 40]%	[》] [30 – 40]%	[》] [30 – 40]%	[》] [30 – 40]%
App Store <sup>109</sup>	[%] [60 – 70]%	[》] [60 – 70]%	[‰] [60 – 70]%	[‰] [60 – 70]%	[≈] [60 – 70]%
Other app stores <sup>110</sup>	[‰] [0 – 5]%	[≫] [0 − 5]%	[≫] [0 – 5]%	[≫] [0 – 5]%	[≫] [0 – 5]%

Source: CMA analysis of data from Google, Apple, Samsung, Amazon, and Huawei.

Note: The Other app Stores row in the table is comprised of data from Samsung, Amazon, Huawei

result, the figures presented may underestimate the share of the Galaxy Store however, any underestimation is expected to be marginal.

<sup>108</sup> Google's response to section 69 notice [X]. Google's response to section 69 notice [X].

<sup>&</sup>lt;sup>109</sup> Apple's response to section 69 notice [ ].

<sup>&</sup>lt;sup>110</sup> Samsung's response to section 69 notice [ $\gg$ ]. Amazon's response to section 69 notice [ $\gg$ ]. Huawei's response to section 69 notice [ $\gg$ ].

Table A.6: The proportion of net revenue by app store across Mobile Devices in the UK (2020-2024)

Party			Time period		
	2020	2021	2022	2023	2024
Play Store <sup>111</sup>	[≫] [30 – 40]%	[》] [30 – 40]%	[》] [30 – 40]%	[》] [30 – 40]%	[》] [20 – 30]%
App Store <sup>112</sup>	[》] [60 – 70]%	[≈] [60 – 70]%	[》] [60 – 70]%	[》] [60 – 70]%	[%] [60 – 70]%
Other app stores <sup>113</sup>	[≫] [0 – 5]%	[≫] [0 − 5]%	[≫] [0 − 5]%	[≫] [0 – 5]%	[》] [0 – 5]%

Source: CMA analysis of data from Google, Apple, Samsung, Amazon, and Huawei.

Note: The Other app stores row in the table is comprised of data from Samsung, Amazon, and Huawei.

- A.76 Table A.7 shows the annual average commission rates on Mobile Devices based on market participant data for Google in the UK for the period 2020-2024. As can be seen:
  - (a) The Play Store's annual average commission rate over the five-year period ranged from [≫] [20 - 30]%, decreasing between 2020-2022 and remaining largely stable thereafter.

Table A.7: Annual average commission rates in the UK (2020-2024)<sup>114</sup>

Year	Commission rates
2024	[≈] [20-30]%
2023	[≈] [20-30]%
2022	[≈] [20-30]%
2021	[≈] [20-30]%
2020	[≥] [20-30]%

Source: CMA analysis of data from Google.

A.77 Table A.8 shows the proportion of app developers that incurred each band of average commission fee rates on their customer billings on the Play Store in the UK based on data from Google for the period 2020-2024. As can be seen:

<sup>&</sup>lt;sup>111</sup> Google's response to section 69 notice [≫]. Google's response to section 69 notice [≫].

<sup>&</sup>lt;sup>112</sup> Apple's response to section 69 notice [ ].

<sup>&</sup>lt;sup>113</sup> Samsung's response to section 69 notice [ $\gg$ ]. Amazon's response to section 69 notice [ $\gg$ ]. Huawei's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>114</sup> Google's response to section 69 notice [≫]. Google's response to section 69 notice [≫].

- (a) The proportion of app developers with no customer billings remained relatively stable between the period 2020 to 2023, but declined to [≫] [90 95]% in 2024.
- (b) The proportion of app developers that incurred an average commission rate of between 10 15% steadily increased from [ $\gg$ ] [0 5]% to  $[\gg]$  [0 5]%.
- (c) The proportion of app developers that incurred an average commission rate of between 15 20% gradually increased [ $\gg$ ] within the [0 5]% range.
- (d) On the other hand, the proportion of app developers that incurred an average commission rate of 25%+ declined from [ $\gg$ ] [0 5]% to [ $\gg$ ] [0 5]%.
- (e) The proportion of app developers across the remaining commission bands remained broadly stable over the five-year period.

Table A.8: The proportion of app developers that incurred each band of average commission fee rates on their customer billings on the Play Store in the UK (2020-2024)<sup>115</sup>

Year	No billings	Below 5%	5-10%	10-15%	15-20%	20-25%	25%+
	[≫] [90 –	[》》] [0 —	[》》] [0 —	[》》] [0 —	[》》] [0 —	[》》] [0 —	[》] [0 -
2024	95]%	5]%	5]%	5]%	5]%	5]%	5]%
	[≫] [95 –	[》] [0 —	[》] [0 –	[≫] [0 –	[≫] [0 –	[≫] [0 –	[》] [0 –
2023	100]%	5]%	5]%	5]%	5]%	5]%	5]%
	[≫] [95 –	[》] [0 —	[》] [0 –	[≫] [0 –	[≫] [0 –	[≫] [0 –	[》] [0 -
2022	100]%	5]%	5]%	5]%	5]%	5]%	5]%
	[≫] [90 –	[》] [0 —	[》] [0 –	[》》] [0 —	[≫] [0 –	[≫] [0 –	[》] [0 –
2021	95]%	5]%	5]%	5]%	5]%	5]%	5]%
	[≫] [95 –	[》] [0 —	[》] [0 –	[》》] [0 —	[≫] [0 –	[≫] [0 –	[》] [0 –
2020	100]%	5]%	5]%	5]%	5]%	5]%	5]%

Source: CMA analysis of data from Google.

Note: The data was provided in 5% bands, expect for average commission rates of 25%+. The data provided reports service fees of 10%, 15%, 20%, and 25% in the 5-10%, 10-15%, 15-20%, and 20-25% ranges, respectively. That means if an app developer in aggregate paid a service fee of exactly 15%, that app developer was allocated to the 10-15% range.

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<sup>&</sup>lt;sup>115</sup> Google's response to section 69 notice [><].

- A.78 Of the app developers that generate customer billings, [≫] [50 60]% incurred an average commission rate of 15% or less in 2024. 116
- A.79 Table A.9 shows the proportion of customer billings that incurred each band of average commission fee rates on the Play Store in the UK based on data from Google for the period 2020-2024. As can be seen:
  - (a) The proportion of customer billings that incurred an average commission rate between 10% 15% consistently increased year on year from [≫] [0 − 5]% in 2020 to [≫] [10 − 15]% in 2024, with the most significant increase occurring in 2022.
  - (b) A similar trend is observed in the 15% 20% average commission rate where the proportion that customer spend accounted for increased from [≫] [0 5]% to [≫] [15 20]%, with the largest increase occurring in 2022.
  - (c) The proportion of customer billings that incurred an average commission rate of 25%+ declined year on year from [≫] [90 95]% in 2020 to [≫] [60 65]% in 2024, with the most significant decreases occurring between 2020 and 2022. The share of consumer spend accounted for within this band remained the largest over the five-year period.
  - (d) The proportion that customer spend accounted for across the remaining commission bands remained broadly stable over the five-year period, with some year-on-year fluctuation.

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<sup>&</sup>lt;sup>116</sup> Google's response to section 69 notice [≫].

Table A.9: The proportion of customer billings that incurred each band of average commission fee rates on the Play Store in the UK (2020-2024)<sup>117</sup>

Year	Below 5%	5-10%	10-15%	15-20%	20-25%	25%+
2024	[%] [0 – 5]%	[》] [0 – 5]%	[泽] [10 – 15]%	[》<] [15 – 20]%	[≫] [0 – 5]%	[》] [60 – 65]%
2023	[%] [0 – 5]%	[》] [0 – 5]%	[》<] [10 – 15]%	[》<] [15 – 20]%	[≫] [0 – 5]%	[》] [65 – 70]%
2022	[%] [0 – 5]%	[》] [0 – 5]%	[》<] [5 – 10]%	[》<] [15 – 20]%	[≫] [0 – 5]%	[》] [65 – 70]%
2021	[%] [0 – 5]%	[》] [0 – 5]%	[‰] [0 – 5]%	[‰] [0 – 5]%	[》<] [10 – 15]%	[》] [80 – 85]%
2020	[≫] [0 – 5]%	[≫] [0 – 5]%	[‰] [0 – 5]%	[≫] [0 – 5]%	[≫] [0 − 5]%	[》] [90 – 95]%

Source: CMA analysis of data from Google.

Note: The data was provided in 5% bands, expect for average commission rates of 25%+. The data provided reports service fees of 10%, 15%, 20%, and 25% in the 5-10%, 10-15%, 15-20%, and 20-25% ranges, respectively. That means if an app developer in aggregate paid a service fee of exactly 15%, that app developer was allocated to the 10-15% range.

- A.80 Table A.10 shows the total value of Play Store revenue, the net revenue generated from customer billings through Google's proprietary payment system, the revenue generated from Google's Play Store adverts, and the proportion of Play Store revenue earned by Google, split between Play service fees and adverts in the Play Store, on Mobile Devices in the UK based on data from Google for the period 2023-2024. As can be seen:
  - (a) Revenue from Play service fees accounts for the larger proportion of the two sources across both 2023 and 2024, at [≫]% and [≫]% respectively.
  - (b) The proportion of revenue from adverts increased between the two years from [≫]% to [≫]%.

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<sup>&</sup>lt;sup>117</sup> Google's response to section 69 notice [><].

Table A.10: The total value of Play Store revenue earned by Google, the net revenue generated from customer billings, the revenue generated by Google's Play Store adverts, and the proportion of Play Store revenue earned by Google in the UK, split between Play service fees and adverts in the Play Store (2023-2024) 118

Year	Play Store combined revenue	Play Store net revenue	Play Store adverts revenue	Play service fees	Play Store adverts
2024	[》<]	[≫] [0 – 2] billion	[%]	[%<]	[‰]
2023	[%]	[≫] [0 – 2] billion	[%]	[%]	[%]

Source: Data from Google.

Notes:

- A.81 Table A.11 shows the shares of total revenue earned by app stores, which includes revenue from customer billings through their proprietary payment systems and revenue from advertising, on Mobile Devices in the UK for the period 2023-2024. 119 As can be seen:
  - (a) The Play Store's and App Store's shares of app store revenue remained stable at [⋈] [30 – 40]% and [⋈] [60 – 70]% respectively in the period 2023-2024.
  - (b) The combined share of app store revenue for all other app stores also remained constant at  $[\gg] [0-5]\%$  over the two-year period.

<sup>118</sup> Google's response to section 69 notice [ $\gg$ ]. Google's response to section 69 notice [ $\gg$ ]. Google's response to section 69 notice [ $\gg$ ].

<sup>1.</sup> Play net revenue includes revenue generated from Play Books and Play Pass.

<sup>2.</sup> Play Store adverts revenue was calculated by the CMA using the proportion of Play Store revenue that Play Store adverts accounted for the period 2023-2024.

<sup>&</sup>lt;sup>119</sup> Analysis is based on data from market participants Google, Apple, Samsung, Amazon, and Huawei. Advertising revenue was only gathered from Google and Apple. As a result, the figures presented may underestimate the share of the other app stores however, any underestimation is expected to be limited, given their very small share of customer billings' revenue and native app downloads.

Table A.11: The proportion of total app store revenue by app store across Mobile Devices in the UK (2023-2024)

#### Time period

Party	2023	2024
Play Store <sup>120</sup>	[》] [30 – 40]%	[》] [30 – 40]%
App Store <sup>121</sup>	[》] [60 – 70]%	[%] [60 – 70]%
Other app stores <sup>122</sup>	[》] [0 – 5]%	[%] [0 – 5]%

Source: CMA analysis of data from Google, Apple, Samsung, Amazon, and Huawei.

Note: The Other app stores row in the table is comprised of data from Samsung, Amazon, and Huawei.

# Usage of alternative distribution methods - sideloading

#### Source of data

- A.82 The data underlying this analysis comes from Google only.
- A.83 We received annual data on the total number of users<sup>123</sup> that sideloaded (i) native apps<sup>124</sup> and (ii) app stores<sup>125</sup>, and the total volume of downloads<sup>126</sup> by sideloading for (i) native apps<sup>127</sup> and (ii) app stores on Android Mobile Devices.
- A.84 The data covers the period March 2023 to December 2024.
- A.85 Additionally, we present below annual data on the total number of active Android Mobile Devices and total number of native app downloads via the Play

<sup>&</sup>lt;sup>120</sup> Google's response to section 69 notice [ $\gg$ ]. Google's response to section 69 notice [ $\gg$ ]. Google's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>121</sup> Apple's response to section 69 notice [≫]. Apple's response to section 69 notice [≫].

<sup>&</sup>lt;sup>122</sup> Samsung's response to section 69 notice [ $\gg$ ]. Amazon's response to section 69 notice [ $\gg$ ]. Huawei's response to section 69 notice [ $\gg$ ].

<sup>123</sup> Google noted that the user data may be subject to double counting due to limitations in data availability. Google's response to section 69 notice [≫].

<sup>124</sup> Google noted that native apps data is based on installations that occurred while the device had an internet connection and on active GMS devices with Google Play Protect enabled. Google's response to section 69 notice [≽].

<sup>&</sup>lt;sup>125</sup> Google collected data on a sample of third-party app stores operating on Android Mobile Devices. [≫]. Google's response to section 69 [≫].

<sup>&</sup>lt;sup>126</sup> Google noted that the number of downloads include both first time and any subsequent downloads. Google's response to section 69 notice [≫].

<sup>127</sup> Google noted that data on native apps sideloaded includes all download channels outside of the Play Store and pre-installed third-party app stores – [ $\gg$ ]. Google's response to section 69 notice [ $\gg$ ].

Store in 2024. This data provides further context from which to understand the magnitude of the sideloading data relative to the data about the Play Store.

# **Outputs**

- A.86 Table A.12 shows the total number of native apps sideloaded, the number of users that sideloaded native apps, the number of active Android Mobile Devices and the number of Play Store native app downloads in the UK based on data from Google for the period March 2023 December 2024. As can be seen:
  - (a) In 2024, an estimated [≫] [200 300] million native apps were sideloaded on Android Mobile Devices, in comparison to [≫] [1,500 – 2,000] million native apps that were downloaded through the Play Store in the same year.
  - (b) [≫] [20 30] million Android users sideloaded a native app on Android Mobile Devices in the UK in 2024 across [≫] [40 – 50] million active devices.
  - (c) The data for 2023 (March December) mirrors a similar pattern to the results observed in 2024.

Table A.12: Total number of native apps sideloaded, total number of users that sideloaded native apps, total number of active Android Mobile Devices and total number of Play Store native app downloads in the UK (2023-2024)<sup>128</sup>

Year	Number of native apps sideloaded	Number of users t	that sideloaded	Number of active Android device	Millions Number of native apps downloaded via the Play Store
		(i) Native apps	(ii) App stores		
2024	[≫] [200 – 300]	[%] [20 – 30]	[%] [0 – 1]	[%] [40 – 50]	[》=] [1,900 — 2,000]
2023 (Mar-Dec)	[><] [100 – 200]	[≈] [20 – 30]	[‰] [0 – 1]	[%] [40 – 50]	[》<] [1,600 — 1,700]

Source: CMA analysis of data from Google.

# Usage of alternative distribution methods – web apps (including PWAs)

### Source of data

- A.87 The data underlying this analysis comes from market participants Google, Samsung and Mozilla.
- A.88 We received data from those market participants on the number of users of PWAs that were installed on Mobile Devices and the number of installations of PWAs to Mobile Devices.
- A.89 The data covered the period 2022 – 2025 – with some differences between market participants. 129 The data also varied by other factors, such as frequency and methodology. As such, there are limitations in directly comparing the data from each of the market participants.
- A.90 We provide further detail about the nature of each market participant's data below:

<sup>1.</sup> The numbers for active Android Mobile Devices are computed by taking the midpoint of each year shown, which is the midpoint of 31 February 2023 - 31 December 2023 for the year 2023 (aligning with Google's sideloading data which begins in March 2023), and 31 December 2023 - 31 December 2024 for the year 2024.

<sup>2.</sup> Data on the number of sideloaded native apps includes sideloaded app stores. App stores make up less than [≫] [0 − 5] million sideloads in each period.

<sup>&</sup>lt;sup>128</sup> Google's response to section 69 notice [≫].

<sup>129</sup> Google provided monthly data for period October 2023 – December 2024. Samsung provided annual data for years 2023-2024. Mozilla provided annual data for years 2022-2024.

## (a) Google

- (i) Data was sourced from its Chrome browser for Android only.
- (ii) Number of users who used PWAs installed on their device via Chrome: The estimated number of UK Chrome users on Android Mobile Devices that used PWAs installed on their device over the first 28 days of each month. 130
- (iii) Number of installations of PWAs via Chrome each month: The estimated number of installations of PWA via Chrome for each month.

## (b) Samsung

- (i) Data was sourced from a sample of users. 131
- (ii) **Installation of Web Apps**: the number of events and users for installing web apps through Samsung internet browser.
- (iii) **Use of Web App**: the number of events and users of running a web app through Samsung internet browser.

## (c) Mozilla

- (i) Data was sourced from its FireFox browser for Android only.
- (ii) **Yearly Installation of PWAs**: Number of user requests to install a PWA on a mobile device.
- (iii) **Active PWA users**: Mozilla only measures a daily snapshot of PWA users, as such a yearly averaged daily amount is estimated in volume. 132

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<sup>&</sup>lt;sup>130</sup> The data only captures users running a version of Chrome released in November 2020 or later, which represents approximately 98% of Chrome users in the UK. Google's response to section 69 notice [≫].

<sup>131</sup> Data provided by Samsung is an extrapolated estimate based on a sample of 10% of users that opted-in to provide this information, with figures multiplied by 10 to estimate figures for the entire population of those users. Samsung note that actual figures may be different. Samsung's response to section 69 notice [><1.

<sup>&</sup>lt;sup>132</sup> Mozilla captures 'PWA users' on a daily snapshot basis. To aggregate this to a yearly format Mozilla first calculates the percentage of users who use PWAs daily, by comparing DAU of PWAs against Firefox users generally. They do this for all days in the relevant years, before applying this percentage to the total Firefox users on a yearly basis. Further, to measure 'users', and PWA 'users' Mozilla tracks clients. This may lead to inconsistencies in counting, if a user for example reinstalls or requests data deletion on Firefox. This same distinction applies to PWA

A.91 Additionally, we draw on annual data from Google on the number of active Android Mobile Devices to enable comparison with the web apps data described above. 133

## **Outputs**

- A.92 Table A.13 shows data from Google on the number of users that used PWAs and the number of PWA installations via the Chrome browser in the UK for the period October 2023 to December 2024. As can be seen:
  - (a) The number of users on a monthly basis remained relatively consistent, albeit showing some marginal increases over the nearly two-year period, ranging from approximately [ $\gg$ ] [3 4] million to [ $\gg$ ] [4 5] million.
  - (b) The number of PWA installations showed more substantial growth, rising from approximately [ $\gg$ ] [0 1] million per month to [ $\gg$ ] [1 2] million, with the total number of installations in 2024 reaching [ $\gg$ ] [10 11] million.

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users. As Mozilla does not have access to information on the deletion of PWAs, they use MAUs of PWAs as a proxy for active PWA users. Mozilla's response to section 69 notice [ $\gg$ ].

<sup>&</sup>lt;sup>133</sup> This data was described in the mobile operating shares of supply section above.

Table A.13: Monthly number of users that used PWAs and the number of PWAs installations via Chrome browser on Android Mobile Devices in the UK (Oct 2023 – Dec 2024)<sup>134</sup>

		Millions
Period	Number of users	Number of PWA
renou	who used PWAs	installations
December 2024	[≥] [4-5]	[≫] [1-2]
November 2024	[≥] [4-5]	[≫] [1-2]
October 2024	[》<] [4-5]	[≫] [1-2]
September 2024	[≥] [4-5]	[≫] [0-1]
August 2024	[≥] [4-5]	[≫] [0-1]
July 2024	[≥] [4-5]	[≫] [0-1]
June 2024	[》<] [4-5]	[》<] [0-1]
May 2024	[》<] [4-5]	[》<] [0-1]
April 2024	[≫] [4-5]	[≫] [0-1]
March 2024	[≥] [4-5]	[》<] [0-1]
February 2024	[≥] [4-5]	[》<] [0-1]
January 2024	[≫] [3-4]	[≫] [0-1]
December 2023	[≫] [3-4]	[≫] [0-1]
November 2023	[≫] [3-4]	[≫] [0-1]
October 2023	[%] [3-4]	[‰] [0-1]

Source: CMA analysis of data from Google

- A.93 The majority of PWA installations via the Chrome browser in 2024 occurred on smartphones. Of the total number of PWA installations, [≫] [10 11] million occurred on smartphones compared to [≫] [0 1] million on tablets.
- A.94 There were also a considerably larger number of users who used PWAs installed on their home screen on smartphones via the Chrome browser in 2024. On average, [≫] [4 5] million users used PWAs on smartphones compared to [≫] [0 1] million on tablets each month.
- A.95 Table A.14 shows data from Samsung on the number of users that used web apps, and the number of PWA installations in the UK for the period April 2023 to December 2024. As can be seen:
  - (a) There was very little change between 2023 and 2024 on the number of users that used PWAs – ranging from approximately [≫] [1 – 2] million to [≫] [1 – 2] million.

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<sup>&</sup>lt;sup>134</sup> Google's response to section 69 notice [ $\gg$ ].

(b) However, the number of PWA installations fell substantially from approximately [ $\gg$ ] [50,000 – 60,000] to [ $\gg$ ] [0 – 10,000].

Table A.14: Annual number of users that used web apps and the number of PWAs installations via Samsung Internet browser on Android Mobile Devices in the UK (2023 – 2024)<sup>135</sup>

	Number of users	
	who used web	Number of PWA
Period	apps	installations
2024	[≥] [1 – 2] million	[≥] [0 - 10,000]
		[≥] [50,000-
	[≥] [1 – 2] million	60,000]
2022		

2023

Source: CMA analysis of data from Samsung

Note: Data provided by Samsung is an extrapolated estimate based on a sample of 10% of users that opted-in to provide this information, with figures multiplied by 10 to estimate figures for the entire population of those users. Samsung note that actual figures may be different.

- A.96 Table A.15 shows data from Mozilla on the number of users that used PWAs, and the number of PWA installations in the UK for the period 2022-2024. As can be seen:
  - (a) The number of users that used web apps decreased from [ $\gg$ ] [25,000 50,000] to [ $\gg$ ] [0 25,000] between the period 2022-2024, representing a slight decline in the proportion of users who used web apps.
  - (b) Similarly, the number of PWA installations also declined in that period from  $[\gg] [150,000 200,000]$  to  $[\gg] [150,000 200,000]$ .

Table A.15: Annual number of active Firefox users that used PWAs and the number of PWAs installations via Firefox browser on Android Mobile Devices in the UK (2022 – 2024)<sup>136</sup>

		Thousands
Period	Number of users	Number of PWA
	who used PWAs	installations
2024	[≥] [0 – 25]	[》] [150 – 200]
2023	[》<] [0 – 25]	[≥] [150 – 200]
2022	[≥] [25 – 50]	[≫] [150 – 200]

Source: CMA analysis of data from Mozilla.

<sup>&</sup>lt;sup>135</sup> Samsung's response to section 69 notice [><].

<sup>&</sup>lt;sup>136</sup> Mozilla's response to section 69 notice [≫].

# Mobile browsers and browser engines outcomes

- A.97 In this section we present an analysis of:
  - (a) Mobile browser shares of supply on all Mobile Devices; and
  - (b) Mobile browser shares of supply on Google's Mobile Ecosystem.

# Mobile browser shares of supply on all Mobile Devices

#### Source of data

- A.98 The data underlying this analysis comes from Statcounter.
- A.99 We examine publicly available aggregate level data from Statcounter on browser usage from 2012 to 2024 (inclusive) across Mobile Devices (comprising smartphones and tablets) including both Apple's and Google's Mobile Ecosystems in the UK. 137

## Outputs

A.100 Figure A.19 shows each mobile browser's share as a percentage of all mobile browser usage for each year from 2012 to 2024 on smartphones and tablets.

<sup>&</sup>lt;sup>137</sup> Statcounter collect data on an ongoing basis covering year-to-date data for 2025. Only full year data is presented graphically. The most recent 2025 data do not show any material difference from 2024. The possible limitations of Statcounter data described above also apply to the data examined here.

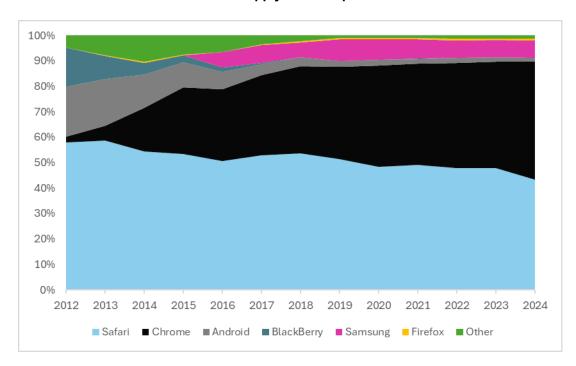


Figure A.19: UK mobile browser shares of supply on smartphones and tablets - 2012 to 2024

Source: Statcounter, Mobile & Tablet Browser Market Share United Kingdom.

Notes: (i) The CMA uses its own definition of 'Mobile Devices' to refer to both smartphones and tablets (ii) Android refers to AOSPbased browsers developed on top of the web browser apps made available through the Android Open-Source Project. European Commission, Google Android Decision, footnote 1034.

- Figure A.19 shows that Safari's share of supply has decreased from 58% in 2012 to 43% in 2024. Chrome's share of supply has increased from 2.2% to 46% over the same timeframe.
- A.102 Apple and Google have had a persistent high share over time. Chrome's share has risen over time, in part driven by Android (on which Chrome has a high share of supply) having a growing operating system share on both mobile and tablets 138
- A.103 There are differences in mobile browser share of supply trends between smartphones and tablets. Figure A.20 shows mobile browser shares of supply on smartphones, while Figure A.21 shows mobile browser shares of supply on tablets.

<sup>138 &#</sup>x27;Mobile Operating System Market Share United Kingdom | Statcounter Global Stats' & 'Tablet Operating System Market Share United Kingdom | Statcounter Global Stats', accessed 30 June 2025.

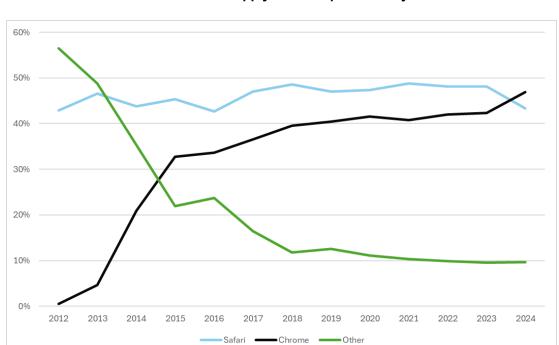


Figure A.20: UK mobile browser shares of supply on smartphones only - 2012 to 2024

Source: Statcounter, Mobile & Tablet Browser Market Share United Kingdom.

Notes: (i) The CMA's definition of 'Mobile Devices' refers to both smartphones and tablets, however, Statcounter considers 'tablets' separately from 'mobile' (ii) Android is included in the other category and refers to AOSP-based browsers developed on top of the web browser apps made available through the Android Open-Source Project. European Commission, Google Android Decision, footnote 1034.

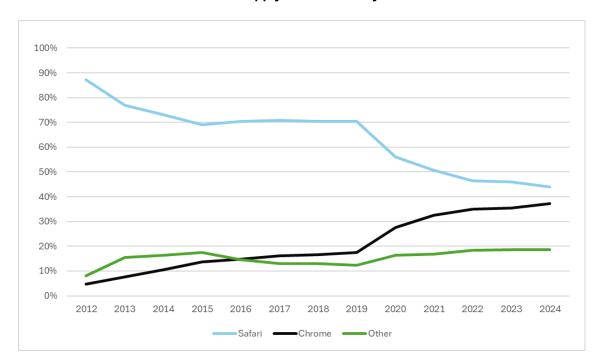


Figure A.21: UK mobile browser shares of supply on tablets only - 2012 to 2024

Source: Statcounter, Mobile & Tablet Browser Market Share United Kingdom.

Notes: (i) The CMA's definition of 'Mobile Devices' refers to both smartphones and tablets, however, Statcounter considers 'tablets' separately from 'mobile' (ii) Android refers to AOSP-based browsers developed on top of the web browser apps made available through the Android Open-Source Project. European Commission, Google Android Decision, footnote 1034.

- A.104 Chrome's share of supply on smartphones was relatively stable between 2019 and 2024 and remained within the range of 40-47%. Over the same period, Chrome's share of supply in tablet browsers increased from 17% to 37%. Safari's share of supply on smartphones was relatively stable between 2019 and 2024 and remained with the range of 43-49%. Safari's share of supply on tablets decreased considerably over the same period, from 70% in 2019, to 44% in 2024.
- A.105 This trend is aligned with a decline in Apple's share of supply in tablets as measured by Statcounter data. This indicates that Safari's decline may be explained by a change in the composition of device sales rather than Safari losing share to rivals on Apple tablets.<sup>139</sup>

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<sup>&</sup>lt;sup>139</sup> 'Tablet Vendor Market Share United Kingdom', accessed 19 June 2025.

# Mobile browser and browser engine shares of supply on Google's Mobile Ecosystem

#### Sources of data

- A.106 The data underlying this analysis comes from Cloudflare Radar, and App Annie.
- A.107 We examined publicly available data from Cloudflare Radar. Cloudflare Radar accelerates and protects web traffic for a large part of the internet. It uses metadata gathered through its network to measure mobile browser usage. 140 It provides shares of supply data for browsers by UK web traffic for Google's Mobile Ecosystem from October 2022 to June 2025.
- A.108 We also consider App Annie data which provides data on time spent on different browser apps on Google's Mobile Ecosystem from January 2018 to March 2025 in the UK. App Annie relies on a global panel of millions of users that report data to App Annie. The data is then extrapolated to be representative of the mobile population.

## Outputs

A.109 Table A.16 shows mobile browser shares of supply by web traffic on Google's Mobile Ecosystem in June 2025, according to Cloudflare Radar. 141

Table A.16: UK browser and browser engine share of supply on Google's Mobile Ecosystem in June 2025

Browser	Browser engine	Share
Chrome	Blink	80%
Samsung	Blink	16%
Firefox	Gecko	1%
DuckDuckGo	Blink*	1%
Brave	Blink	1%
Edge	Blink	1%
Smaller browsers	Blink	1%
Smaller browsers	Unknown	0%
	=	

Source: Cloudflare Radar, see Market Share by Country and OS.

Notes: (i) smaller browsers based on Blink include Opera, Aloha, Ecosia, Huawei, Yandex, and UC; (ii) shares of supply may not sum to 100% due to rounding; and (iii) Smaller browsers using an unknown browser engine have a share of 0.16% which rounds to a share of 0%

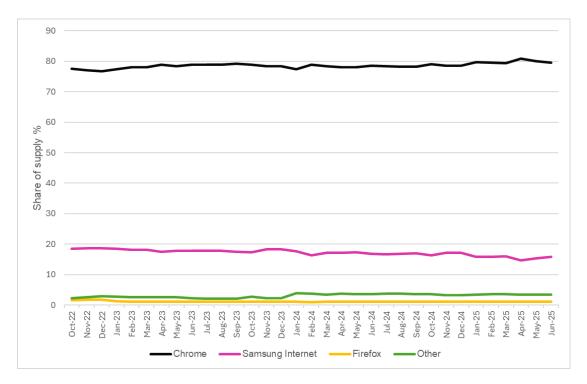
\*DuckDuckGo's browser engine (OS's WebView) is counted as Blink on Android.

<sup>&</sup>lt;sup>140</sup> 'Browser Market Share Report for 2025 Q2', accessed 17 September 2025.

<sup>&</sup>lt;sup>141</sup> Figures include tablets, but there might be a slight underreporting of Android users if devices use desktop user agents.

- A.110 Table A.16 shows that Chrome was the leading mobile browser on Google's Mobile Ecosystem in June 2025 with a share of supply of 80%.
- A.111 Samsung Internet was the second largest mobile browser on Google's Mobile Ecosystem with a share of supply of 16%.
- A.112 Smaller browsers accounted for no more than 1% of supply on Google's Mobile Ecosystem when considering each individually.
- A.113 Google's Blink browser engine was the leading browser engine on Google's Mobile Ecosystem with mobile browsers running on Blink accounting for at least 99% of the share of supply in terms of web traffic on Google's Mobile Ecosystem in June 2025. Mozilla's Gecko had a share of supply of just over 1%.
- A.114 Figure A.22 shows that mobile browser shares of supply on Google's Mobile Ecosystem have been stable from October 2022 and June 2025.

Figure A.22: UK browser shares of supply (mobile) on Google's Mobile Ecosystem from October 2022 to June 2025 using Cloudflare Radar data on web traffic



Source: Cloudflare Radar

A.115 Cloudflare Radar also provides data including in-app browsing on Google's Mobile Ecosystem. This data was first reported for quarter 1 2025, as described

in the Proposed Decision. 142 The reported quarter 2 data includes the additional category 'Chrome Mobile WebView' for Android. This methodological change has resulted in substantial changes to the reported shares. Chrome Mobile WebView accounts for at least 16% of all browsing activity in each month for quarter 2, whilst Chrome's share has fallen by 9% and Facebook's share has fallen by 3% between March and April 2025.

- A.116 These changes give rise to concerns about the reliability of the data. It is also not clear what is captured by different categories. For example, we understand that many apps use Android WebView, or Chrome Custom Tabs for in-app browsing on Android, 143 and it is not clear whether in-app browsing on these apps would be captured by the Chrome Mobile WebView category, or under the individual app. 144 Therefore, whilst we have reported shares based on this data in this Appendix, we do not place weight on these in our assessment.
- A.117 Based on the Cloudflare Radar data, in June 2025, Chrome had the largest share of supply with 60%, followed by Chrome Mobile WebView with 17%. Samsung Internet had the third largest share of supply with 12%. Facebook and Instagram (both developed by Meta) had the next largest shares of supply, with a combined share of 8%. In-app browsing on Meta's apps uses a bundled browser engine (a fork of Chromium developed by Meta), therefore including inapp browsing means that Meta's browser engine has a share of supply of 8%, whilst Blink's share of supply is reduced to 90%. 145
- A.118 App Annie data shows that Chrome also had the largest share of supply in terms of usage minutes between January 2018 and June 2025, with its share of supply persistently being between [≫] [70 − 80]% and [≫] [70 − 80]%. Samsung was the second largest browser on Google's Mobile Ecosystem in terms of usage minutes, with a share of supply persistently between [≫] [10 − 20]% and [≫] [10 − 20]%. 146

<sup>&</sup>lt;sup>142</sup> See Proposed Decision: <u>Appendix A – market outcomes</u>, and <u>Cloudflare Radar - Browser Market Share Report for</u> 2025 Q1.

<sup>143</sup> See MBCG MI Final Report - Section 7, paragraph 7.8, accessed 22 September 2025.

Developers can set a custom user agent string to identify themselves for in-app browsing, or be identified using a generic 'Android WebView' user agent string. How developers choose to identify themselves will therefore influence the reported shares.

<sup>&</sup>lt;sup>145</sup> Blink has 90% (consisting of Chrome, Chrome Mobile WebView, Samsung, and several smaller Blink-based browsers), Meta's browser engine has 8%, Mozilla's Gecko has 1%, and the remaining share (<1%) is made up of browsers or apps for which the browser engine is unknown; <u>'Browser Market Share Report for 2025 Q2'</u>, accessed 17 September 2025.

<sup>&</sup>lt;sup>146</sup> CMA analysis of [≫] response to section 69 notice [≫].