



EUROPEAN COMMISSION
DG Competition

PUBLIC VERSION

Case M.9660 – GOOGLE/FITBIT

(Only the English text is authentic)

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 8(2) Regulation (EC) 139/2004

Date: 17/12/2020

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EUROPEAN
COMMISSION

Brussels, 17.12.2020
C(2020) 9105 final

COMMISSION DECISION

of 17.12.2020

**declaring a concentration to be compatible with the internal market and the EEA
agreement**

(Case M.9660 – GOOGLE/FITBIT)

Text with EEA relevance

(Only the English text is authentic)

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COMMISSION DECISION

of 17.12.2020

declaring a concentration to be compatible with the internal market and the EEA agreement

(Case M.9660 – GOOGLE/FITBIT)

Text with EEA relevance

(Only the English text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings¹, and in particular Article 8(2) thereof,

Having regard to the Commission's decision of 4 August 2020 to initiate proceedings in this case,

Having regard to the opinion of the Advisory Committee on Concentrations²,

Having regard to the final report of the Hearing Officer in this case³,

Whereas:

1. INTRODUCTION

- (1) On 15 June 2020, the Commission received notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (the “Merger Regulation”) by which Google, LLC (“Google” or the “Notifying Party”, US) intends to acquire sole control of Fitbit, Inc. (“Fitbit”, US) (the “Transaction”).⁴ Google and Fitbit together are collectively referred to as the ‘Parties’ throughout this Decision. The present decision concludes the examination of the notified Transaction after the serious doubts raised by the Commission by its decision on 4 August 2020 pursuant to Article 6(1)(c) of the Merger Regulation.

¹ OJ L 24, 29.1.2004, p. 1. With effect from 1 December 2009, the Treaty on the Functioning of the European Union (“TFEU”) has introduced certain changes, such as the replacement of “Community” by “Union” and “common market” by “internal market”. The terminology of the TFEU will be used throughout this Decision.

² Opinion of the Advisory Committee on Concentrations of 1 December 2020.

³ Final report of the Hearing Officer of 4 December 2020.

⁴ Publication in the Official Journal of the European Union No C 210, 24.06.2020, p. 32.

- (2) This Decision is structured as follows. Section 2 describes the Parties. Section 3 illustrates the Transaction. Section 4 explains the reasons for considering the concentration brought about by the Transaction to have a Union dimension. Section 5 describes the procedure followed in this case. Section 6 describes the investigative steps undertaken by the Commission of the Transaction. Section 7 provides an overview of the concerned market activities of the Parties. Section 8 defines the relevant product and geographic markets. Section 9 sets out the Commission's competitive assessment of the Transaction. Section 10 contains the Commission's assessment of the commitments entered into by the Parties. Section 11 contains the Commission's conclusions; and Section 12 identifies the conditions and obligations attached to this Decision.

2. THE PARTIES

- (3) **Google** is a Delaware limited liability company and is wholly owned by Alphabet Inc. ("Alphabet"). It is a multinational technology company active in the supply of a wide range of products and services including online advertising technology, internet search, cloud computing, software and hardware. Amongst other products and services, Google develops licensable operating systems ("OSs") for smart mobile devices (Android) and smartwatches (Wear OS) and offers a health and fitness application ("app"). Google derives a significant majority of its revenue from online advertising via its internet search engine. Google also offers IT and information/research services for the healthcare industry.
- (4) **Fitbit** is a Delaware corporation, listed on the New York Stock Exchange. Founded in 2007, Fitbit is a technology company that develops, manufactures and distributes wearable devices, software and services in the health and fitness sector. The large majority of its revenue is derived from the supply of wearable devices, which includes fitness trackers and smartwatches. Fitbit's software and services offering includes an online dashboard and mobile app developed for use with its wearable devices.

3. THE TRANSACTION

- (5) Under the Agreement and Plan of Merger signed by the Parties on 1 November 2019 (the "Agreement"), Google will acquire all of Fitbit's issued and outstanding common shares for a total value of approximately USD 2.1 billion (approximately EUR 1.8 billion). Following the Transaction, Google will own 100% of Fitbit's shares. Fitbit's shareholders approved the Transaction on 13 January 2020.
- (6) Therefore, the Transaction consists of an acquisition by Google of sole control over Fitbit within the meaning of Article 3(1)(b) of the Merger Regulation and thus constitutes a concentration.

4. UNION DIMENSION

- (7) The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 5 000 million (Google: EUR 144 580 million; Fitbit 1 282 million)⁵.

⁵ Turnover calculated in accordance with Article 5 of the Merger Regulation.

Each of the undertakings has an Union-wide turnover in excess of EUR 250 million (Google: EUR [...] million; Fitbit: [...] million), but they do not achieve more than two-thirds of their aggregate Union-wide turnover within one particular Member State.

- (8) The Transaction therefore has an Union dimension pursuant to Article 1(2) of the Merger Regulation.

5. PROCEDURE

- (9) The Transaction was notified to the Commission on 15 June 2020.
- (10) After a preliminary examination of the notification and based on an initial (“Phase I”) market investigation, the Commission raised serious doubts as to the compatibility of the Transaction with the internal market and adopted a decision to initiate proceedings to conduct an in-depth examination (“Phase II”) pursuant to Article 6(1)(c) of the Merger Regulation on 4 August 2020 (the “Article 6(1)(c) Decision”).
- (11) The Notifying Party submitted its written comments on the Article 6(1)(c) Decision on 21 August 2020.
- (12) On 26 August 2020, a state of play meeting between the Parties and the Commission took place.
- (13) On 22 September 2020, the Notifying Party and the Commission agreed on an extension of the time period for the Commission’s investigation by 10 working days under the second subparagraph of Article 10(3) of the Merger Regulation.
- (14) On 28 September 2020, the Notifying Party submitted commitments pursuant to Article 8(2) of the Merger Regulation in order to address the competition concerns identified by the Commission. On 29 September 2020, the Commission launched a market test of the commitments submitted by the Notifying Party on 28 September 2020.
- (15) The Commission gave the Notifying Party detailed feedback on the outcome of the market test during calls on 9, 13 and 14 October 2020.
- (16) On 16 October 2020, the Notifying Party and the Commission agreed on a further extension of the time period for the Commission’s investigation by 5 working days under the second subparagraph of Article 10(3) of the Merger Regulation.
- (17) The Commission continued to give feedback on the revised commitments during calls on 20, 21, 27, 29 October 2020 and 3 November 2020.
- (18) On 4 November 2020, the Notifying Party submitted revised and final commitments pursuant to Article 8(2) of the Merger Regulation.
- (19) On 17 November 2020, the Commission sent a draft of this Decision to the Advisory Committee with the view of seeking the Committee’s opinion. The meeting of the Advisory Committee took place on 1 December 2020 and the Committee issued its positive opinion.

6. THE COMMISSION'S INVESTIGATION

- (20) This Decision contains the Commission's findings on the basis of the investigation it carried out prior to the notification of the Transaction, in the first phase, and in the second phase of the investigation.
- (21) Prior to the notification of the Transaction, the Commission sent twelve requests for information ("RFIs") to the Parties, the responses to which were included in the notification.
- (22) During Phase I of the investigation, the Commission sent nine RFIs to the Parties, including requests for internal documents and data, as well as seven data RFIs to third parties. In addition, the Commission sent two RFIs to (i) over 100 online advertising services providers, wearable original equipment manufacturers ("OEMs")⁶ and app developers, as well as (ii) over 100 digital healthcare players. In total, the Commission received over 50 replies from third parties during Phase I of the investigation.
- (23) During Phase II of the investigation, the Commission sent seventeen RFIs to the Parties, as well as four dedicated RFIs to (i) about 70 online advertising services providers (Google's competitors in online advertising markets), (ii) about 80 online advertisers and media agencies (Google's customers in online advertising markets), (iii) over 50 Android smartphone OEMs⁷ and wearable OEMs as well as app providers and (iv) almost 50 digital healthcare players. In total, the Commission received over 100 replies from third parties during Phase II.
- (24) Throughout the whole market investigation, the Commission also conducted multiple interviews with market participants, such as with online advertisers, wrist-worn wearable OEMs, app developers, digital healthcare players, their respective industry organisations as well as other stakeholders.
- (25) The Commission also reviewed internal documents submitted by the Parties in response to RFIs from the Commission. In total, the Parties have provided more than 1 000 000 documents to the Commission (Google around 247 000 and Fitbit around 828 000).

7. INDUSTRY OVERVIEW

- (26) This section provides an overview of all sectors that are relevant for the purpose of assessing the Transaction in order to provide context for the relevant market definition and the competitive assessment undertaken in Section 8 and Section 9.

7.1. Wearable devices

7.1.1. Types of devices

- (27) Wearable devices encompass devices that are worn in the ear, on the finger, over the eyes, as part of clothing and on the wrist. Since those devices rest on the body, they can be equipped with sensors that allow to record health and body measurements. As technology advances, wearable devices are also incorporating more sophisticated

⁶ The term wearable OEMs is used to refer to suppliers of wrist-worn wearable devices.

⁷ Android smartphone OEMs license Android for free under the AOSP license from Google and supply smartphones running on Android.

chipsets and antennae, enabling these devices to offer not only Bluetooth and Wi-Fi, but also GPS and cellular⁸ connectivity.

- (28) Within wearable devices, the largest segment are wrist-worn wearable devices. This is a fast-growing category that includes fitness trackers and smartwatches.
- (a) Fitness trackers have sensor hardware that allows users to record and monitor various health and activity metrics such as heart rate, daily activity (for example steps taken, distance travelled) and sleep duration. The most advanced models may also include further metrics, such as oxygen saturation.
 - (b) Smartwatches have larger screens and typically offer more advanced health and fitness features than fitness trackers. They also usually provide additional functionality such as communication and entertainment functions. In particular, this may include the ability to install apps on the smartwatch and to interact with apps on the smartphone, for example to display call/text/calendar notifications on the smartwatch with quick reply options.⁹ Some smartwatches offer cellular connectivity.
- (29) Up to the time of adoption of this Decision, some fitness trackers and smartwatches collect precise geographic position data using built-in GPS, while most wrist-worn devices cannot collect this information independently but rely on the tethered mobile device.
- (30) The importance of smartwatches is steadily growing, even though there was also a significant increase in sales of fitness trackers in 2019. In volume terms, the smartwatches segment ([...] million) was twice as big as what the fitness tracker segment ([...] million) was in the EEA in 2019. In value terms, the smartwatches segment (EUR [...] million) was ten times larger than what the fitness tracker segment (EUR [...] million) was in the EEA in 2019. The market evolution of the segments for smartwatches and fitness trackers between 2016 and 2019 in volume terms in the EEA is represented in Figure 1.

Figure 1: Sale evolution of the smartwatches and fitness trackers in the EEA (2016-2019, shipments)

[Third party data]

Source: IDC.

- (31) On the worldwide level, the trend is similar. Nevertheless, in value terms, the smartwatches segment (EUR [...] million) was almost eight times larger than what the fitness tracker segment (EUR [...] million) was in 2019.
- (32) A distinction can be made between basic and full smartwatches. In contrast to full smartwatches, basic smartwatches do not run third-party apps. With respect to the full smartwatches segment, connected smartwatches with cellular connectivity will overtake smartwatches with no cellular activity by [Third party data], as illustrated in Figure 2.

⁸ Wearable devices with cellular connectivity can connect to the internet using a cellular network (the network used by regular cell phones). In contrast, wearable devices without cellular connectivity either need to be in the range of a WiFi network or use smartphone tethering to access the internet.

⁹ Form CO, paragraphs 110, 115 and 118.

Figure 2: Sale evolution of the smartwatches with and without cellular connectivity in the world (2018-2023, shipments)

[Third party data]

Source: IDC, October 2019.

- (33) Of the many suppliers of wrist-worn wearable devices, the following are the main players:
- (a) Fitbit is a pioneer in wrist-worn wearable devices, launching its first fitness tracker model in 2009. Fitbit introduced its first smartwatch in 2017. Fitbit currently does not yet offer a smartwatch with cellular connectivity.
 - (b) Apple launched its first smartwatch, called Apple Watch, in April 2015. Since then, the company has consistently been at the forefront of wearable technology, releasing a new device every September with new features. For instance, Apple introduced the category of connected smartwatches with cellular connectivity with its fourth series released in 2018. Apple does not offer fitness trackers.
 - (c) Samsung has used its considerable experience in consumer electronics to launch a wide range of wearable devices, and currently markets fitness trackers and full smartwatches, some with cellular connectivity.
 - (d) Huawei offers low-cost fitness trackers and both basic and full smartwatches. It has grown to command significant market shares in recent years. In view of US trade sanctions¹⁰, Huawei has stated that it is planning to transition its smartwatches to its internally developed Harmony OS.
 - (e) Xiaomi became the largest supplier of wrist-worn wearable devices worldwide in 2019, powered by its enormous sales of low-cost fitness trackers. More recently, in November 2019, Xiaomi launched its first smartwatch that runs third-party apps and has cellular connectivity. Xiaomi collaborates with Huami, which also markets its own products under the Amazfit brand.
 - (f) Garmin supplies both fitness trackers and smartwatches, including connected ones. Unlike Apple, Samsung, Huawei, and Xiaomi, Garmin does not supply smartphones.
 - (g) Fossil is a fashion-focused watchmaker, which manufactures a wide range of basic and full smartwatches. Besides marketing watches under the Fossil brand, the company also partners with a wide range of fashion houses, including Michael Kors, Diesel, and Emporio Armani.
- (34) In addition, there are a number of smaller competitors, such as Mobvoi, Polar, BBK, Suunto and many more.

7.1.2. *Data generated by wearables*

- (35) Wearable devices are equipped with sensors that allow recording data relating to certain health and body measurements as well as other types of data, such as location data.

¹⁰ Form CO, paragraph 217.

- (36) Raw sensor data is either processed on the device itself (for example, accelerometer raw data is processed into “steps” information) or, when an algorithm is too demanding to run on the device, it is transferred to a server for processing (for example, sleep data).
- (37) Typical wrist-worn wearable devices can measure certain users’ daily activities and health metrics, such as the number of steps taken, the calories burned, the distance travelled, the floors climbed, and the minutes of activity, as well as the sleep duration and quality and the heart rate.
- (38) The sensor data can be automatically combined with location data either from on-board GPS or from location information provided by a tethered mobile device, if geo-localization is activated.

7.1.3. *Health and fitness apps*

- (39) Users of wearable devices typically connect their device to health and fitness apps on a smartphone to review, analyse, store and/or export the data generated by the wearable device.
- (40) Besides displaying and processing the data generated from wearable devices, health and fitness apps on smartphones can also display certain simple data types (for example, simple step or activity counts) based on sensors of the smartphone. Health and fitness apps may offer additional features, such as fitness goal suggestions, mindfulness and meditation exercises, general and professional physical training, activity and daily habits tracking, nutrition and weight-loss monitoring and advice, as well as menstrual cycles monitoring.
- (41) Suppliers of wrist-worn wearable devices typically offer one or several companion apps, which enable the users to initialize and synchronize their devices with the smartphone, but which also cover the functionalities of a health and fitness app. Users can also opt to use a third-party health and fitness app, which can import the users’ data (with their consent) through an application programming interface (“API”).¹¹

7.2. **OSs**

- (42) OSs are software systems that control the basic functions of computing devices such as servers, PCs, tablets and mobile as well as wearable devices and enable the user to operate the device and run application software on it.¹²
- (43) OSs that are designed to support the functioning of smart mobile devices, i.e. smartphones and tablets, and the corresponding apps are hereinafter referred to as "smart mobile OSs".
- (44) Smart mobile OSs typically provide a graphical user interface, APIs, and other ancillary functions, which are required for the operation of a smart mobile device and allow for new combinations of functions to offer greater usability and

¹¹ An API is a particular set of rules and specifications that a software program follows in order to access and make use of the services and resources provided by another software program or hardware that also implements that API. In essence, APIs allow software programs and hardware, or different software programs, to communicate with each other.

¹² Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 74-83.

innovations. Apps written for a given smart mobile OS will typically run on a smart mobile device using the same OS, regardless of the manufacturer.

- (45) Smart mobile OSs are developed by vertically integrated OEMs such as Apple for captive use on their own smart mobile devices (“non-licensable smart mobile OSs”), or by providers such as Google (with Android), which license their smart mobile OS to other OEMs (“licensable smart mobile OSs”). The licensing of a smart mobile OS therefore constitutes an economic activity upstream from the level of sales of smart mobile devices to users.
- (46) Smart mobile OSs need to interact with the OSs of wearable devices “wearable OSs”.
- (47) Similarly to smart mobile OSs, wearable OSs are developed by vertically integrated OEMs such as Apple, Fitbit or Garmin for use on their own wearable device or by providers such as Google (with its Wear OS), which license their wearable OS to OEMs.

7.3. App stores

- (48) The development of smart mobile devices has led to the emergence of a new type of software: app stores, i.e., digital distribution platforms, constituted by online services and related apps that are dedicated to enabling users to download, install and manage a wide range of diverse apps from a single point in the interface of the smart mobile device.¹³
- (49) Similarly, there are app stores for wearable devices that enable users to download, install and manage a wide range of diverse apps on their wearable device from a single point in the interface of the smart mobile device.
- (50) App stores are generally available to users for free. Users only pay to download certain apps or acquire paid content within apps (“in-app purchases”). Developers of revenue-generating apps typically pay an app store a fixed percentage of their app-related revenues when users pay for the download of apps or make in-app purchases.

7.4. Search engines

- (51) Search engines allow users to search for information across the Internet. Typically, based on a search query entered by the user, the search engine provides the user with the most relevant results. Search engines are usually free of charge for the user and are in most cases financed by advertisements that are selected on the basis of the user’s search query (‘search ads’), as explained below in Section 7.5. Most search engines are accessible from a desktop browser, a mobile app or a wearable app.

7.5. Online advertising and ad tech services

- (52) There are two types of online ads:
 - (a) Search ads, which are displayed on the basis of search queries entered by users into internet search engines (that is to say, advertisers can specify the keywords for which they want their ads to be triggered or the queries for which they are most likely to be relevant). Search ads are typically presented

¹³ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 86-88.

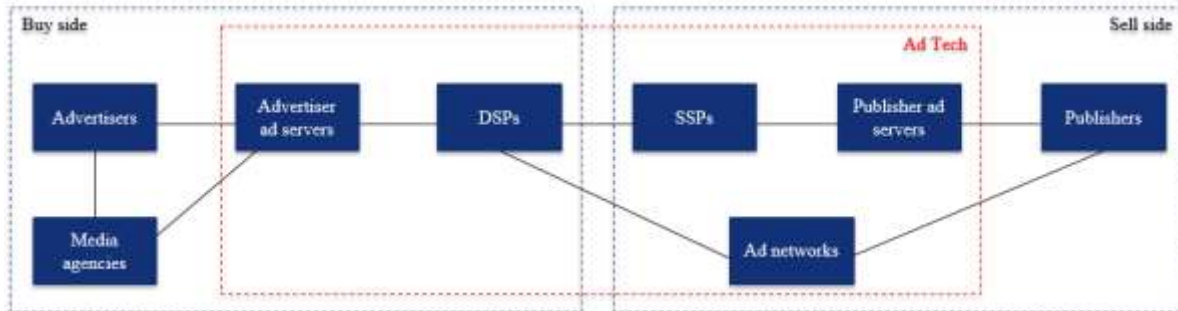
next to the search results on the search engine's own pages or other search results pages.

- (b) Non-search or display ads, which can be either contextual ads, displayed according to the content of the page on which they appear, or non-contextual ads. Since no query-keyword is available to trigger display ads, the data collected about the user accessing the pages is relatively more important for the selection of display ads than for the selection of search ads.
- (53) The online advertising sector has developed over the past 10 years towards ever increasing automation. Digital advertising space (or "inventory") can be sold at a fixed price through direct deals between the publishers (the "sell side") and individual advertisers or media agencies (the "buy side"). The matching between the two sides can also be made by intermediaries. The vast majority of digital advertising space is now sold by intermediaries in "programmatic" forms. In programmatic buying, the purchase of a particular piece of advertising inventory is made in an automated way on the basis of predetermined criteria tailored to or chosen by the relevant advertisers or publishers, including information such as the webpage in which the ad will appear, the ID of the user to whom the ad will be shown, the minimum price at which the publisher is willing to sell the ad space etc.. The majority of programmatic advertising is done via online auctions using real-time-bidding, which is the nearly instantaneous buying and selling of advertising space (the whole process happens in the time it takes for a webpage to load into a user's web browser).
- (54) In this context, the advertising supply chain involves a diversified network of intermediaries that provide technologies and/or data ("ad tech") to facilitate the programmatic sale and purchase of digital advertising inventory.
- (55) The key intermediaries in the ad tech value chain are:
- (a) Demand Side Platforms ("DSPs"): (buy-side) platforms that allow advertisers and media agencies to buy advertising inventory from many sources (ad exchanges, ad networks, Supply Side Platforms).
 - (b) Supply Side Platforms ("SSPs"): (sell-side) platforms that automate the sale of digital inventory. Their core purpose is to help publishers to sell their inventory. Those platforms allow real-time auctions by connecting to multiple DSPs, collecting bids from them and performing the function of exchanges.
 - (c) Advertiser ad servers: solutions used by advertisers and media agencies to store the ads, deliver them to publishers, keep track of this activity and assess the impact of their campaigns by tracking conversions.
 - (d) Publisher ad servers: publishers use ad servers to manage their inventory. Those servers make the final choice of which ad to display, based on the offer received from different SSPs and DSPs and the direct deals agreed between the publisher and advertisers.
 - (e) Ad exchanges: a digital marketplace where SSPs and DSPs connect. The ad exchange runs the auction and decides the winner, that is to say which bidder (advertiser) wins the impression on the inventory. Ad exchanges used to be separate, but at the time of this Decision SSPs typically incorporate an ad exchange as part of their technology offering.

- (f) Ad networks: platforms that integrate most intermediation functions into a single service. They aggregate inventory supply from publishers and match it with advertisers.
- (g) Data services suppliers: different players providing advertisers and publishers with tools to collect, store, manage and analyse data.¹⁴ The users of such tools can receive the data from multiple sources, including the advertisers themselves or third party licensors.

(56) A simplified version of the ad tech value chain is provided in Figure 3 below.

Figure 3: The ad tech value chain



Source: Commission (based on CMA's Online platforms and digital advertising. Market study final report, 1 July 2020).

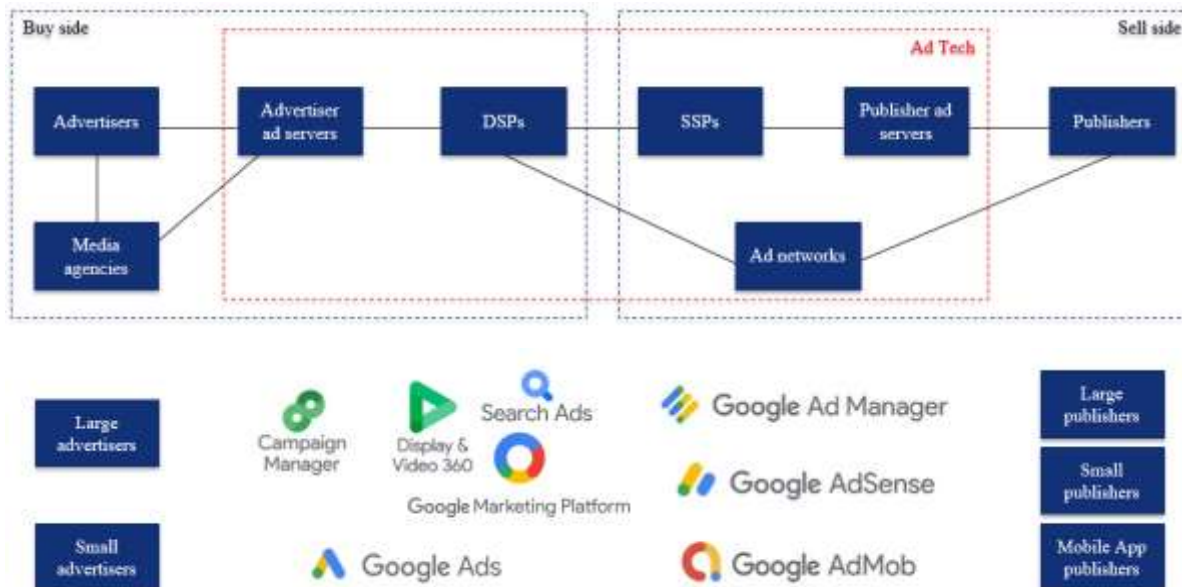
(57) Google supplies online advertising services at all levels of the ad tech value chain. In particular, Google provides:

- (a) For advertisers:
 - Google advertiser ad server Campaign Manager;
 - Google's DSP: Display&Video 360, which helps (typically large) advertisers to buy ad space on Google's own non-search ad inventory (for example YouTube), but also on ad exchanges and/or SSPs, so that these ads can be delivered eventually on third party publishers;
 - Google's search campaign management platform SearchAds 360 (equivalent to DSP functions for search ads), which helps (typically large) advertisers to manage their campaigns on Google's own search engine and third party search engines (Microsoft Ads, Yahoo!, Baidu);
 - Google's alternative platform for buying advertising space, Google Ads (formerly AdWords). Google Ads essentially serves the same purposes as SearchAds 360 and Display&Video 360, but typically for smaller advertisers. Google Ads is a buying interface for advertisers through which they can access both Google's own surfaces (so called "owned and operated" or "O&O" surfaces) and ad space inventory of third-party publishers. Advertisers can choose different types of campaigns in Google Ads based on their advertising goals.
- (b) For publishers:

¹⁴ See CMA, Online platforms and digital advertising. Market study final report, 1 July 2020.

- Google Ad Manager: an SSP solution for large publishers, which groups Google’s ad server for publishers (previously DoubleClick for Publishers) and its SSP/Ad exchange (previously AdX);
 - Google AdSense: an ad network solution for smaller publishers, which delivers Google ads on the websites of publishers;
 - Google AdMob: an ad network solution for ads served on mobile apps.
- (58) Moreover, as part of the Google Marketing Platform, Google Analytics provides web analytics service that tracks and reports web traffic.¹⁵
- (59) Google’s presence at the various levels of the value chain is illustrated in the below Figure 4.

Figure 4: Google’s presence in the ad tech value chain



Source: Commission (based on CMA’s Online platforms and digital advertising. Market study final report, 1 July 2020).

7.6. Digital healthcare services

- (60) The large penetration of smart digital devices among consumers has significantly increased the amount and level of detail of user data available to the economy. The healthcare sector is one of the sectors benefiting from the streams of data and monetisation, since user data can inform tools for the prevention (or early detection) of serious medical conditions (for example diabetes, obesity, atrial fibrillation, etc.), which contributes to the adoption of healthier lifestyle by users and a decrease of health expenditure. It may also facilitate medical research. The sum of these initiatives is a sector commonly referred to as digital healthcare. Digital healthcare is still a nascent sector, whose development largely depends on the type of data and

¹⁵ Google Marketing Platform includes additionally Data Studio, Optimize, Tag Manager and Surveys.

digital technology available. Both technology companies Google and Fitbit among others and traditional healthcare companies are making progress in order to establish themselves in this new sector.

- (61) Digital healthcare is not characterised by a prevailing business model, but the combination of data and technology leads to a variety of business initiatives and monetisation modes. A common feature of all business initiatives is the relevance of user data, widely expected to have a significant impact on healthcare. As they allow establishing connections - and thus extracting additional conclusions - from sets of previously unrelated data, data-based solutions (sometimes referred to as Big Data) will provide new insights for medical research that were impossible to obtain before. It may be possible, for example, to link diseases - such as obesity, cardiovascular diseases, depression - to human behaviour, lifestyle or other causes that are characteristic of a given geographic area or group of people.

8. RELEVANT MARKETS

8.1. Introduction

- (62) The Parties both supply (i) wearable devices, (ii) an OS for wearable devices, (iii) app stores for wearable devices, (iv) health and fitness apps, and (v) mobile payment apps. The Transaction accordingly may create some horizontal overlaps in those areas. However, the Parties are not always active in the same product markets.¹⁶
- (63) The Transaction also creates a number of non-horizontal relationships between Fitbit's activities in the supply of wrist-worn wearable devices (and associated companion apps) and Google's activities in the supply of (i) online search and display advertising services (including intermediation services), (ii) general search services, (iii) licensable OSs for smart mobile devices, (iv) licensable OSs for smartwatches, (v) Android app stores, and (vi) various apps and services that are or could be offered on wrist-worn wearable devices. In addition, there is a non-horizontal relationship between Fitbit's apps store for its wearable devices and Google's supply of various apps for wearable devices.
- (64) Finally, both Parties are active in the digital healthcare sector.
- (65) In the present Section 8, the Commission assesses the relevant product and geographic market definitions.

8.2. Wearable devices

- (66) Both Parties supply wearable devices. While Google supplies earwear and eyewear devices, Fitbit is active in wrist-worn wearable devices, including both fitness trackers and smartwatches. [Google's product strategy]. [Google's product strategy].

¹⁶ In the past, Fitbit also marketed wearable devices that clipped on to the user's clothing, including the Fitbit One and the Fitbit Zip. These have been discontinued (Fitbit One's inventory was sold through in 2017, and Fitbit Zip's inventory was sold through in 2018), [Fitbit's product strategy]. Fitbit offered wireless headphones, called Fitbit Flyers. In [Fitbit's product strategy], Fitbit decided to stop the production of Fitbit Flyers and [Fitbit's product strategy]. Fitbit also offers Wi-Fi or Bluetooth connected scales, however, Fitbit's activities in this area are *de minimis*. Form CO, paragraph 132 ff and Notifying Party's response to RFI 41, question 1.

8.2.1. *Product market definition*

8.2.1.1. Commission precedents

- (67) In *Apple/Beats*, the Commission examined the possibility of assessing the market for the supply of headphones as separate from other audio equipment, but ultimately decided to leave the product market definition open.¹⁷
- (68) The Commission has not previously considered the market for wrist-worn wearable devices.

8.2.1.2. The Notifying Party's view

- (69) The Notifying Party considers that the relevant product market should encompass all wrist-worn wearable devices, but exclude other wearable devices such as earwear and eyewear.¹⁸
- (70) As regards earwear, the Notifying Party explains that their primary function is to play audio. As a result, their smart functions tend to be far more limited than those offered by wrist-worn devices.¹⁹ As regards eyewear, the Notifying Party considers that Google's own product (Google Glass) is a productivity tool for businesses. In particular, Google Glass does not contain any of the sensors necessary to track the health metrics expected by consumers of wrist-worn wearable devices.²⁰ Moreover, the Notifying Party submits that eyewear's and earwear's components and underlying technologies are very different from wrist-worn devices.
- (71) The Notifying Party considers that there is no reason to further segment wrist-worn wearable devices, as there is a very considerable overlap in the features offered by fitness trackers and smartwatches. According to the Notifying Party, there is a continuous chain of substitution extending from basic fitness trackers through to full smartwatches.²¹
- (72) The Notifying Party does not consider it appropriate to segment wrist-worn wearable devices on the basis of either cellular connectivity or GPS functionality.²² According to the Notifying Party, devices without these features clearly exercise direct and significant pressure on device that do offer these features.
- (73) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the product market for wearable devices can be left open.

8.2.1.3. The Commission's assessment

- (74) In line with the Notifying Party's submission and the results of the market investigation, the Commission considers that wrist-worn wearables constitute a separate product market from other types of wearable devices.

¹⁷ Commission decision of 25 July 2014 in case M.7290 – *Apple/Beats*, paragraphs 11-13.

¹⁸ Form CO, paragraph 343.

¹⁹ Form CO, paragraph 343.

²⁰ Form CO, paragraph 344.

²¹ Form CO, paragraph 345.

²² Form CO, paragraphs 347-351.

- (75) From a demand-side perspective, the majority of respondents indicated that users do not consider other wearable devices, in particular connected rings, earwear and eyewear, as substitutes for wrist-worn wearable devices, namely, smartwatches and fitness trackers.²³ Respondents explained that the devices specific to different body parts have different functions. Nevertheless, some respondents indicated that connecting rings could offer some but not all functionalities of a fitness tracker.
- (76) From a supply-side perspective, only about half of respondents indicated that suppliers of other wearable devices could develop and start offering to consumers wrist-worn wearable devices in the short term and without incurring significant costs through investments.²⁴ Respondents highlighted that the barriers to entry in the supply of smartwatches were particularly high.
- (77) As regards the question of whether or not it is necessary to further segment the market for wrist-worn wearable devices, the majority of respondents indicated that users consider smartwatches and fitness trackers as substitutes.²⁵ Nevertheless, respondents also pointed out that smartwatches and fitness trackers offer different functionalities and are marketed at very different price points. Considering the supply-side, a majority of respondents reported that suppliers of fitness trackers could develop and start offering smartwatches (and vice versa) in the short term without incurring significant investment.²⁶
- (78) Regarding GPS and cellular connectivity, respondents to the market investigation reported that these functionalities are important factors driving consumers' choices for wrist-worn wearable devices, albeit cellular connectivity is only relevant for smartwatches as it is not offered on fitness trackers.²⁷ However, since for both GPS and cellular connectivity a substantial share of respondents answered that "it depends on the price", it appears that devices with and without these features may exercise a direct constraint on each other. As regards other important distinguishing features, respondents to the market investigation highlighted the difference between basic and full smartwatches, the latter also supporting third-party apps. This distinction is not relevant for fitness trackers, which generally do not carry apps.
- (79) In light of recitals (74) to (78), for the purpose of assessing the Transaction in this Decision, the Commission considers that the relevant product market is the market for wrist-worn wearable devices. The question whether the supply of wrist-worn wearable devices should be further segmented between (i) fitness trackers and smartwatches, (ii) fitness trackers and smartwatches with and without GPS connectivity, (iii) smartwatches with and without cellular connectivity and (iv) basic and full smartwatches can be left open in this Decision since the Parties do not overlap as regards wrist-worn wearable devices and any further segmentations would thus not change the outcome of the competitive assessment in the present case.

²³ Replies to questionnaire QA on wearables, search and advertising, question C.3.

²⁴ Replies to questionnaire QA on wearables, search and advertising, question C.5.

²⁵ Replies to questionnaire QA on wearables, search and advertising, question C.3.

²⁶ Replies to questionnaire QA on wearables, search and advertising, question C.5.

²⁷ Replies to questionnaire QA on wearables, search and advertising, question C.4.

8.2.2. *Geographic market definition*

8.2.2.1. Commission precedents

(80) The Commission has not previously considered the market for wrist-worn wearable devices.

8.2.2.2. The Notifying Party's view

(81) Referring to the Commission's decisional practice with respect to smart mobile devices²⁸, the Notifying Party submits that the geographic market for wrist-worn wearable devices is worldwide or at least EEA-wide.²⁹

(82) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic market for wearable devices can be left open.³⁰

8.2.2.3. The Commission's assessment

(83) Responses to the to the market investigation suggest that there are no significant differences in customer demand and/or requirements between different EEA countries, however, that there are some significant differences across regions such as the EEA, North America and China.³¹ From the supply side, it seems that transport costs are rather low and products are manufactured globally and shipped to customers throughout the world. For instance, the 10 largest vendors of wrist-worn wearable devices in the EEA by volume are spread throughout the world: Apple, Garmin, Fossil, and Fitbit are based in the United States; Xiaomi, Huami, and Huawei are based in China; Samsung is based in South Korea; and Suunto and Polar are based in Europe.³² Nevertheless, as can be seen from market shares (see Section 9.1.1), competitive conditions and competitors' market position can vary significantly by geographic region.

(84) In light of recital (83) , for the purpose of assessing the Transaction in this Decision, the Commission considers that the geographic scope of the relevant product markets for wrist-worn wearable devices identified in recital (79) above is at least EEA-wide if not worldwide.

8.3. OSs

(85) Google maintains and develops the Android ecosystem, which includes an open-source smart mobile OS. Google also maintains and develops its own wearable OS called Wear OS, based on Android OS, which it licenses to OEMs for use on smartwatches [Google's strategy].

(86) Fitbit owns two OSs which it does not licence to third parties: [Fitbit OS 1], which is used exclusively on Fitbit's fitness trackers, and [Fitbit OS 2], which is exclusively used on Fitbit's smartwatches.

²⁸ Commission decision of 13 February 2012 in case M.6381 – Google/Motorola Mobility, paragraphs 46 and 48 and; Commission decision of 4 December 2013 in case M.7047 – Microsoft/Nokia, paragraph 72.

²⁹ Form CO, paragraph 356.

³⁰ Form CO, paragraph 357.

³¹ Replies to questionnaire QA on wearables, search and advertising, question C.7.

³² Form CO, paragraph 356.

- (87) For the purpose of the market definition, the Commission has thus examined both (i) OSs for smart mobile devices and (ii) OSs for wrist-worn wearable devices.

8.3.1. Product market definition

8.3.1.1. Commission precedents

- (88) In *Google/Motorola Mobility*, while leaving the exact market definition open, the Commission took the view that OSs for PCs and OSs for smart mobile devices³³ belong to separate product markets, given that both such OSs use different hardware and have different performance capacities.³⁴ A similar approach was adopted in *Microsoft/Nokia*³⁵, *Microsoft/LinkedIn*³⁶ and *Apple/Shazam*³⁷.
- (89) In *Apple/Shazam*³⁸, the Commission left open whether it is appropriate to consider segmentations by further device type, that is, in addition to OSs for PCs and smart mobile devices, also as regards smart TVs and different types of smart wearable devices. In particular, the evidence on file was inconclusive on whether OSs for smart wearable devices constituted a separate market from OSs for smart mobile devices.
- (90) In addition, in *Google Android*, the Commission concluded in the context of OSs for smart mobile devices that licensable and non-licensable OSs belong to separate product markets.³⁹ This question was left open in previous relevant Commission decisions.

8.3.1.2. The Notifying Party's view

- (91) The Notifying Party considers that the relevant product market for wearable OSs is separate from the market for OSs for other smart devices, such as smart mobile devices. That is because (i) wearable devices use very different hardware and have different performance capacities, (ii) the principal smart mobile OS developers, Google and Apple, have each developed a separate OS to run on wearable devices and (iii) apps developed for smart mobile OSs are specific to smart mobile devices and cannot be directly ported to wearable OSs.⁴⁰
- (92) The Notifying Party submits that no further distinction is needed between OSs for fitness trackers and smartwatches.⁴¹ While Fitbit has developed separate OSs for fitness trackers and smartwatches and Google's Wear OS is only used on smartwatches, the Notifying Party considers that the line between OSs for fitness trackers and OSs for smartwatches is increasingly blurred. Moreover, [Fitbit OS 2]

³³ Smart mobile devices include smartphones and tablet devices.

³⁴ Commission decision of 13 February 2012 in case M.6381 – *Google/Motorola Mobility*, paragraphs 26 and 29-30.

³⁵ Commission decision of 4 December 2013 in case M.7047 – *Microsoft/Nokia*, paragraph 27.

³⁶ Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 11-15.

³⁷ Commission decision of 6 September 2018 in case M.8788 – *Apple/Shazam*, recitals 82-85.

³⁸ Commission decision of 6 September 2018 in case M.8788 – *Apple/Shazam*, recitals 82-85.

³⁹ See Commission decision of 18 July 2018 in case AT.40099 – *Google Android*, recitals 238-267.

⁴⁰ Form CO, paragraphs 358-359.

⁴¹ Form CO, paragraphs 360-362.

which Fitbit employs in its smartwatches is an RTOS⁴², which is by far the most common type of OS used for fitness trackers (more than 99% of fitness trackers run on RTOSs) and accounts for a significant share of smartwatches. Although development costs of wrist-worn wearable OSs can vary depending on their sophistication, these OSs are all part of the same spectrum of software solutions, without any clear qualitative demarcation between these solutions.

- (93) The Notifying Party considers that it is inappropriate to segment the relevant market between licensable and non-licensable OSs.⁴³ According to the Notifying Party, licensable and non-licensable OSs compete to attract users and developers.
- (94) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the product markets for OSs for smart mobile and wearable devices can be left open.⁴⁴

8.3.1.3. The Commission's assessment

- (95) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant product market for OSs, it would be appropriate to depart from its previous practice as to the distinction between OSs for PCs and OSs for smart mobile devices.⁴⁵
- (96) With regard to wearable OSs, in line with the Notifying Party's submission and the results of the market investigation⁴⁶, the Commission considers that wearables OSs constitute a separate product market from smart mobile OSs. Respondents to the market investigation emphasised that wearable OSs are customised products, which are specifically designed for wearable devices. From a demand-side perspective, it is not possible for an OEM to simply transfer an OS for PCs, smart TVs or smart mobile devices onto wearable devices. While it is possible and common to adapt OSs for smart mobile devices for use on wearable devices (for example iOS, Android OS), this requires a significant level of customisation. From a supply-side perspective, the majority of respondents also indicated that a supplier of an OS for smart mobile device could not develop and start offering in the short term and without undertaking significant investment an OS for wearable devices.⁴⁷ For the same reasons, and based on the results of the market investigation, the Commission considers that OSs for wrist-worn wearable devices, which are relevant in the context of the Transaction, constitute a separate product market from OSs for non-wrist-worn wearable devices.

⁴² Real-time OS. A type of OS that is generally smaller, more lightweight, and more limited than general purpose OSs, such as Android, Windows, or iOS. RTOSs often run more basic apps and functions than general purpose OSs.

⁴³ Form CO, paragraph 363.

⁴⁴ Form CO, paragraph 364.

⁴⁵ Replies to questionnaire QA on wearables, search and advertising, question C.14.

⁴⁶ Replies to questionnaire QA on wearables, search and advertising, question C.14.

⁴⁷ Replies to questionnaire QA on wearables, search and advertising, question C.16.

- (97) As regards the question whether OSs for different types of wrist-worn wearable devices constitute distinct product markets, the evidence in the Commission's file was not conclusive.⁴⁸
- (98) With regard to the distinction between licensable and non-licensable OSs, the respondents to the market investigation acknowledged a degree of competition between licensable and non-licensable OSs at the level of the user of smart mobile and wrist-worn wearable devices, but they did not indicate that licensable and non-licensable OSs can be seen as substitutes from an OEM perspective.⁴⁹
- (99) From the demand-side, OEMs cannot obtain a licence to use a non-licensable OS on their smart mobile or wrist-worn wearable devices. From the supply-side perspective, developers of OSs are unlikely to readily change the status of their OS. For instance, while Apple's iOS and Fitbit's proprietary OSs [Fitbit OS 1] and [Fitbit OS 2] have always been non-licensable, Google's Android OS and Wear OS have always been licensable. The majority of respondents to the market investigation confirmed that suppliers of non-licensable OS are unlikely to start licensing their OS to third-party OEMs, mentioning in particular Apple as example.⁵⁰ Therefore, the Commission considers that licensable and non-licensable OSs constitute separate product markets due to a lack of demand-side and supply-side substitutability.
- (100) In light of recitals (95)-(99), for the purpose of assessing the Transaction, the Commission considers that the relevant product markets are:
- (a) The supply of licensable OSs for smart mobile devices; and
 - (b) The supply of licensable OSs for wrist-worn wearable devices, potentially segmented along the lines of the potential segments of the market for wrist-worn wearable devices listed in recital (79).

8.3.2. *Geographic market definition*

8.3.2.1. Commission precedents

- (101) In its previous decisional practice, the Commission has usually considered the market for OSs for smart mobile devices to be EEA-wide, if not worldwide, but it has ultimately left the exact geographic market definition open⁵¹. However, in *Google Android*, it concluded, in relation to licensable OSs for smart mobile devices that the market is worldwide excluding China.⁵² This conclusion was based on the fact that barriers to entry are low in most of the regions of the world (for example, there are no trade barriers and limited language-specific demand characteristics), and agreements between OEMs and OS developers are generally worldwide in scope. At the same time, conditions of competition were found to be different in China because Google's activities in China are limited and there is a number of OEMs that sell devices in China based on modified Android versions which were not

⁴⁸ Replies to questionnaire QA on wearables, search and advertising, question C.14.

⁴⁹ Replies to questionnaire QA on wearables, search and advertising, question C.15.

⁵⁰ Replies to questionnaire QA on wearables, search and advertising, question C.17.

⁵¹ Commission decision of 13 February 2012 in case M.6381 – Google/Motorola Mobility, paragraphs 33-35; Commission decision of 4 December 2013 in case M.7047 – Microsoft/Nokia, paragraphs 74-77.

⁵² Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 403-411.

recognised by Google as “Android-compatible” and thus could not be successfully marketed outside of China.

- (102) The Commission has not previously considered the geographic scope of the market for licensable OSs for wrist-worn wearable devices.

8.3.2.2. The Notifying Party’s view

- (103) The Notifying Party submits that the relevant geographic markets are worldwide, as OEMs generally enter into a single worldwide licensing agreement.⁵³

- (104) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic markets for OSs for smart mobile and wearable devices can be left open.⁵⁴

8.3.2.3. The Commission’s assessment

- (105) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant product market for licensable OSs for smart mobile devices, it would be appropriate to deviate from its previous finding that the market is worldwide excluding China.⁵⁵

- (106) With regard to the market for licensable OSs for wrist-worn wearable devices, responses to the market investigation suggest that there are no significant differences in customer demand and/or requirements between different EEA countries but that there are some significant differences across regions such as the EEA, North America and China.⁵⁶ From the supply side, similar arguments as for licensable OSs for smart mobile devices hold. OEMs generally enter into a single worldwide licensing agreement with the wearable OS provider. Due to the nature of wearable OSs, factors such as import restrictions, transport costs and technical requirements are not meaningful. Although wearable OEMs may require specific language capabilities for certain regions or countries, these do not constitute a significant obstacle to cross-border supplies.⁵⁷ Nevertheless, as can be seen from market shares (see Section 9.1.2), competitive conditions and competitors’ market position can vary significantly by geographic region. In particular, conditions of competition were found to be different in China. There are a number of OEMs which sell devices with their OSs only in China.⁵⁸

- (107) In light of recitals (105)-(106), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the markets for licensable OSs for smart mobile devices is worldwide excluding China, while the geographic scope of the market for licensable OSs for wrist-worn wearable devices is at least EEA-wide, and potentially even worldwide excluding China.

⁵³ Form CO, paragraph 365.

⁵⁴ Form CO, paragraph 367.

⁵⁵ Replies to questionnaire QA on wearables, search and advertising, question C.18.

⁵⁶ Replies to questionnaire QA on wearables, search and advertising, question C.7.

⁵⁷ Form CO, paragraph 366.

⁵⁸ Form CO, paragraph 519.

8.4. App stores

- (108) Google runs the “Play Store” to distribute apps on its open-source smart mobile OS (Android OS) and its wearable OS (Wear OS).
- (109) Fitbit maintains the “Fitbit App Gallery” to distribute apps on its wearable OSs.
- (110) For the purpose of assessing the Transaction, the Commission has thus examined both (i) app stores for smart mobile devices and (ii) app stores for wearable devices.

8.4.1. Product market definition

8.4.1.1. Commission precedents

- (111) For smart mobile devices, in *Google Android*, the Commission has defined digital distribution platforms, that is to say “app stores,” as online services and related apps dedicated to enable users to download, install, and manage different apps from a single point in the interface of the smart mobile device.⁵⁹ The Commission considered app stores to belong to a separate product market from other apps, based on their (i) pre-installation requirement to enable users to download other apps, (ii) specific distribution channel function, and (iii) time and resource demands for development, regardless of a developer’s general experience.⁶⁰
- (112) In *Google Android*, the Commission also found that Android app stores belong to a distinct product market, because smart mobile device OEMs would need to switch to another licensable OS in order to offer a different app store, but that these OEMs are unlikely to do so, *inter alia* because (i) users are unlikely to switch to a device with a different OS due to the small spending in app stores, switching costs and the degree of OS loyalty, and (ii) Google Android is currently the smart mobile OS with the largest number of apps and users.⁶¹
- (113) The Commission concluded that app stores for a given OS platform of smart mobile devices (namely Android app stores) constitute a separate relevant product market.⁶²
- (114) The Commission has not previously considered a market for apps stores on wearable devices.

8.4.1.2. The Notifying Party’s view

- (115) The Notifying Party considers that the exact scope of the relevant product markets can be left open, as no competition concerns would arise under any plausible market definition.⁶³
- (116) In addition, with regard to app stores on wearable devices, the Notifying Party notes that, were the Commission to apply the approach from the *Google Android* case, there would be no overlap between the Parties’ offering as the Parties’ app stores are platform-specific, namely Google Play is only available on Wear OS devices and the Fitbit App Gallery on Fitbit devices.⁶⁴

⁵⁹ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recital 86.

⁶⁰ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 271-272.

⁶¹ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 284-305.

⁶² Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 268-322.

⁶³ Form CO, paragraphs 370 and 398.

⁶⁴ Form CO, paragraph 370.

8.4.1.3. The Commission's assessment

- (117) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant product market for app stores for smart mobile devices, it would be appropriate to depart from its previous practice.⁶⁵
- (118) In line with the Notifying Party's submission and the results of the market investigation,⁶⁶ the Commission thus considers that app stores for a given OS platform of smart mobile devices (namely Android app stores) constitute a separate relevant product market from app stores for other OS platforms. The Commission concludes that different app stores for Google Android devices belong to the same product market.
- (119) From a demand-side perspective, an OEM can, in principle, choose from a number of different Android app stores for its Google Android devices. Moreover, the majority of respondents to the market investigation indicated that customers consider other Android app stores as an alternative to Google Play, while not considering app stores for other OS platforms.⁶⁷ Some market respondents however, pointed out, while generally agreeing that other Android app stores could be an alternative to the Play Store, that they have so far only played a limited role.⁶⁸
- (120) Given the multi-sidedness of app stores, it is important to consider also the perspective of app developers. In *Google Android* the Commission concluded that app developers would be unlikely to switch from developing apps for Google Android devices to developing apps for smart mobile devices with a different smart mobile OS because, in doing so, they would forego access to a large number of users of smart mobile devices.⁶⁹
- (121) With regard to app stores on wearable devices, the Commission considers that similar arguments apply.
- (122) Just like on smart mobile devices, the Commission considers app stores on wearable devices to belong to a separate product market from other apps, based on their (i) pre-installation requirement to enable users to download other apps, (ii) specific distribution channel function, and (iii) time and resource demands for development, regardless of a developer's general experience.
- (123) Moreover, the Commission considers that there are separate markets for app stores for a given OS platform of wearable devices. From an end user demand-side perspective, the majority of respondents to the market investigation indicated that customers cannot choose between different app stores for their devices running on Wear OS and Fitbit OSs.⁷⁰ Google Play is the only app store via which users can download apps onto their Wear OS devices. The Fitbit App Gallery is the only app store via which users can download apps onto their Fitbit devices. From an app developer perspective, Google Play and the Fitbit App Gallery therefore provide

⁶⁵ Replies to questionnaire QA on wearables, search and advertising, question C.31.

⁶⁶ Replies to questionnaire QA on wearables, search and advertising, question C.31.

⁶⁷ Replies to questionnaire QA on wearables, search and advertising, question C.31.

⁶⁸ Replies to questionnaire QA on wearables, search and advertising, question C.31.1.

⁶⁹ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recital 290.

⁷⁰ Replies to questionnaire QA on wearables, search and advertising, question C.31.

access to a different customer group, i.e. to users of Wear OS devices and users of Fitbit devices, respectively.

- (124) From a supply side perspective, in line with the *Google Android* case, the Commission notes that smart mobile device OEMs are unlikely to switch app stores, as they would need to switch to another licensable OS thereby incurring significant costs. The development costs can be substantial, making it unlikely that an OEM would change OS merely due to a degradation of the wearable app store. OEMs are also unlikely to do so because their users would incur costs when switching to a different OS and app store. These switching costs include the need to download and purchase existing apps for the new wearable OS, the need to learn and become familiar with a new interface and the need to transfer data through often inconvenient and imperfect mechanisms.⁷¹
- (125) In light of recitals (117)-(124), for the purpose of assessing the Transaction in this Decision, the Commission considers that the relevant product markets are:
- (a) The supply of app stores for a given OS platform of smart mobile devices (in particular Android app stores);
 - (b) The supply of app stores for a given OS platform of wrist-worn wearable devices (in particular app stores for Wear OS and Fitbit devices).

8.4.2. *Geographic market definition*

8.4.2.1. Commission precedents

- (126) In *Google Android*, the Commission concluded that the geographic scope of the market for app stores for a given OS platform of smart mobile devices (for example Android app stores) is worldwide, excluding China.⁷² This conclusion was based on the fact that (i) there are no trade restrictions, (ii) language differences between different geographic areas do not appear to create obstacles for app store developers, and (iii) OEMs can sell smart mobile devices with the same app stores pre-installed in most regions of the world. At the same time, conditions of competition were found to be different in China because Google's activities in China are limited and there are a number of OEMs active in China that have successfully developed and commercialised their own app store.
- (127) The Commission has not previously considered a market for apps stores on wearable devices.

8.4.2.2. The Notifying Party's view

- (128) The Notifying Party considers that the exact scope of the relevant product markets can be left open, as no competition concerns would arise under any plausible market definition.⁷³

8.4.2.3. The Commission's assessment

- (129) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant geographic market for app stores for smart

⁷¹ Cf. the reasoning in Commission decision of 18 July 2018 in case AT.40099 – Google Android, recital 523.

⁷² Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 412-421.

⁷³ Form CO, paragraph 400.

mobile devices, it would be appropriate to deviate from its previous decisional practice for app stores for smart mobile devices of defining a worldwide market excluding China.⁷⁴

- (130) With regard to the market for app stores for wrist-worn wearable devices, responses to the market investigation suggest that there are no significant differences in customer demand and/or requirements between different EEA countries, however, that there are some significant differences across regions such as the EEA, North America and China.⁷⁵ From the supply side, similar arguments as for app stores for smart mobile devices hold, i.e. (i) there are no trade restrictions, (ii) language differences between different geographic areas does not appear to create obstacles for app store developers, and (iii) OEMs can sell smart mobile devices with the same app stores pre-installed in most regions of the world.⁷⁶ Nevertheless, competitive conditions and competitors' market position can vary significantly by geographic region. In particular, conditions of competition were found to be different in China. For instance, on Wear OS devices sold in China, [Google's licensing strategy]. Therefore, international developers may need to adapt [Google's licensing strategy].⁷⁷
- (131) In light of recitals (129)-(130), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the markets for app stores for a given OS platform of smart mobile devices (for example Android app stores) and of wrist-worn wearable devices (for example Wear OS and Fitbit app stores) is worldwide excluding China.

8.5. Search services

- (132) Google's principal activity in online services is the provision of general search services through Google Search, its internet search engine. Google Search is offered to end users free of charge and is financed through online advertising. Users can access Google Search from a mobile or desktop browser, from an Android or iOS mobile app, or from a Wear OS app. While the user interface may vary depending on the type of device, the underlying technology is essentially the same.
- (133) Fitbit does not provide search services.

8.5.1. Product market definition

8.5.1.1. Commission precedents

- (134) Two main categories of search services have been considered in previous Commission decisions:
- (a) general search services, which search the entire internet and therefore generally return different, more wide-ranging results;
 - (b) specialised search services, which focus on providing specific information or purchasing options in their respective fields of specialisation, also often covering a content category which is possible to monetise.

⁷⁴ Replies to questionnaire QA on wearables, search and advertising, question C.32.

⁷⁵ Replies to questionnaire QA on wearables, search and advertising, question C.32.

⁷⁶ Form CO, paragraph 371.

⁷⁷ Form CO, paragraph 371.

(135) In particular, in the *Google Shopping* and *Google Android* decisions, the Commission concluded that the provision of general search services constitutes a separate relevant product market.⁷⁸

(136) The Commission found that general search services on static devices such as desktop and laptop PCs and on mobile devices belong to the same relevant product market due to supply-side substitutability.⁷⁹

8.5.1.2. The Notifying Party's view

(137) According to the Notifying Party, the product market for general search services should include the Google Search app on Wear OS devices.⁸⁰

(138) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the market for general search services can be left open.⁸¹

8.5.1.3. The Commission's assessment

(139) The evidence in the Commission's file has not provided any indication that would suggest that it would be appropriate to depart from its previous practice finding a separate product market for the supply of general search services.⁸²

(140) Responses to the to the market investigation indicate that users of search apps for wearable devices consider search apps on smart mobile devices as suitable alternatives⁸³ and providers of software solutions for PCs and smart mobile devices would most likely be able to also offer search apps for wrist-worn arable devices, without incurring in significant investments, as the underlying technology is essentially the same.⁸⁴

(141) The Commission did not investigate segmentations by further device type, that is the question if general search services on smart TVs, smart speakers or other (i.e. non-wrist-worn) wearable devices are part of the overall market as they are not relevant for the assessment of this Transaction. Fitbit is only active in the supply of wrist-worn wearable devices.

(142) Therefore, for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the one for the supply of general search services.

⁷⁸ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 323-366 and 422-425 and Commission decision of 27 June 2017 in case AT.39740 – Google Shopping, recitals 155-190 and 252-255.

⁷⁹ Commission decision of 27 June 2017 in case AT.39740 – Google Shopping, recitals 186-190.

⁸⁰ Form CO, paragraph 416.

⁸¹ Form CO, paragraph 417.

⁸² Replies to questionnaire QA on wearables, search and advertising, questions D.4-5.

⁸³ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

⁸⁴ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

8.5.2. *Geographic market definition*

8.5.2.1. Commission precedents

(143) In the *Google Shopping* and *Google Android* decisions, the Commission concluded that the market for the provision of general search services is national in scope.⁸⁵

8.5.2.2. The Notifying Party's view

(144) The Notifying Party submits that, as the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the market for general search services can be left open.⁸⁶

8.5.2.3. The Commission's assessment

(145) The evidence in the Commission's file has not provided any indication that would suggest that it would be appropriate to depart from its previous practice in relation to the geographic scope of the market for the supply of general search services.⁸⁷

(146) Therefore, for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the supply of general search services is national.

8.6. Online advertising services

(147) Google monetizes several of its services through the provision of online advertising space. Search ads make up the majority of Google's ads business. Fitbit is not active in online advertising.

8.6.1. *Product market definition*

8.6.1.1. Commission precedents

(148) Four main categories of ads or advertising services have been considered in the Commission's previous decisions:

- (a) offline ads or advertising services, such as on newspapers, television, etc.;
- (b) online search ads or advertising services, which are selected on the basis of search queries entered by users into internet search engines and are typically presented next to the search results on the search engine's own pages or other search results pages;
- (c) online non-search or display ads or advertising services on domains other than social networks (in the following "online display advertising off-social networks"), which can be either contextual ads, selected according to the content of the page on which they appear, or non-contextual ads;
- (d) online non-search or display ads or advertising services on social networks (in the following "online display advertising on-social networks").

(149) In previous merger decisions, the Commission considered the market for online advertising to be separate from offline advertising. It also considered possible further

⁸⁵ Commission decision of 18 July 2018 in case AT.40099 – Google Android, recitals 323-366 and 422-425 and; Commission decision of 27 June 2017 in case AT.39740 – Google Shopping, recitals 155-190 and 252-255.

⁸⁶ Form CO, paragraph 419.

⁸⁷ Replies to questionnaire QA on wearables, search and advertising, question D.6.

segmentations between online search and non-search advertising, between ads on social networks or off social networks, or on the basis of the platform (PC versus mobile), but it ultimately left the market definition open.⁸⁸ In *Google AdSense*, the Commission concluded that online search advertising constitutes a separate relevant product market.⁸⁹

8.6.1.2. The Notifying Party's view

(150) The Notifying Party submits that, for the purposes of this case, it accepts the Commission's conclusion in the *AdSense* decision that there exist separate product markets for online advertising, which can be further segmented into search and non-search advertising. Since the Transaction does not raise competitive concerns under any plausible product delineation, according to the Notifying Party, the exact scope of the relevant product market can be left open.⁹⁰

8.6.1.3. The Commission's assessment

(151) The market investigation confirms that the market for online advertising is separate from offline advertising. The majority of respondents does not consider the market for offline advertising services as an alternative to online search or display advertising.⁹¹ A clear majority of respondents also considers that suppliers of offline advertising services could not develop and start offering online search advertising services or online display advertising services in the short term without incurring significant investments.⁹²

(152) The evidence in the Commission's file has not provided any indication that would suggest that it would be appropriate to depart from its previous practice of considering online search and non-search advertising as separate markets.⁹³ In the market investigation, several respondents mentioned that online search and non-search advertising complement one another as opposed to providing direct substitutes. In this respect, one respondent explained that "*Search and Display each play unique roles in an advertiser's strategy. One defining characteristic about Search is that it is an interaction that is initiated by the end consumer. This is often indicative of consumer interest or intent and can be a powerful lever for driving 'conversions'. Display advertising also tends to focus on 'performance' by balancing investment in 'prospecting' and 'retargeting' based on person (or device) level targeting. Advertisers can pursue this strategy on social networks or on the open internet*".⁹⁴ Display and search advertising services appear to be also not substitutable from the supply-side. In particular, supplying online search advertising

⁸⁸ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recitals 133-135; Commission decision of 6 December 2016 in case M.8124 – Microsoft/LinkedIn, paragraphs 159-161; Commission decision of 3 October 2014 in case M.7217 – Facebook/WhatsApp, paragraphs 74-79.

⁸⁹ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, recitals 121-183.

⁹⁰ Form CO, paragraph 420.

⁹¹ Replies to questionnaire QA on wearables, search and advertising, question D.13.

⁹² Replies to questionnaire QA on wearables, search and advertising, question D.14.

⁹³ Replies to questionnaire QA on wearables, search and advertising, question D.13.

⁹⁴ Replies to questionnaire QA on wearables, search and advertising, question D.13.

services requires building a successful search engine, which would be extremely costly and time consuming.⁹⁵

- (153) The Commission has also considered whether a segmentation according to the platform where the ad is delivered, namely desktop or mobile devices, may be appropriate. In particular, it cannot be excluded that building a mobile app or a website, on which the ads may be served or delivered, are very different processes. The question as to the relevance of the segmentation according to the platform where the ad is delivered can be left open, as it would not change the outcome of the competitive assessment in the present case.
- (154) As regards online display advertising, the Commission has considered a segmentation between video and non-video advertising and advertising on- and off-social networks. In particular, in relation to the latter distinction, respondents to the market investigation indicated that the technology that powers each of these advertising services are different. Thus, expanding into a new advertising channel requires some investment.⁹⁶ Also from the demand-side, it appears that all these possible markets/segments may be complementary outlets for ads, which advertisers consider when deciding how to spend their advertising budget. The question as to the relevance of the segmentation between video and non-video advertising and a possible segment of online display advertising off-social networks⁹⁷ can be left open, as it would not change the outcome of the competitive assessment in the present case.
- (155) In light of recitals (151)-(154), for the purpose of assessing the Transaction in this Decision, the Commission considers that the relevant product markets are those for:
- (a) the supply of online search advertising services, potentially segmented in the supply of online search advertising services on desktops or on mobile apps;
 - (b) the supply of online display advertising services, potentially segmented in the supply of online display advertising services on desktops or on mobile apps, in the supply of online display advertising services off-social networks, and/or in the supply of online display video or non-video advertising services.

8.6.2. *Geographic market definition*

8.6.2.1. Commission precedents

- (156) With reference to the geographic scope of the online advertising market and its possible segments, the Commission found in previous cases that they should be defined as national in scope or alongside linguistic borders within the EEA.⁹⁸ In the *Google AdSense* decision, the Commission concluded that online search advertising constitutes a separate relevant product market, whose relevant scope is national.⁹⁹

⁹⁵ Replies to questionnaire QA on wearables, search and advertising, question D.14.

⁹⁶ Replies to questionnaire QA on wearables, search and advertising, question D.14.

⁹⁷ The possible segment of online display advertising on-social networks is not relevant for the purpose of this Decision as Google is only active in the supply of online display advertising off-social network.

⁹⁸ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recitals 138-140; Commission decision of 6 December 2016 in case M.8124 – Microsoft/LinkedIn, paragraphs 163-164; Commission decision of 3 October 2014 in case M.7217 – Facebook/WhatsApp, paragraphs 44 and 83.

⁹⁹ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, recitals 203-217.

8.6.2.2. The Notifying Party's view

(157) The Notifying Party submits that, as the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic market for online search advertising can be left open. The Notifying Party did not provide any view as to the geographic scope of the other possible product markets within the supply of online advertising.¹⁰⁰

8.6.2.3. The Commission's assessment

(158) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant geographic market for online advertising (and segments thereof), it would be appropriate to deviate from its previous decisional practice.

(159) The majority of respondents to the market investigation considers that advertisers typically buy advertising space and conduct online advertising campaigns on a national basis. In the market investigation, respondents also stressed the importance of differentiation by language.¹⁰¹

(160) In light of recitals (158)-(159), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the relevant product markets identified in recital (155) above is national or alongside linguistic borders within the EEA.¹⁰²

8.7. Ad tech services

(161) As outlined in Section 7.5, Google is not only active in the supply of online advertising services, but also as intermediary across the entire ad tech value chain. Fitbit is not active in this space.

8.7.1. Product market definition

8.7.1.1. Commission precedents

(162) In *Google AdSense*, the Commission concluded that online advertising intermediation constitutes a relevant product market separate from the direct sale of online ads and that it should be further sub-divided in a market for online search advertising intermediation services and a market for online non-search intermediation services.¹⁰³ In *Google/DoubleClick*, the Commission considered a market for online display ad serving technology, which could be further segmented between services for advertisers and publishers.¹⁰⁴ In its previous decisions, the Commission has not considered the most recent developments in the ad tech value chain.

¹⁰⁰ Form CO, paragraph 425.

¹⁰¹ Replies to questionnaire QA on wearables, search and advertising, question D.15.

¹⁰² Nonetheless, due to lack of available data, for the purpose of this Decision, market shares will be provided in the following only for national markets. This is in line with the Commission's practice in its precedents to which the Notifying Party refers to.

¹⁰³ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, recitals 184-200.

¹⁰⁴ Commission decision of 11 March 2008 in case M.4731 – Google/DoubleClick, recitals 73-84.

8.7.1.2. The Notifying Party's view

(163) The Notifying Party submits that, for the purposes of this case, it accepts the Commission's conclusion in the *AdSense* decision that there exist separate product markets for online advertising intermediation, which can be further segmented into search and non-search advertising intermediation. Since the Transaction does not raise competitive concerns under any plausible product delineation, according to the Notifying Party, the exact scope of the relevant product market can be left open.¹⁰⁵

8.7.1.3. The Commission's assessment

(164) The Commission notes that the intermediation services analysed in *Google AdSense* and *Google/DoubleClick* are likely to correspond to only a part of the ad tech value chain, which has over time evolved, expanded and increased its level of automatisisation.

(165) In the market investigation, it was pointed out that various services currently provided in the ad tech value chain, such as DSP, SSP, ad exchange and ad server services, are all based on distinct technologies that pose unique challenges and serve a specific purpose.

(166) The results of the market investigation were inconclusive regarding the exact segmentation of online advertising intermediation services. Nonetheless, the evidence in the Commission's file has not provided any indication that would suggest that it would be appropriate to depart from its previous practice of considering search and non-search advertising intermediation services as separate markets. Furthermore, in view of the technical differences regarding the serving of search ads¹⁰⁶ as opposed to display ads, not all the "ad tech" services seem to be relevant for search advertising. Accordingly, in relation to search ads the Commission has considered a market for intermediation services as in *Google AdSense*, which coincides with the supply of search ad network services. In relation to display ads, however, the Commission has considered a segmentation between (i) supply of SSP services; (ii) the supply of DSP services; (iii) the supply of ad network services; (iv) the supply of advertiser ad server and (v) the supply of publisher ad server services.

(167) Finally, for the purposes of assessing the Transaction, data services, and in particular data analytics services, are of particular relevance, both for online search and display advertising.

(168) In light of recitals (164)-(167), for the purpose of assessing the Transaction, the Commission considers that the relevant product markets are:

- (a) The supply of search ad network services;
- (b) The supply of display ads SSP services;
- (c) The supply of display ads DSP services;

¹⁰⁵ Form CO, paragraph 420.

¹⁰⁶ Search ads are triggered by the search query and appear on search results pages, the ad choice is managed by the search engine (which could use some contextual and behavioural data to better refine the targeting), whereas display ads can be served on any webpage or app and their choice is managed by a complex chain of electronic interactions by different players.

- (d) The supply of display ad network services;
 - (e) The supply of display ads publisher ad server services;
 - (f) The supply of display ads advertiser ad server services and
 - (g) The supply of analytics services.
- (169) The question of the relevance of the exact segmentation of advertising intermediation services according to services listed in recital (168) can be left open, as it would not change the outcome of the competitive assessment in the present case.

8.7.2. *Geographic market definition*

8.7.2.1. Commission precedents

- (170) In *Google AdSense*, the Commission concluded that the market for online search advertising intermediation is EEA-wide in scope.¹⁰⁷ In *Google/DoubleClick*, the Commission considered the market for online display ad serving technology, and segments thereof, as at least EEA-wide in scope.¹⁰⁸ In its previous decisions, the Commission has not considered specifically the geographic scope of the other services in the ad tech value chain.

8.7.2.2. The Notifying Party's view

- (171) The Notifying Party submits that, as the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic market for online search advertising intermediation can be left open. The Notifying Party did not provide any view as to the geographic scope of the other possible product markets within the supply of online advertising intermediation.¹⁰⁹

8.7.2.3. The Commission's assessment

- (172) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant geographic market for the ad tech services, it would be appropriate to deviate from its previous decisional practice in relation to online search advertising intermediation and ad server services.
- (173) In light of recital (172), for the purpose of assessing the Transaction in this Decision, the Commission considers that the geographic scope of the relevant product markets identified in recital (168) above is at least EEA-wide.

8.8. **Health and fitness apps**

- (174) Google develops and maintains the Google Fit mobile app. The Google Fit app enables a user to access their Google Fit data on an Android or iOS smart mobile devices or a Wear OS wearable device.¹¹⁰ Google also offers a Wear OS mobile app that serves as a companion to a Wear OS device and enables a user to sync their Wear OS device and their Android or iOS smart mobile device.

¹⁰⁷ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, recitals 218-221.

¹⁰⁸ Commission decision of 11 March 2008 in case M.4731 – Google/DoubleClick, recitals 73-84.

¹⁰⁹ Form CO, paragraph 425.

¹¹⁰ [Google Fit user patterns].

(175) Fitbit provides the Fitbit mobile app that serves as companion app to Fitbit devices and enables users to view the activity tracked by their Fitbit device.¹¹¹ The app does not pair with non-Fitbit wearable devices but third-party user data can be imported into the Fitbit mobile app. The Fitbit mobile app can be installed on an Android or iOS smart mobile device.¹¹²

8.8.1. *Product market definition*

8.8.1.1. Commission precedents

(176) The Commission has not previously considered a market for health and fitness apps.

(177) In previous Commission decisions, the Commission segmented product markets for apps based on (i) type (for example, productivity apps, communication apps, music recognition apps), and (ii) platform (for example, apps for PCs, smart mobile devices, or gaming consoles).¹¹³

8.8.1.2. The Notifying Party's view

(178) The Notifying Party submits that health and fitness apps are a growing and varied category.¹¹⁴ According to the Notifying Party, health and fitness apps typically fall into four groups based on the aspect of user lifestyle or behaviour that they target: (i) activity and fitness; (ii) sleep; (iii) mental wellbeing; and (iv) nutrition. Some apps are specialised, focusing on one of these four groups; others are generalist, covering all four.

(179) In addition, health and fitness apps differ in whether they serve as companion app to a specific wearable brand. For example, the Fitbit mobile app is designed primarily as a companion to a Fitbit wearable device and enables the user to set up their Fitbit device, synchronize it with their smart mobile device and download apps for use on their Fitbit device. The analogous app for Wear OS devices is Google's Wear OS mobile app. These apps are essentially extensions of the devices they support and do not compete with each other, since a Fitbit user would have no use for Google's Wear OS mobile app, and a Wear OS user would have no use for the Fitbit app. In contrast, the Google Fit mobile app does not work as companion app to a specific device but collects data from various sources and users could transfer their Fitbit data to Google Fit.

(180) According to the Notifying Party, the major mobile app stores tend to group all of these apps together under the broad "health and fitness" category, and present them to users as such.

(181) The Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the product market for health and fitness apps can be left open.

¹¹¹ In 2019, Fitbit started offering a paid-for premium service that Fitbit users could subscribe to for either a monthly or an annual fee. This service, known as "Fitbit Premium," is available through its app and dashboard and provides more customised health and fitness guidance, including guided programs, personalized insights, advanced sleep tools, and dynamic workouts.

¹¹² In addition, Fitbit has a marginal number of active users on the Windows Phone.

¹¹³ See for example Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 114.

¹¹⁴ Form CO, paragraphs 373-376.

8.8.1.3. The Commission's assessment

- (182) With regard to the exact scope of the market for health and fitness apps, the evidence in the Commission's file is not conclusive. Respondents to the market investigation confirmed that health and fitness apps is a broad category in which there is a wide range of offerings with partially overlapping features.¹¹⁵ The results of the market investigation also highlighted the specific role of companion apps.
- (183) As regards the differentiation by platform, the majority of respondents reported that they regard health and fitness apps on smart mobile devices as a suitable alternative to health and fitness apps on wearable devices and providers of software solutions for smart mobile devices would most likely be able to also offer search apps for wearable devices, without incurring significant investments, as the underlying technology is essentially the same.¹¹⁶ Nevertheless, respondents also highlighted that content and functionality of the app can vary depending on the platform.¹¹⁷ The market investigation was inconclusive on the question if providers of health and fitness apps for static devices, such as PCs would be just as easily be able to provide a solution on wearable devices as providers of health and fitness apps on smart mobile devices.¹¹⁸ Rather, it seems that health and fitness apps accessible on PCs (for example through a web browser) are usually merely interface extensions of apps offered on smart mobile devices.
- (184) The Commission did not investigate segmentations by further device type, that is the question if health and fitness apps on other (i.e. non-wrist-worn) wearable devices are part of the overall market, as they are not relevant for the assessment of this Transaction. Fitbit is only active in the supply of wrist-worn wearable devices.
- (185) The Commission also found that some of the offered health and fitness apps are OS-specific, i.e. they are offered by OEMs on their own or selected wearable (for example Google Fit on Wear OS devices) or wrist-worn wearable and smart mobile devices (for example Apple Health on its watchOS smartwatch and iOS smart mobile devices). The market investigation was inconclusive on the question if providers of health and fitness apps for a specific OS would be technically able to develop their service for and/or place their service on other OSs.
- (186) In light of recitals (182)-(185), for the purpose of assessing the Transaction in this Decision, the Commission considers that the relevant product market is the market for health and fitness apps, potentially further segmented (i) by functionality (companion apps and other health and fitness apps), (ii) based on the platform (PC, smart mobile and wrist-worn wearable devices), as well as (iii) based on the OS used. The exact scope of the relevant product market can be left open, as no competition concerns arise under any plausible market definition.

8.8.2. *Geographic market definition*

8.8.2.1. Commission precedents

- (187) The Commission has not previously considered a market for health and fitness apps.

¹¹⁵ Form CO, paragraphs 373-376.

¹¹⁶ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

¹¹⁷ Replies to questionnaire QA on wearables, search and advertising, question C.28.

¹¹⁸ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

(188) In previous decisions relating to mobile apps, the Commission considered the geographic scope to be at least national in scope.¹¹⁹

8.8.2.2. The Notifying Party's view

(189) The Notifying Party considers health and fitness apps to compete on at least an EEA-wide, if not a worldwide.¹²⁰

(190) However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic markets for health and fitness apps can be left open.¹²¹

8.8.2.3. The Commission's assessment

(191) The evidence in the Commission's file was not conclusive on the question as to whether the geographic scope of the market for health and fitness apps (and segments thereof) is national, EEA-wide or worldwide.¹²²

(192) In light of recital (191), for the purpose of assessing the Transaction in this Decision, the Commission considers that the geographic scope of the relevant product markets identified in recital (186) above is at least national in scope.

8.9. Mobile payment services

(193) Google offers "Google Pay", a digital wallet app that enables a variety of online and offline payment methods. While used primarily on Android and iOS¹²³ smart mobile devices, Google Pay is available on wearable devices running Wear OS that also incorporate a near-field communication ("NFC") chip enabling contactless payments.¹²⁴

(194) Some of Fitbit's devices incorporate a NFC chip and offer the ability to perform in-store contactless payments. This "Fitbit Pay" feature is only offered on NFC-enabled Fitbit devices.

8.9.1. Product market definition

8.9.1.1. Commission precedents

(195) In previous cases, the Commission has found that there are likely separate markets in the retail payments space – concerning payment transactions where at least one party to the transaction is not a financial institution – for (i) online payments (for example, through credit cards, debit cards, and PayPal via an internet browser irrespective of the device used), (ii) offline payments (for example, NFC-enabled credit and debit

¹¹⁹ See e.g. Commission decision of 4 September 2012 in case M.6314 – Telefónica UK/Vodafone UK/Everything Everywhere/JV, recitals 220-224; Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 235; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 21; Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraph 62; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 104.

¹²⁰ Form CO, paragraphs 378.

¹²¹ Form CO, paragraphs 379.

¹²² Replies to questionnaire QA on wearables, search and advertising, question C.30.

¹²³ On iOS, Google Pay is only available in selected countries outside of the EEA and with limited functionalities, Notifying Party's reply to RFI 42, questions 1(a) and 1(b).

¹²⁴ Form CO, paragraphs 9 and 245 et seq.

cards, and traditional means of payment such as credit and debit cards and cash), and (iii) mobile payments.¹²⁵ The Commission defined mobile payment services as retail payments for which the payment data and instructions are initiated, transmitted or confirmed via a smart mobile device.¹²⁶ The Commission has also considered to further differentiate mobile payment services based on the location of the payee and the payer between: (i) proximity/offline mobile payments when the payer and the payee are in the same location, and (ii) remote/online payments when that is not the case.¹²⁷ Ultimately, the Commission has left the exact market definition open pointing to the ongoing developing of technologies and consumer preferences.

- (196) The Commission has not previously considered if payment services on wearable devices are part of the overall market for mobile payment services.

8.9.1.2. The Notifying Party's view

- (197) The Notifying Party submits that payment services as they are provided by wearable OEMs are not substitutable with more complex system solutions as they require access to the specific OEM's wearable device and do not offer all functionalities.¹²⁸

- (198) However, the Notifying Party submits that the exact scope of the relevant product market can be left open as the Transaction does not raise competitive concerns under any plausible market definition.¹²⁹

8.9.1.3. The Commission's assessment

- (199) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant product market for mobile payment services on wearable devices, it would be appropriate to deviate from its previous decisional practice.

- (200) Payment apps on wrist-worn wearable devices are focussed on proximity/offline payments. As regards this segment, responses to the market investigation suggest that users of payment apps for wearable devices, who typically also own and connect their wearable to a smart mobile device, would see payment apps on smart mobile devices as a suitable alternatives¹³⁰ and providers of software solutions for smart mobile devices would most likely be able to also offer payment apps for wearable devices.¹³¹ The Commission has not investigated in detail whether users of payment apps for smart mobile devices would see payment apps for wearable devices as substitutable and whether providers of software solutions for wearable devices would be able to also offer payment apps for smart mobile devices. The Commission also found that many of the offered mobile payment apps are OS-specific, i.e. they are offered by OEMs on their own wrist-worn wearable (for example Fitbit Pay,

¹²⁵ Commission decision of 4 September 2012 in case M.6314 – Telefónica UK/Vodafone UK/Everything Everywhere/JV, recitals 124 et seq; Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraphs 19 et seq.; Commission decision of 21 November 2017 in case M.8640 – CVC/Blackstone/Paysafe, paragraph 19.

¹²⁶ Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraph 20.

¹²⁷ Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraphs 20 and 28.

¹²⁸ Form CO, paragraph 382.

¹²⁹ Form CO, paragraph 383.

¹³⁰ Replies to questionnaire QA on wearables, search and advertising, question C.28.

¹³¹ Replies to questionnaire QA on wearables, search and advertising, question C.29.

Garmin Pay) or wrist-worn wearable and smart mobile devices (for example Samsung Pay, Huawei Pay). Google Pay is offered on Android and certain iOS smart mobile devices, but only on wrist-worn wearable devices running Wear OS. The market investigation was inconclusive on the question if providers of mobile payment apps for a specific OS would be interested to develop their service for and technically able to place their service on other OSs.

- (201) In light of recitals (199)-(200), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for the retail provision of mobile payment services. The question whether the retail provision of mobile payment services should be further segmented (i) between proximity/offline mobile payments and remote/online mobile payments (including or not payment intermediation services), (ii) based on the platform used (smart mobile and wrist-worn wearable devices), as well as (iii) based on the OS used can be left open in this Decision as this would not change the outcome of the competitive assessment in the present case.

8.9.2. *Geographic market definition*

8.9.2.1. Commission precedents

- (202) In previous decisions, the Commission considered the markets in question to be at least national in scope, while keeping the exact geographic market definition open.¹³²

8.9.2.2. The Notifying Party's view

- (203) The Notifying Party submits that, as the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic market for mobile payment services can be left open.¹³³

8.9.2.3. The Commission's assessment

- (204) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant geographic market for the retail provision of mobile payment services, it would be appropriate to deviate from its previous decisional practice.¹³⁴
- (205) In light of recital (204), for the purpose of assessing the Transaction in this Decision, the Commission considers that the geographic scope of the relevant product markets identified in recital (201) is at least national in scope.

8.10. Other digital apps and services

- (206) For the purpose of assessing the Transaction, the Commission has examined four other related markets in which Google is active: (i) navigation, (ii) virtual assistants, (iii) digital music distribution, and (iv) digital translation.

¹³² Commission decision of 4 September 2012 in case M.6314 – Telefónica UK/Vodafone UK/Everything Everywhere/JV, recitals 220-224; Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraph 62.

¹³³ Form CO, paragraph 385.

¹³⁴ Replies to questionnaire QA on wearables, search and advertising, question C.30.

8.10.1. Navigation

(207) Google offers “Google Maps”. Google Maps provides an online map to users for free via the internet and available for download as an app for smart mobile devices (Android and iOS) and Wear OS devices. Google Maps provides search and discovery functions (that is to say locating places of interest in a particular area, such as a restaurant or tourist attraction), as well as a navigation offering, guiding users to their chosen destination by car, walking, cycling, or by public transport. Google also licenses a Google Maps API, allowing third parties to use the service in their own apps.¹³⁵¹³⁶

(208) Fitbit is not active in this area.

8.10.1.1. Product market definition

8.10.1.1.1. Commission precedents

(209) In *Nokia/Navteq*, the Commission defined a single relevant market for navigation apps for smart mobile devices offering turn-by-turn navigation. Navigation apps provide users with real-time instructions and additional information about chosen routes using GPS, navigable map databases and navigation software.¹³⁷ This market definition included pre-installed and downloaded apps, as well as services “accessed via a web browser” on a smart mobile device.¹³⁸ The Commission considered this market to be separate from the market for apps that offer basic routability in the form of static text instructions on how to get from point A to B displayed next to a map.¹³⁹ The Commission found that it is not necessary to define separate markets for off-board, on-board or hybrid navigation apps¹⁴⁰ or further segment the market by sales channels.¹⁴¹

(210) The Commission has not previously defined the relevant market for navigation apps on wrist-worn wearable devices.

8.10.1.1.2. The Notifying Party’s view

(211) The Notifying Party submits that, in light of continued technological development, the market for navigation apps should not be limited to those available on a given platform, such as smart mobile devices or wrist-worn wearable devices, but should also include those apps available on personal navigation devices (“PNDs”) and in-car navigation systems, as well as maps-based services provided over the internet.¹⁴²

(212) However, the Notifying Party submits that the exact scope of the relevant product market can be left open as the Transaction does not raise competitive concerns under any plausible market definition.¹⁴³

¹³⁵ Form CO, paragraph 273.

¹³⁶ Google also controls Waze, another navigation app.

¹³⁷ Commission decision of 2 July 2008 in case M.4942 – Nokia/Navteq, recital 101.

¹³⁸ Commission decision of 2 July 2008 in case M.4942 – Nokia/Navteq, recital 125.

¹³⁹ Commission decision of 2 July 2008 in case M.4942 – Nokia/Navteq, recitals 104-110.

¹⁴⁰ Form CO, paragraph 121.

¹⁴¹ Form CO, paragraph 124.

¹⁴² Form CO, paragraph 391.

¹⁴³ Form CO, paragraph 392.

8.10.1.1.3. The Commission's assessment

- (213) The evidence in the Commission's file has not provided any indication which would suggest that it would be appropriate to depart from its previous practice finding a relevant product market for navigation apps offering turn-by-turn navigation.
- (214) Nevertheless, the Commission's file provides some arguments that, in the evolving market for navigation apps, navigation services on PNDs may become increasingly interchangeable with navigation apps on smart mobile and wrist-worn wearable devices. However, the market investigation has not provided a clear indication that users of navigation apps would see navigation services on PNDs as suitable alternatives.¹⁴⁴ Only some suppliers of PNDs offer app versions of their PND services. Similarly, some app developers are working with vehicle manufacturers to integrate navigation software with in-car systems.
- (215) In terms of supply-side substitutability between smart mobile and wrist-worn wearable devices, the results of the market investigation suggest that providers of software solutions for smart mobile devices would most likely be able to also offer navigation apps for wrist-worn wearable devices without incurring significant investments.¹⁴⁵
- (216) The Commission also found that some of the offered navigation apps are OS-specific, i.e. they are offered by OEMs on their own or selected wrist-worn wearable (for example Google Maps on Wear OS devices and more recently watchOS devices (see Section 9.4.4)) or wrist-worn and smart mobile devices (for example Apple Maps on its watchOS smartwatch and iOS smart mobile devices). The market investigation was inconclusive on the question if providers of navigation apps for a specific OS would be interested to develop their service for and technically able to place their service on other OSs.
- (217) In light of recitals (213)-(216) , for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for navigation apps offering turn-by-turn navigation, potentially further segmented by platform (smart mobile and wrist-worn wearable devices) and based on the OS used. The exact scope of the relevant product market can be left open, as no competition concerns arise under any plausible market definition.

8.10.1.2. Geographic market definition

8.10.1.2.1. Commission precedents

- (218) In its previous decision, the Commission considered the geographic scope for the supply of navigation apps to be at least EEA-wide.¹⁴⁶

8.10.1.2.2. The Notifying Party's view

- (219) In line with the approach followed by the Commission in its previous decisions relating to navigation apps, the Notifying Party considers navigation apps to compete on at least an EEA-wide, if not a worldwide, basis, since the Notifying

¹⁴⁴ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

¹⁴⁵ Replies to questionnaire QA on wearables, search and advertising, question C.29 and C.29.1.

¹⁴⁶ Commission decision of 2 July 2008 in case M.4942 – Nokia/Navteq, recitals 127-128.

Party provides navigation apps globally.¹⁴⁷ However, the Notifying Party considers that, since the Transaction does not raise competitive concerns under any plausible market definition, the exact scope of the geographic markets for navigation apps can be left open.¹⁴⁸

8.10.1.2.3. The Commission's assessment

- (220) The evidence in the Commission's file was not conclusive on the question as to whether the geographic scope of the market for navigation apps (and segments thereof) is EEA-wide or worldwide.¹⁴⁹
- (221) In light of recital(220), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the market for navigation apps offering turn-by-turn navigation is at least EEA-wide if not worldwide.

8.10.2. *Virtual assistants*

- (222) Google offers "Google Assistant", which performs certain tasks or services for a customer based on commands or questions. Google Assistant is preinstalled on Wear OS devices and available on many other devices, including Android phones, smart displays, smart speakers, smart TVs, and in automotive applications.¹⁵⁰ Recently, the Google Assistant has become available on certain Fitbit devices.¹⁵¹
- (223) Fitbit is not active in this area.

8.10.2.1. Product market definition

8.10.2.1.1. Commission precedents

- (224) The Commission has not previously considered the relevant product market for virtual assistants.

8.10.2.1.2. The Notifying Party's view

- (225) The Notifying Party submits that, virtual assistants should form a separate product market independent of internet search services as virtual assistants can either operate without such a service or license results from a general search service.¹⁵²
- (226) However, the Notifying Party submits that the exact scope of the relevant product market can be left open as the Transaction does not raise competitive concerns under any plausible market definition.¹⁵³

8.10.2.1.3. The Commission's assessment

- (227) Virtual assistant apps are a category of apps functioning as single user interface, typically voice driven, which allow users to interact with compatible devices.

¹⁴⁷ Form CO, paragraph 393.

¹⁴⁸ Form CO, paragraph 393.

¹⁴⁹ Replies to questionnaire QA on wearables, search and advertising, questions C.30 and C.30.1.

¹⁵⁰ Form CO, paragraphs 268-271.

¹⁵¹ The initial version of the feature launched in English in the US on 19 November 2020 [Google's product strategy].

¹⁵² Form CO, paragraph 412.

¹⁵³ Form CO, paragraph 413.

- (228) Responses to the market investigation suggest that users of virtual assistants for wrist-worn wearable devices would see virtual assistants on smart mobile devices as a suitable alternatives¹⁵⁴ and providers of software solutions for smart mobile devices would most likely be able to also offer virtual assistants for wrist-worn wearable devices without incurring significant investment.¹⁵⁵ The market investigation was inconclusive on the question if providers of virtual assistants for static devices such as PCs would be just as easily be able to provide a solution on wearable devices as providers of virtual assistants on smart mobile devices.¹⁵⁶
- (229) The Commission did not investigate segmentations by further device type, that is the question if virtual assistants on smart TVs, smart speakers or other (i.e. non-wrist-worn) wearable devices are part of the overall market, as they are not relevant for the assessment of this Transaction. Fitbit is only active in the supply of wrist-worn wearable devices.
- (230) The Commission also found that some of the offered virtual assistants are OS-specific, i.e. they are offered by OEMs on their own or selected wrist-worn wearable (for example Google Assistant on Wear OS and more recently Fitbit devices (see Section 9.4.4)) or wrist-worn and smart mobile devices (for example Apple's virtual assistant). The market investigation was inconclusive on the question if providers of virtual assistants for a specific OS would be interested to develop their service for and technically able to place their service on other OSs.
- (231) In light of recitals (227)-(230), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for virtual assistants, potentially further segmented by platform (PC, smart mobile or wrist-worn wearable device) and based on the OS used. The exact scope of the relevant product market can be left open, as no competition concerns arise under any plausible market definition.

8.10.2.2. Geographic market definition

8.10.2.2.1. Commission precedents

- (232) The Commission has not previously considered the relevant geographic market for virtual assistants.
- (233) In previous decisions relating to mobile apps, the Commission considered the geographic scope to be at least national or EEA-wide in scope if not worldwide.¹⁵⁷

8.10.2.2.2. The Notifying Party's view

- (234) The Notifying Party submits that the relevant geographic market for virtual assistants is at least national in scope, as the voice operation has to be adjusted to the

¹⁵⁴ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

¹⁵⁵ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

¹⁵⁶ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

¹⁵⁷ See for example Commission decision of 4 September 2012 in case M.6314 – Telefónica UK/Vodafone UK/Everything Everywhere/JV, recitals 220-224; Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 235; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 21; Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraph 62; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 104.

particular language of each country and virtual assistants provide different functionalities in different countries.¹⁵⁸ However, the Notifying Party submits that the geographic market definition can be left open as no competition concerns would arise under any plausible market definition (both for horizontal and for vertical effects).¹⁵⁹

8.10.2.2.3. The Commission's assessment

(235) The evidence in the Commission's file was not conclusive on the question as to whether the geographic scope of the market for virtual assistants (and segments thereof) is national, EEA-wide or worldwide.¹⁶⁰

(236) In light of recital (235), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the relevant market for virtual assistants is at least national.

8.10.3. *Digital music distribution*

(237) Google offers "Google Play Music" and its successor "YouTube Music" music streaming services, which are available on various devices (PCs, smart mobile devices, and wrist-worn wearable devices) as well as various OSs (Android, iOS, Tizen, and Wear OS).¹⁶¹

(238) Fitbit is not active in this area.

8.10.3.1. Product market definition

8.10.3.1.1. Commission precedents

(239) In its previous decisions, the Commission analysed the market for digital music distribution and considered a potential segmentation between music download and music streaming retail models.¹⁶² Music download services allow for the purchase and storage of a digital copy of a musical work on an electronic device,¹⁶³ while streaming services involve the delivery of small data packets over the internet with playback commencing as soon as this streaming has started.¹⁶⁴ The Commission ultimately left the market segmentation open as it concluded that the boundaries between the two retail models were becoming blurred and that remaining differences would likely become less marked in the future.¹⁶⁵ That said, in *Apple/Shazam*, the market investigation results indicated that some music streaming providers would

¹⁵⁸ Form CO, paragraph 414.

¹⁵⁹ Form CO, paragraph 415.

¹⁶⁰ Replies to questionnaire QA on wearables, search and advertising, questions C.30 and C.30.1

¹⁶¹ Form CO, paragraph 273.

¹⁶² Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 140; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 18; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 94.

¹⁶³ Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 58; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 17.

¹⁶⁴ Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 59; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 17.

¹⁶⁵ Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 139-140; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 18-19; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 95.

not consider themselves to be in a position to start offering digital music downloading services in the short term or without incurring significant investments.¹⁶⁶

- (240) The Commission also left open whether a further segmentation according to the type of software solution was required (considering dedicated apps, apps including digital music distribution next to other services, and websites offering music distribution).¹⁶⁷ The Commission found that software solutions for PCs or websites only exert a limited competitive constraint on dedicated mobile apps for digital music distribution and that a segmentation by OS does not appear to be relevant.¹⁶⁸
- (241) The Commission has not yet considered if digital music distribution services on wearables are part of the same market as those services on smart mobile devices.

8.10.3.1.2. The Notifying Party's view

- (242) The Notifying Party submits that the exact scope of the relevant product market can be left open as the Transaction does not raise competitive concerns under any plausible market definition.¹⁶⁹

8.10.3.1.3. The Commission's assessment

- (243) The evidence in the Commission's file has not provided any indication which would suggest that, in defining the relevant product market for digital music distribution services, it would be appropriate to deviate from its previous decisional practice.
- (244) The market investigation in this case was again inconclusive as to whether music downloading services and music streaming activities form part of the same product market.¹⁷⁰
- (245) Responses to the market investigation suggest that users of digital music distribution apps for wrist-worn wearable devices would see digital music distribution apps on smart mobile devices as a suitable alternatives¹⁷¹ and providers of software solutions for smart mobile devices would most likely be able to also offer digital music distribution apps for wrist-worn wearable devices.¹⁷² The market investigation was inconclusive on the question if providers of digital music distribution for static devices such as PCs would be just as easily be able to provide a solution on wearable devices as providers of digital music distribution on smart mobile devices.¹⁷³
- (246) The Commission did not investigate segmentations by further device type, that is the question if digital music distribution services on smart TVs, smart speakers or other (non-wrist-worn) wearable devices are part of the overall market, as they are not relevant for the assessment of this Transaction. Fitbit is only active in the supply of wrist-worn wearable devices.

¹⁶⁶ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 95.

¹⁶⁷ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 96.

¹⁶⁸ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 96.

¹⁶⁹ Form CO, paragraph 388.

¹⁷⁰ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

¹⁷¹ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

¹⁷² Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

¹⁷³ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

- (247) The Commission also found that some of the offered digital music services are OS-specific, i.e. they are offered by OEMs on their own or selected wrist-worn wearable (for example Google Play Music on Wear OS devices). The market investigation was inconclusive on the question if providers of digital music streaming services for a specific OS would be interested to develop their service for and technically able to place their service on other OSs.
- (248) In light of recitals (243)-(247), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for digital music distribution services, potentially further segmented by functionality (music downloading services and music streaming services), by platform (PC, smart mobile and wrist-worn wearable devices) as well as based on the OS used. The exact scope of the relevant product market can be left open, as no competition concerns arise under any plausible market definition.

8.10.3.2. Geographic market definition

8.10.3.2.1. Commission precedents

- (249) The Commission previously left open whether the market was national or EEA-wide in scope.¹⁷⁴

8.10.3.2.2. The Notifying Party's view

- (250) The Notifying Party submits that the relevant geographic market for digital music distribution services is at least EEA-wide, as there are no considerable differences in customer demand and expectations. However, the Notifying Party submits that the geographic market definition can be left open as no competition concerns would arise under any plausible market definition (both for horizontal and for vertical effects).¹⁷⁵

8.10.3.2.3. The Commission's assessment

- (251) The evidence in the Commission's file was not conclusive on the question as to whether the geographic scope of the market for digital music distribution services (and segments thereof) is national, EEA-wide or worldwide.¹⁷⁶
- (252) In light of recital (251), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the relevant market for digital music distribution services is at least national.

8.10.4. Digital translation

- (253) Google offers "Google Translate". Google Translate is a free multilingual statistical and neural machine translation service developed by Google, which translates text and websites from one language into another. Google Translate offers a website

¹⁷⁴ Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 235; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 21; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 104.

¹⁷⁵ Form CO, paragraph 389.

¹⁷⁶ Replies to questionnaire QA on wearables, search and advertising, questions C.30 and C.30.1.

interface, an app for smart mobile devices (Android and iOS) and for Wear OS devices and an API allowing translation in third-party apps.¹⁷⁷

(254) Fitbit is not active in this area.

8.10.4.1. Product market definition

8.10.4.1.1. Commission precedents

(255) The Commission has not previously considered the relevant product market for digital translation services.

8.10.4.1.2. The Notifying Party's view

(256) The Notifying Party submits that the market for translation apps should include translation services on static and mobile devices (including wearables) and not be further segmented by OS.¹⁷⁸

8.10.4.1.3. The Commission's assessment

(257) Although the text-based nature of translation services can make a difference in the implementation and presentation of the translation results, the responses to the market investigation suggest that users of translation apps for wrist-worn wearable devices would see translation apps on smart mobile devices as suitable alternatives¹⁷⁹ and providers of software solutions for smart mobile devices would most likely be able to also offer translation apps for wrist-worn wearable devices without incurring significant investment.¹⁸⁰ The market investigation was inconclusive on the question if providers of digital translation services for static devices such as PCs would be just as easily be able to provide a solution on wearable devices as providers of digital translation services on smart mobile devices.¹⁸¹

(258) The Commission did not investigate segmentations by further device type, that is the question if digital translation services on smart TVs, smart speakers or other (i.e. non-wrist-worn) wearable devices are part of the overall market, as they are not relevant for the assessment of this Transaction.

(259) The Commission also found that some of the offered digital translation services are OS-specific, i.e. they are offered by OEMs on their own wrist-worn wearable (for example Google Translate on Wear OS devices). The market investigation was inconclusive on the question if providers of digital translation services for a specific OS would be interested to develop their service for and technically able to place their service on other OSs.

(260) In light of recitals (257)-(259), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for digital translation services, potentially further segmented by platform (PC, smart mobile and wrist-worn wearable devices) and based on the OS used. The exact scope of the

¹⁷⁷ Form CO, paragraph 273.

¹⁷⁸ Form CO, paragraph 394.

¹⁷⁹ Replies to questionnaire QA on wearables, search and advertising, questions C.28 and C.28.1.

¹⁸⁰ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

¹⁸¹ Replies to questionnaire QA on wearables, search and advertising, questions C.29 and C.29.1.

relevant product market can be left open, as no competition concerns arise under any plausible market definition.

8.10.4.2. Geographic market definition

8.10.4.2.1. Commission precedents

(261) The Commission has not previously considered the relevant geographic market for digital translation services.

(262) In previous decisions relating to mobile apps, the Commission considered the geographic scope to be at least national, EEA-wide in scope, if not worldwide.¹⁸²

8.10.4.2.2. The Notifying Party's view

(263) The Notifying Party submits that the relevant geographic market for digital translation services is at least EEA-wide.¹⁸³

8.10.4.2.3. The Commission's assessment

(264) The evidence in the Commission's file was not conclusive on the question as to whether the geographic scope of the market for digital translation services is national, EEA-wide or worldwide.¹⁸⁴

(265) In light of the recital (264), for the purpose of assessing the Transaction, the Commission considers that the geographic scope of the relevant market for digital translation services is at least national.

8.11. Digital healthcare

(266) For the purpose of assessing the Transaction, the Commission has examined four potentially relevant data-related activities in the digital healthcare sector: (i) provision of cloud and data analytics services, (ii) patient monitoring services, (iii) provision of data for medical research and real-world evidence, and (iv) corporate wellness programmes.

(267) In Phase II, respondents to the market investigation generally confirmed that the digital healthcare market can be split into (i) cloud and data analytic services, (ii) patient monitoring, (iii) provision of data for medical research and real-world evidence ("RWE"), and (iv) corporate wellness.¹⁸⁵

(268) Some respondents indicated that the digital healthcare market is dynamic and while the proposed segmentation may be relevant today it is not clear to what extent it will remain the case in the future. Several respondents point out that the digital healthcare market includes a myriad of different initiatives: "*digital healthcare sector to be much broader than the proposed categorisation. Digital healthcare*

¹⁸² See for example Commission decision of 4 September 2012 in case M.6314 – Telefónica UK/Vodafone UK/Everything Everywhere/JV, recitals 220-224; Commission decision of 21 September 2012 in case M.6458 – Universal Music Group/EMI Music, recital 235; Commission decision of 25 July 2014 in case M.7290 – Apple/Beats, paragraph 21; Commission decision of 19 July 2017 in case M.8251 – Bite/Tele2/Telia Lietuva/JV, paragraph 62; Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recital 104.

¹⁸³ Form CO, paragraph 396.

¹⁸⁴ Replies to questionnaire QA on wearables, search and advertising, questions C.30 and C.30.1

¹⁸⁵ Replies to questionnaire QD on wearables, smartphones and apps, question 23.

includes many other categories, such as chronic disease management services, telehealth (including the provision of care/guidance), and provider tools (for example, clinical decision support services)”.¹⁸⁶

8.11.1. Provision of cloud and data analytics services

- (269) Google Cloud is active in the provision of cloud and data analytics services designed for, among others, customers in the healthcare sector (as part of the Google Cloud Life Sciences initiative). Fitbit is not active in this area.

8.11.1.1. Product market definition

8.11.1.1.1. Commission precedents

- (270) The Commission has previously assessed cloud computing activities in several decisions.¹⁸⁷ In *Verizon/Yahoo*, the Commission considered cloud computing by referring to the segmentation of IT outsourcing in (i) public cloud computing services, (ii) infrastructure as a service (“IaaS”), (iii) infrastructure outsourcing services (including potential further sub-segments for data centre services, network outsourcing, end-user device outsourcing and help desk outsourcing) and (iv) application outsourcing services.¹⁸⁸ The Commission ultimately left the product market definition for cloud computing open.¹⁸⁹

8.11.1.1.2. The Notifying Party’s views

- (271) The Notifying Party argues that the precise market definition can be left open in this case. Regardless of the precise market definition, there is no possible overlap between the Parties, as Fitbit is not active in any form of cloud computing, let alone in the provision of cloud and associated analytics services to clients in the healthcare sector. At the same time, the Notifying Party notes that cloud computing is not a necessary vertical input for Fitbit’s activities either, nor are Fitbit’s data a necessary vertical input for Google’s cloud services.¹⁹⁰

8.11.1.1.3. The Commission’s assessment

- (272) The replies of the market investigation in Phase I have indicated that, in spite of all having in common a relationship to user data, the provision of cloud infrastructure and data analytics is substantially different from other digital healthcare initiatives involving the use of health and wellness data¹⁹¹ and the relevant services are provided by different categories of operators.¹⁹²
- (273) The results of the market investigation in Phase II indicated that there may be a separate market for the provision of cloud and data analytic services.

¹⁸⁶ Replies to questionnaire QD on wearables, smartphones and apps, replies to question 23.1.

¹⁸⁷ Commission decision of 19 June 19, 2013 in case M.6921, – IBM Italia/UBIS; Commission decision of 15 December 15, 2014 in case M.7458, – IBM/INF Business of Deutsche Lufthansa; Commission decision of 21 December 21, 2016 in case COMP/M.8180, – Verizon/Yahoo.

¹⁸⁸ Commission decision of 21 December 21, 2016 in case COMP/M.8180, – Verizon/Yahoo, paragraph 72.

¹⁸⁹ Commission decision of 21 December 21, 2016 in case COMP/M.8180, – Verizon/Yahoo, paragraphs 73 and 76.

¹⁹⁰ Form CO, paragraphs 426-428 and 602.

¹⁹¹ Replies to questionnaire QB to health data users, question 1.1.

¹⁹² Replies to questionnaire QB to health data users, question 1.

(274) In light of the recitals (272)-(273), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for the provision of cloud infrastructure and data analytics.

8.11.1.2. Geographic market definition

8.11.1.2.1. Commission precedents

(275) The Commission considered that the geographic market for the provision of cloud computing had been at least EEA-wide in some cases (but national in other cases,¹⁹³ where some IT providers operated only at national level).¹⁹⁴ The Commission ultimately left the geographic market definitions for the provision of cloud computing open.¹⁹⁵

8.11.1.2.2. The Notifying Party's view

(276) The Notifying Party considers that the exact market definition may be left open, as Fitbit is not active in this area and therefore the assessment of the Transaction would not change, regardless of the geographic market definition adopted.

8.11.1.2.3. The Commission's assessment

(277) The results of the market investigation have not provided any indication that the Commission should depart from its previous decisional practice.¹⁹⁶

(278) In light of recital (277), for the purpose of assessing the Transaction, the Commission considers that the relevant geographic market for the provision of cloud computing is at least EEA-wide in scope.

8.11.2. Patient monitoring services

(279) Patient monitoring is the activity of collecting and processing personal data concerning an individual that is or could be affected by a medical condition, whether or not subject to a therapy or involved in a clinical study, for the purpose of determining the patient's health conditions or reaction to therapy or treatments.

(280) Alphabet's subsidiary Verily is active in this field through the Study Watch, a simple wearable device designed to capture patient health data during clinical trials. [Verily's product strategy]. [Google's product strategy].

(281) Fitbit is not active in patient monitoring. In fact, while Fitbit's products may be used in the context of patient monitoring by third parties, Fitbit is not itself involved in patient monitoring services or apps and does not provide any tailored products or services to specifically enable them.¹⁹⁷

¹⁹³ Commission decision of 13 October, 2008 in case COMP/M. 5301, – Capgemini/BAS, paragraph 19.

¹⁹⁴ Commission decision of 21 December 21, 2016 in case COMP/M.8180, – Verizon/Yahoo, paragraph 75.

¹⁹⁵ Commission decision of 21 December 21, 2016 in case COMP/M.8180, – Verizon/Yahoo, paragraphs 73 and 76.

¹⁹⁶ Replies to questionnaire QB to health data users, questions 11 and 11.1; replies to questionnaire QD on wearables, smartphones and apps, question 24.5 and Replies; replies to questionnaire QG to digital health players, question 6.2.

¹⁹⁷ Fitbit has looked into potentially developing other devices for medical uses, in particular, [Fitbit's product strategy]. [Fitbit's product strategy]. [Fitbit's product strategy]. [Fitbit's product strategy]. [Fitbit's product strategy]. [Fitbit's product strategy]. Form CO, paragraph 136.

8.11.2.1. Product market definition

8.11.2.1.1. Commission precedents

(282) The Commission has not previously defined a relevant market for patient monitoring services or apps.

8.11.2.1.2. The Notifying Party's view

(283) The Notifying Party submits, in this respect, that it is also not necessary to define the product market as regards patient monitoring. Regardless of market definition, in fact, there is no horizontal overlap or vertical or conglomerate relationship between the Parties in this area.¹⁹⁸

8.11.2.1.3. The Commission's assessment

(284) The replies of the market investigation in Phase I have indicated that, despite having in common a relationship to user data, patient monitoring is substantially different from other activities in the digital healthcare space¹⁹⁹ and the relevant services are provided by different categories of operators.²⁰⁰ The results of the market investigation in Phase II did not provide any elements to contradict this conclusion.²⁰¹

(285) In light of recital (284), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for patient monitoring.

8.11.2.2. Geographic market definition

8.11.2.2.1. Commission precedents

(286) The Commission has not previously defined a relevant market for patient monitoring services or apps.

8.11.2.2.2. The Notifying Party's view

(287) The Notifying Party submits, in this respect, that it is also not necessary to define the geographic market in the area of patient monitoring. Regardless of market definition, in fact, there is no horizontal overlap or vertical or conglomerate relationship between the Parties in this case.

8.11.2.2.3. The Commission's assessment

(288) The replies to the market investigation in Phase I given by companies active in patient monitoring indicate that they provide their services at global level or at least at EEA-level.²⁰² The results of the market investigation in Phase II did not provide any elements to contradict this finding.²⁰³

¹⁹⁸ Form CO, paragraphs 426-428 and 602.

¹⁹⁹ Replies to questionnaire QB to health data users, question 1.1.

²⁰⁰ Replies to questionnaire QB to health data users, question 1.

²⁰¹ Replies to questionnaire QD on wearables, smartphones and apps, question 23 and Replies; replies to questionnaire QG to digital health players, question 5.

²⁰² Replies to questionnaire QB to health data users, questions 11 and 11.1.

²⁰³ Replies to QD on wearables, smartphones and apps, question 24.2 and Replies; replies to questionnaire QG to digital health players, question 6.3.

(289) In light of recital (288), for the purpose of assessing the Transaction, the Commission considers that the relevant geographic market for patient monitoring is at least EEA in scope.

8.11.3. *Provision of data for medical research and real-world evidence*

(290) The provision of data for medical research and of RWE consist of the provision of personal data concerning users/patients to entities and institutions that carry out medical research. RWE refers to services that collect medically-relevant data from observations outside of medical trials.

(291) While Google is not directly active in the sector, Alphabet's Verily seeks to make medical data collected by third parties more readily available for research purposes. In particular, Verily is collaborating on Terra and Project Baseline, two major research platforms that facilitate the sharing of medical data.

(292) At the same time, while internal documents provided by Google²⁰⁴ [Google's health know-how], Fitbit is not directly active nor generates any revenue in this field. In fact, Fitbit offers access to its Web API, so that Fitbit users can authorize third parties to access their data and use them for research purposes. In such a case, however, rather than Fitbit providing access to this data, the Commission considers that the individual users, not Fitbit, are granting access to their data using the Web API offered by Fitbit.

8.11.3.1. Product market definition

8.11.3.1.1. Commission precedents

(293) The Commission has previously assessed activities in the provision of medical data and RWE services in several decisions. In the recent *IMS Health/Quintiles* decision, the Commission defined RWE services as the sale of observational studies based on data of patient experiences and the impact of a product in "real life" clinical practice including from medical records and pharmacy management software.²⁰⁵ The Commission considered that there is a difference between (a) primary and secondary RWE data as such, (b) the collection and provision of RWE data, and (c) the provision of RWE studies (services).²⁰⁶ The Commission ultimately left the precise product market definitions open.²⁰⁷

8.11.3.1.2. Notifying Party's view

(294) The Notifying Party did not provide any element or comment supporting a departure from the Commission precedents and indicated that, regardless, there is no horizontal overlap or relevant vertical or conglomerate relationship in this case.²⁰⁸

²⁰⁴ See, for example, [Reference to internal documents].

²⁰⁵ Commission decision of 12 August 12, 2016 in case M.8061, – IMS Health/Quintiles, paragraphs 27-28. See also Commission decision of 19 December 19, 2014 in case M.7337, – IMS Health/Cegedim Business, paragraph 134.

²⁰⁶ Commission decision of 12 August 12, 2016 in case M.8061, – IMS Health/Quintiles, paragraph 36.

²⁰⁷ Commission decision of 12 August 12, 2016 in case M.8061, – IMS Health/Quintiles, paragraph 38.

²⁰⁸ Form CO, paragraphs 426-428 and 602.

8.11.3.1.3. The Commission's assessment

- (295) The replies of the market investigation in Phase I have indicated that, despite having in common a relationship to user data, the provision of data for medical research and RWE are substantially different from other activities in the area of digital healthcare²⁰⁹ and the relevant services are provided by different categories of operators.²¹⁰ The results of the market investigation in Phase II did not provide any elements to contradict this conclusion.²¹¹
- (296) In light of recital (295), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for the provision of data for medical research and RWE without any further segmentation.

8.11.3.2. Geographic market definition

8.11.3.2.1. Commission precedents

- (297) In *IMS Health/Quintiles*, the Commission observed that some providers of RWE services operate on a local basis while others cover several EEA countries and that customers seem to purchase RWE studies both at the national and EEA level.²¹² The Commission ultimately left the geographic market definition open.²¹³

8.11.3.2.2. Notifying Party's view

- (298) The Notifying Party did not provide any element or comment supporting a departure from the Commission precedents and indicated that, regardless, there is no horizontal overlap or relevant vertical or conglomerate relationship in this case.

8.11.3.2.3. The Commission's assessment

- (299) The replies to the market investigation from market operators that provide RWE services are mixed and seem to indicate that they are mainly global players with ability to cover multiple countries at EEA wide level.²¹⁴ The results of the market investigation in Phase II generally confirm these statements.²¹⁵
- (300) In light of recital (299), for the purpose of assessing the Transaction, the Commission considers that the relevant geographic market for the provision of data for medical research and RWE is at least EEA-wide in scope.

8.11.4. Corporate wellness programmes

- (301) Corporate wellness programmes involve the provision of devices and services to companies as part of employer-sponsored employee benefit or corporate wellness plans. These services may also include software platforms for user engagement (for example a dashboard allowing users to monitor their performances and fitness) and

²⁰⁹ Replies to questionnaire QB to health users data, question 1.1.

²¹⁰ Replies to questionnaire QB to health users data, question 1.

²¹¹ Replies to questionnaire QD on wearables, smartphones and apps, question 23 and Replies to; replies to questionnaire QG to digital health players, question 5.

²¹² Commission decision of 12 August 12, 2016 in case M.8061, – *IMS Health/Quintiles*, paragraph 37.

²¹³ Commission decision of 12 August 12, 2016 in case M.8061, – *IMS Health/Quintiles*, paragraph 38.

²¹⁴ Replies to questionnaire QB to health user data, questions 11 and 11.1.

²¹⁵ Replies to questionnaire QD on wearables, smartphones and apps, question 24.3 and Replies; replies to questionnaire QG to digital health players, question 6.4.

to allow employers to monitor (with user consent) the participation and progress of the enrolled employees.

- (302) Fitbit sells wrist-worn wearable devices and services to companies in the context of its Fitbit Health Solutions (“FHS”) programme as part of employer-sponsored employee benefit or corporate wellness plans. In addition to Fitbit devices, customers might also purchase for their employees access to Fitbit’s Premium or Fitbit Care Health Coaching services (the latter not yet available in Europe) or access to the programme’s dashboards. In 2019, FHS revenues amounted to \$[...]M in the EEA (mostly generated with the sale of Fitbit wearable devices).
- (303) Google is not active in corporate wellness programs/services and [Google’s product strategy]. [Google’s product strategy].

8.11.4.1. Product market definition

8.11.4.1.1. Commission precedents

- (304) The Commission has not previously defined relevant market(s) for corporate wellness programmes and services. Therefore, there are no precedents identifying a market for these activities.

8.11.4.1.2. The Notifying Party’s view

- (305) The Notifying Party submits that it is not necessary to define the market for the purposes of assessing the Transaction. Regardless of market definition, there is no overlap between the Parties, as Google is not active in corporate wellness programmes/services, [Google’s product strategy].²¹⁶

8.11.4.1.3. The Commission’s assessment

- (306) The replies of the market investigation in Phase I have indicated that, in spite of all having in common a relationship to user data, the provision of corporate wellness programmes is substantially different from other activities in the area of digital healthcare²¹⁷ and the relevant services are provided by different categories of operators.²¹⁸ The results of the market investigation in Phase II did not provide any elements to contradict this conclusion.²¹⁹
- (307) In light of recital (306), for the purpose of assessing the Transaction, the Commission considers that the relevant product market is the market for corporate wellness programmes.

8.11.4.2. Geographic market definition

8.11.4.2.1. Commission precedents

- (308) The Commission has not previously defined (a) relevant market(s) for corporate wellness programmes and services. Therefore, there are no precedents identifying the relevant geographic market for these activities.

²¹⁶ Form CO, paragraphs 426-428 and 603.

²¹⁷ Replies to questionnaire QB to health user data, question 1.1.

²¹⁸ Replies to questionnaire QB to health user data, question 1.

²¹⁹ Replies to questionnaire QD on wearables, smartphones and apps, question 23 and Replies; replies to questionnaire QG to digital health players, question 5.

8.11.4.2.2. The Notifying Party's view

(309) The Notifying Party submits that it is not necessary to define the market for the purposes of assessing the Transaction. Regardless of market definition, there is no overlap between the Parties, as Google is not active in corporate wellness programmes/services, [Google's product strategy].

8.11.4.2.3. The Commission's assessment

(310) As to the geographic scope, the replies to the market investigation are mixed and seem to indicate that businesses active in this field operate on both a national, EEA and even worldwide level.²²⁰ The results of the market investigation in Phase II generally confirm these statements.²²¹

(311) In light of recital (310), for the purpose of assessing the Transaction, the Commission considers that the relevant geographic market is global or at least EEA-wide.

9. COMPETITIVE ASSESSMENT

9.1. Market shares

(312) According to the Horizontal Merger Guidelines²²² and the Non-Horizontal Merger Guidelines²²³, market shares provide useful first indications of the market structure and of the competitive importance of the merging parties and their competitors in the relevant markets.

9.1.1. *Wrist-worn wearable devices*

9.1.1.1. Overall

(313) Table 1 and Table 2 set out Fitbit's and its main competitors' market shares in the supply of wrist-worn wearable devices, globally and in the EEA, by sales volumes and sales values for the years 2016, 2017, 2018 and 2019.

²²⁰ Replies to questionnaire QB to health data users, questions 11 and 11.1.

²²¹ Replies to questionnaire QD on wearables, smartphones and apps, question 24.4 and Replies; replies to questionnaire QG to digital health players, question 6.5.

²²² Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Horizontal Merger Guidelines"), OJ C 31, 05.02.2004, paragraph 14.

²²³ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-Horizontal Merger Guidelines"), OJ C 265, 18.10.2008, paragraph 24.

Table 1: Market shares in wrist-worn wearable devices (worldwide, 2016-2019)

Worldwide	Volume (in %)				Value (EUR ²²⁴) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[20-30]	[10-20]	[10-20]	[5-10]	[20-30]	[10-20]	[10-20]	[5-10]
Xiaomi	[10-20]	[10-20]	[10-20]	[10-20]	[0-5]	[0-5]	[0-5]	[0-5]
Apple	[10-20]	[10-20]	[10-20]	[10-20]	[30-40]	[40-50]	[40-50]	[40-50]
Huawei	[0-5]	[0-5]	[5-10]	[10-20]	[0-5]	[0-5]	[0-5]	[5-10]
Samsung	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[10-20]
Garmin	[5-10]	[5-10]	[5-10]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
BBK	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Fossil	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]
Amazfit	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Qihoo 360	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
Lifesense	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
Polar	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Suunto	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Others	[20-30]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[5-10]	[5-10]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 13-14), based on IDC data.

Table 2: Market shares in wrist-worn wearable devices (EEA, 2016-2019)

EEA	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[5-10]
Apple	[20-30]	[20-30]	[20-30]	[20-30]	[40-50]	[40-50]	[40-50]	[30-40]
Samsung	[5-10]	[5-10]	[5-10]	[10-20]	[5-10]	[5-10]	[10-20]	[10-20]
Garmin	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Xiaomi	[0-5]	[0-5]	[5-10]	[10-20]	[0-5]	[0-5]	[0-5]	[0-5]
Huawei	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Fossil	[0-5]	[10-20]	[5-10]	[5-10]	[0-5]	[5-10]	[5-10]	[5-10]
Amazfit	-	[0-5]	[0-5]	[0-5]	-	[0-5]	[0-5]	[0-5]
Suunto	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Polar	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
MyKronoz	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
LVMH	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Others	[10-20]	[5-10]	[0-5]	[0-5]	[10-20]	[5-10]	[0-5]	[0-5]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 25-26), based on IDC data.

- (314) In 2019, on a worldwide level, Fitbit was the fourth largest supplier of wrist-worn wearable devices by both sales volume ([5-10]%) and sales value ([5-10]%). In the EEA, Fitbit was the second largest supplier by sales volume ([10-20]%) and the fourth largest supplier by sales value ([5-10]%).

²²⁴ All value figures in Section 9.1.1 have been converted into EUR using the annual average ECB exchange rates.

- (315) Fitbit's market share has significantly declined, both globally and in the EEA, in the period from 2016 to 2019.
- (316) Apple is, by far, the leading supplier of wrist-worn wearable devices in the EEA, both in volume and value terms, and globally in value terms, while Xiaomi is the largest globally in volume terms. Other significant suppliers are Samsung, Garmin and Huawei.
- (317) Otherwise, the market for wrist-worn wearable devices is fairly fragmented with many smaller competitors being active.

9.1.1.2. Smartwatches

- (318) Table 3 and Table 4 set out Fitbit's and its main competitors' market shares in the supply of smartwatches, globally and in the EEA, by sales volumes and sales values for the years 2016, 2017, 2018 and 2019.

Table 3: Market shares in smartwatches (worldwide, 2016-2019)

Worldwide	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[10-20]	[5-10]	[5-10]	[5-10]	[10-20]	[5-10]	[5-10]	[0-5]
Apple	[20-30]	[20-30]	[30-40]	[20-30]	[40-50]	[50-60]	[50-60]	[50-60]
Samsung	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[10-20]	[10-20]
Huawei	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
BBK	[5-10]	[5-10]	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Garmin	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[10-20]
Fossil	[0-5]	[5-10]	[5-10]	[0-5]	[0-5]	[5-10]	[5-10]	[0-5]
Qihoo 360	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
Amazfit	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Continental	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
Xiaomi	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Suunto	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Polar	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Others	[30-40]	[30-40]	[20-30]	[10-20]	[10-20]	[10-20]	[5-10]	[5-10]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 37-38), based on IDC data.

Table 4: Market shares in smartwatches (EEA, 2016-2019)

EEA	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[10-20]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[0-5]
Apple	[30-40]	[30-40]	[30-40]	[30-40]	[40-50]	[40-50]	[40-50]	[40-50]
Samsung	[5-10]	[5-10]	[10-20]	[10-20]	[5-10]	[5-10]	[10-20]	[10-20]
Garmin	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]	[10-20]
Fossil	[0-5]	[10-20]	[10-20]	[5-10]	[0-5]	[10-20]	[5-10]	[5-10]
Huawei	[0-5]	[0-5]	[0-5]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]
Amazfit	-	[0-5]	[0-5]	[0-5]	-	[0-5]	[0-5]	[0-5]
Suunto	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Polar	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
MyKronoz	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Withings	[0-5]	[0-5]	[0-5]	[0-5]	n/a	n/a	n/a	n/a
LVMH	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]

EEA	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Others	[10-20]	[5-10]	[0-5]	[0-5]	[10-20]	[0-5]	[0-5]	[0-5]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 73-74), based on IDC data.

- (319) In 2019, Fitbit was the fifth largest supplier of smartwatches by sales volume and sales value, both globally ([5-10]/[0-5]%) and in the EEA ([5-10]/[0-5]%).
- (320) Fitbit's market share has significantly declined, both globally and in the EEA, in the period from 2016 to 2019 in a market growing overall.
- (321) Apple is the leading supplier of smartwatches, both globally and in the EEA. Other significant suppliers are Samsung, Garmin, Huawei and Fossil.
- (322) Otherwise, the supply of smartwatches is fairly fragmented with many smaller competitors being active.

9.1.1.3. Fitness trackers

- (323) Table 5 and Table 6 set out Fitbit's and its main competitors' market shares in the supply of fitness trackers, globally and in the EEA, by sales volumes and sales values for the years 2016, 2017, 2018 and 2019.

Table 5: Market shares in fitness trackers (worldwide, 2016-2019)

Worldwide	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[20-30]	[20-30]	[10-20]	[10-20]	[50-60]	[40-50]	[30-40]	[30-40]
Xiaomi	[30-40]	[30-40]	[40-50]	[40-50]	[5-10]	[5-10]	[10-20]	[20-30]
Huawei	[0-5]	[5-10]	[10-20]	[20-30]	[5-10]	[5-10]	[10-20]	[10-20]
Samsung	[0-5]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Garmin	[5-10]	[5-10]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[5-10]
Lifesense	[5-10]	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
GOQii	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Titan	-	[0-5]	[0-5]	[0-5]	-	[0-5]	[0-5]	[0-5]
Polar	n/a	n/a	n/a	n/a	[0-5]	[0-5]	[0-5]	[0-5]
Others	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]	[10-20]	[5-10]	[10-20]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 109-110), based on IDC data.

Table 6: Market shares in fitness trackers (EEA, 2016-2019)

EEA	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google	-	-	-	-	-	-	-	-
Fitbit	[40-50]	[50-60]	[30-40]	[20-30]	[50-60]	[60-70]	[50-60]	[40-50]
Xiaomi	[0-5]	[0-5]	[20-30]	[30-40]	[0-5]	[0-5]	[5-10]	[10-20]
Huawei	[0-5]	[0-5]	[10-20]	[10-20]	[0-5]	[0-5]	[5-10]	[10-20]
Samsung	[0-5]	[5-10]	[0-5]	[5-10]	[5-10]	[10-20]	[5-10]	[5-10]
Garmin	[10-20]	[10-20]	[10-20]	[5-10]	[10-20]	[10-20]	[10-20]	[10-20]
Polar	[5-10]	[0-5]	[0-5]	[0-5]	[5-10]	[5-10]	[5-10]	[0-5]
MyKronoz	[5-10]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Withings	[0-5]	-	[0-5]	[0-5]	[0-5]	-	[0-5]	[0-5]

EEA	Volume (in %)				Value (EUR) (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Amazfit	-	[0-5]	[0-5]	[0-5]	-	[0-5]	[0-5]	[0-5]
Others	[10-20]	[5-10]	[0-5]	[0-5]	[10-20]	[5-10]	[0-5]	[0-5]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 127-128), based on IDC data.

- (324) In 2019, on a worldwide level, Fitbit was the largest supplier of fitness trackers by sales value ([30-40]%) and the third largest by sales volume ([10-20]%). In the EEA, Fitbit was also the largest supplier by sales value ([40-50]%) and the second largest supplier by sales volume ([20-30]%).
- (325) In general, Fitbit's market share has significantly declined, both globally and in the EEA, in the period from 2016 to 2019.
- (326) Xiaomi is the leading supplier of fitness trackers, both globally and in the EEA, in volume terms. Other significant suppliers are Huawei, Garmin and Samsung.
- (327) Otherwise, the supply of fitness trackers is fairly fragmented with many smaller competitors being active.

9.1.1.4. Other segmentations

- (328) Fitbit's market shares in any plausible segments of the supply of wrist-worn wearable devices, smartwatches and fitness trackers are not significantly higher than its market shares in the overall supply of wrist-worn wearable devices, of smartwatches and of fitness trackers. This holds in particular with regard to the following potential segments (as also follows from Table 7 below):
- (a) GPS connectivity (smartwatches and fitness trackers): two of Fitbit's wrist-worn wearable devices, namely one fitness tracker model (out of four different fitness tracker models) and one smartwatch model (out of four different smartwatch models), offer GPS functionality. On this basis, Fitbit's market share is only slightly higher in the fitness tracker segment with GPS connectivity compared to the segment without GPS connectivity. In contrast, Fitbit's market share in the smartwatch segment with GPS connectivity is negligible, compared to the segment without GPS connectivity. This reflects Fitbit's technological delay in the provision of smartwatches with GPS connectivity.²²⁵
- (b) Smartwatches with cellular connectivity: Fitbit currently does not sell a connected smartwatch. Therefore, its market share is zero in this segment. Accordingly, Fitbit's market share is slightly higher in the segment without cellular connectivity, however, this merely reflects Fitbit's technological delay.

²²⁵ During 2020, Fitbit launched more smartwatch models with GPS connectivity, see recital 411 below, which are not yet reflected in the available market share information.

- (c) Full smartwatches²²⁶: almost all of Fitbit’s devices classify as full devices, however, this also holds for of all of its main competitors. Therefore, Fitbit’s market shares are only slightly higher in this segment.

Table 7: Fitbit’s market share in plausible segments (2019)

	GPS connectivity	Cellular connectivity	Full
Fitness trackers²²⁷			
WW (volume)	[20-30]	-	-
WW (value)	[30-40]	-	-
EEA (volume)	[30-40]	-	-
EEA (value)	[40-50]	-	-
Smartwatches			
WW (volume)	[0-5]	[0-5]	[5-10]
WW (value)	[0-5]	[0-5]	[5-10]
EEA (volume)	[0-5]	[0-5]	[10-20]
EEA (value)	[0-5]	[0-5]	[5-10]

Source: Form CO, Annex 7.1 (Tables 41-42, 45-46, 49-50, 77-78, 81-82, 85-86, 11-112, 129-130), based on IDC data.

9.1.2. OSs

9.1.2.1. Licensable OSs for smart mobile devices

- (329) Based on the information provided by the Notifying Party, which relies on the *Google Android* case and refer to the year 2016, Google had a market share in the supply of licensable smart mobile OSs of [90-100]% (by volume, worldwide excluding China). Other marginal competitors active in the market were Windows ([0-5]%) and Fire OS ([0-5]%).²²⁸

9.1.2.2. Licensable OSs for wrist-worn wearable devices

- (330) Table 8 sets out Google’s and its main competitors’ market shares in licensable OSs for wrist-worn wearable devices, globally (excl. China) and in the EEA, by sales volumes for the years 2016, 2017, 2018 and 2019.

Table 8: Market shares in licensable OSs for wrist-worn wearable devices (volume, 2016-2019)

Volume	Worldwide (excl. China) (in %)				EEA (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google (Wear OS)	[80-90]	[80-90]	[80-90]	[70-80]	[80-90]	[90-100]	[90-100]	[90-100]
Fitbit	-	-	-	-	-	-	-	-
AOSP	[10-20]	[5-10]	[10-20]	[20-30]	[0-5]	[0-5]	-	-
Linux	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-	-
Pebble OS	[5-10]	-	-	-	[5-10]	-	-	-
Total	100	100	100	100	100	100	100	100

Source: Form CO, Annex 7.1 (Table 165, 199, 181, 215, 245 and 259), based on IDC data.

²²⁶ This distinction is mainly relevant for smartwatches. Only Samsung and Polar currently offer full fitness trackers, which represent a negligible part of the market. Form CO, Annex 7.1 (Table 115).

²²⁷ Fitbit’s market shares for fitness trackers with GPS connectivity correspond to shares for the first quarter of 2020, as Fitbit’s market share was zero before. Charge 4, Fitbit’s only fitness tracker with on-board GPS, was launched in 2020 only.

²²⁸ As explained in Section 9.5.2.2.1.3, there is no indication, which would suggest that it would be appropriate to take a different view in relation to Google’s current position in the market for the supply of licensable OSs for smart mobile devices in a worldwide market excluding China than the view that the Commission has taken in *Google Android*.

- (331) No licensable OSs for fitness trackers exist. Therefore, the market shares for licensable OS for wrist-worn wearable devices generally are equivalent to the market shares for licensable OSs for smartwatches. Similarly, no licensable OSs for basic smartwatches exist, therefore the market shares for licensable OS for wrist-worn wearable devices generally are equivalent to the market shares for licensable OSs for full smartwatches. Finally, licensable OSs do not differ depending on whether the device offers GPS or cellular connectivity.
- (332) Google’s Android Open Source Project (“AOSP”) is also listed in Table 7. In addition to the traditional use in the smart mobile environment, some wearable OEMs have chosen to repurpose Android for their wearable devices. These OEMs build a wearable OS from the AOSP source code. As the AOSP source code is publicly available online, OEMs can access and repurpose AOSP as an OS for wearable devices without any relationship with or involvement of or payment to Google (see Section 9.4.3 for more details).²²⁹

9.1.3. App stores

9.1.3.1. Android app stores

- (333) Based on the information provided by the Notifying Party, which relies on the *Google Android* case and refer to the year 2016, Google’s market share in Android app stores (Google Play) was [90-100]% (by app downloads, worldwide excluding China).²³⁰

9.1.3.2. Wear OS app stores

- (334) Google Play is the only app store via which users can download apps onto their Wear OS devices. Accordingly, Google has a market share of 100%.

9.1.3.3. Fitbit app stores

- (335) The Fitbit App Gallery is the only app store via which users can download apps onto their Fitbit devices. Accordingly, Fitbit has a market share of 100%.

9.1.4. General search services

- (336) Google’s and other players’ share in the national general search services markets in 2019 on the basis of the data provided by the Notifying Party in the Form CO are represented in Table 9.

Table 9: Google’s national shares in general search services, 2019 (EEA)

EEA Country	Google	Bing	Yahoo	DuckDuckGo	MSN	Seznam	Yandex	Neti	Qwant	Others
Austria	95.70%	1.97%	0.64%	1.18%	-	-	-	-	-	0.51%
Belgium	95.25%	2.99%	0.72%	-	0.1%	-	-	-	-	0.95%
Bulgaria	98.30%	0.89%	0.45%	-	-	-	-	-	-	0.35%

²²⁹ Form CO, paragraph 265.

²³⁰ As explained in Section 9.4.5.2.1, there is no indication, which would suggest that it would be appropriate to take a different view in relation to Google’s current position in the market for Android app stores in a worldwide market excluding China than the view that the Commission has taken in Google Android.

EEA Country	Google	Bing	Yahoo	DuckDuckGo	MSN	Seznam	Yandex	Neti	Qwant	Others
Croatia	98.24%	0.89%	0.49%	-	-	-	-	-	-	0.39%
Cyprus	96.89%	1.41%	0.76%	-	-	-	-	-	-	0.94%
Czechia	84.44%	1.78%	0.92%	-	-	11.96%	-	-	-	0.91%
Denmark	97.18%	1.36%	0.83%	-	-	-	-	-	-	0.62%
Estonia	96.45%	1.09%	0.43%	-	-	-	1.01%	0.12%	-	0.89%
Finland	96.97%	1.43%	0.62%	0.62%	-	-	-	-	-	0.37%
France	92.35%	4.44%	1.38%	0.46%	-	-	-	-	0.71%	0.67%
Germany	94.61%	2.93%	0.71%	0.6%	-	-	-	-	-	1.15%
Greece	98.41%	0.68%	0.63%	-	-	-	-	-	-	0.27%
Hungary	97.95%	0.88%	0.86%	-	-	-	-	-	-	0.32%
Iceland	95.34%	1.86%	0.85%	1.5%	-	-	-	-	-	0.44%
Ireland	96.19%	1.81%	1.08%	-	-	-	-	-	-	0.91%
Italy	96.29%	2.19%	0.97%	-	-	-	-	-	-	0.55%
Latvia	96.35%	1.08%	0.5%	-	-	-	1.36%	-	-	0.69%
Liechtenstein	95.05%	2.88%	0.55%	0.67%	0.57%	-	-	-	-	0.27%
Lithuania	97.04%	1.42%	0.66%	-	-	-	0.38%	-	-	0.51%
Luxembourg	94.59%	2.3%	0.82%	1.53%	-	-	-	-	-	0.75%
Malta	95.53%	2.67%	1.2%	-	-	-	-	-	-	0.6%
Netherlands	95.64%	2.23%	0.71%	0.74%	-	-	-	-	-	0.67%
Norway	95.75%	2.21%	1.12%	-	-	-	-	-	-	0.93%
Poland	98.50%	0.64%	0.53%	-	-	-	-	-	-	0.32%
Portugal	97.38%	1.36%	0.76%	-	-	-	-	-	-	0.49%
Romania	98.15%	0.85%	0.72%	-	-	-	-	-	-	0.27%
Slovakia	97.86%	1.2%	0.42%	-	-	-	-	-	-	0.51%
Slovenia	97.72%	1.22%	0.33%	-	-	-	-	-	-	0.73%
Spain	96.47%	2.07%	0.99%	-	-	-	-	-	-	0.46%
Sweden	95.92%	2.33%	0.96%	0.57%	-	-	-	-	-	0.22%
UK	92.46%	4.35%	1.7%	0.58%	0.58%	-	-	-	-	0.34%

Source: Annex 7.1 to Form CO, based on Statcounter.

(337) As illustrated in Table 9, Google’s market share in general search services was above 90% in almost all EEA countries in 2019, except for Czechia (84.4%). For the other EEA countries, Google’s share varied from 92.4% in France to 98.5% in Poland, with the other EEA countries lying within this range. Google’s competitors are Microsoft’s Bing, Yahoo and DuckDuckGo, but their combined market is never above 10%. In Czechia the second largest player is Senzam with a market share around 11%.

9.1.5. Online advertising services

9.1.5.1. Online search advertising services

(338) The Notifying Party was not able to submit updated market shares for the national markets for online search advertising and referred to the markets shares set out in the *Google AdSense* case for the year 2016²³¹, reproduced in the below Table 10.

Table 10: Google’s shares in online search advertising (gross and net revenues, 2016)

EEA Country	Gross Revenue	Net Revenues
Austria	[90-100]%	[90-100]%
Belgium	[90-100]%	[90-100]%
Bulgaria	[90-100]%	[90-100]%
Croatia	[90-100]%	[90-100]%
Cyprus	*	*
Czechia	[80-90]%	[80-90]%
Denmark	[70-80]%	[70-80]%
Estonia	*	*
Finland	[90-100]%	[90-100]%
France	[90-100]%	[90-100]%
Germany	[90-100]%	[90-100]%
Greece	[80-90]%	[80-90]%
Hungary	[70-80]%	[70-80]%
Iceland	*	*
Ireland	[90-100]%	[90-100]%
Italy	[80-90]%	[80-90]%
Latvia	*	*
Liechtenstein	*	*
Lithuania	*	*
Luxembourg	*	*
Malta	*	*
Netherlands	[90-100]%	[90-100]%
Norway	[90-100]%	[90-100]%
Poland	[90-100]%	[90-100]%
Portugal	*	*
Romania	[90-100]%	[90-100]%
Slovakia	[90-100]%	[90-100]%
Slovenia	[90-100]%	[90-100]%
Spain	[90-100]%	[90-100]%
Sweden	[50-60]%	[50-60]%
UK	[80-90]%	[70-80]%

²³¹ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, Tables 3 and 4.

Source: Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, Tables 3 and 4. Data unavailable for fields marked with “*”.

- (339) To update the market share data, the Commission has reconstructed Google’s market shares for the national markets/sub-markets/segments for online search advertising on the basis of data requested from the main market players on their revenues with online advertising services on their own properties as well as data on the annual value of the search advertising served to third parties publishers.²³² The market size was calculated by summing the revenues of all respondents. This may underestimate the actual size of the market given that not all players responded to the Commission request for information, but there are no reasons to believe that the estimated market size differs significantly from the actual size.
- (340) The result of this exercise for the years 2018 and 2019 is presented in Table 11 for online search advertising. In all EEA countries market shares are above 90% and there is no reason to believe that market shares are materially higher if one considers the segments of online search advertising on desktop and on mobile. Moreover, it appears that Google’s market shares have not materially changed compared to the Commission’s findings in *Google AdSense*.

Table 11: Google’s national market shares in online search advertising, on the basis of revenues (2018 and 2019)

EEA countries	2018	2019
Austria	[90-100]%	[90-100]%
Belgium	[90-100]%	[90-100]%
Bulgaria	[90-100]%	[90-100]%
Croatia	[90-100]%	[90-100]%
Cyprus	[90-100]%	[90-100]%
Czechia	[90-100]%	[90-100]%
Denmark	[90-100]%	[90-100]%
Estonia	[90-100]%	[90-100]%
Finland	[90-100]%	[90-100]%
France	[90-100]%	[90-100]%
Germany	[90-100]%	[90-100]%
Greece	[90-100]%	[90-100]%
Hungary	[90-100]%	[90-100]%
Iceland	[90-100]%	[90-100]%
Ireland	[90-100]%	[90-100]%
Italy	[90-100]%	[90-100]%
Latvia	[90-100]%	[90-100]%
Liechtenstein	[90-100]%	[90-100]%
Lithuania	[90-100]%	[90-100]%
Luxembourg	[90-100]%	[90-100]%
Malta	[90-100]%	[90-100]%

²³² Data submitted by Google in reply to RFIs 25 and 30 and replies to questionnaire QE on wearables, search and advertising, questions B.4 and B.5.

EEA countries	2018	2019
Netherlands	[90-100]%	[90-100]%
Norway	[90-100]%	[90-100]%
Poland	[90-100]%	[90-100]%
Portugal	[90-100]%	[90-100]%
Romania	[90-100]%	[90-100]%
Slovakia	[90-100]%	[90-100]%
Slovenia	[90-100]%	[90-100]%
Spain	[90-100]%	[90-100]%
Sweden	[90-100]%	[90-100]%
United Kingdom	[90-100]%	[90-100]%

Source: Commission computation.

9.1.5.2. Online display advertising services

- (341) Google has not provided market shares for online display advertising services and sub-markets/segments thereof. In previous decisions, the Commission found that, whilst overall the display advertising market is fragmented, Google would be the second largest player after Facebook²³³.
- (342) The Commission has thus reconstructed Google's market shares for the national markets/sub-markets/segments for online display advertising and online display advertising off-social networks²³⁴ on the basis of data requested from the main market players on their revenues with online advertising services on their own properties as well as data on the annual value of the display advertising served to third parties publishers²³⁵. The market size was calculated by summing the revenues of all respondents. This may under-estimate the actual size of the market given that not all players responded to the Commission's request for information, but there are no reasons to believe that the estimated market size differs significantly from the actual size.
- (343) The result of this exercise is presented in Table 12 for online display advertising for the years 2018 and 2019 and Table 13 for online display advertising off-social network for 2018 and 2019.

Table 12: Google's national market shares in online display advertising, on the basis of revenues (2018 and 2019)

EEA countries	2018	2019
Austria	[20-30]%	[20-30]%
Belgium	[20-30]%	[20-30]%
Bulgaria	[10-20]%	[10-20]%
Croatia	[20-30]%	[20-30]%
Cyprus	[10-20]%	[5-10]%

²³³ Commission decision of 6 December 2016 in case M.8124 – Microsoft/LinkedIn.

²³⁴ Google is not active in online display advertising on-social networks.

²³⁵ Data submitted by Google in reply to RFIs 25 and 30 and replies to questionnaire QE on wearables, search and advertising, questions B.4 and B.5.

EEA countries	2018	2019
Czechia	[20-30]%	[20-30]%
Denmark	[20-30]%	[20-30]%
Estonia	[20-30]%	[20-30]%
Finland	[20-30]%	[10-20]%
France	[20-30]%	[20-30]%
Germany	[20-30]%	[30-40]%
Greece	[20-30]%	[20-30]%
Hungary	[20-30]%	[20-30]%
Iceland	[10-20]%	[10-20]%
Ireland	[20-30]%	[10-20]%
Italy	[20-30]%	[20-30]%
Latvia	[20-30]%	[20-30]%
Liechtenstein	[20-30]%	[20-30]%
Lithuania	[20-30]%	[20-30]%
Luxembourg	[20-30]%	[10-20]%
Malta	*	*
Netherlands	[20-30]%	[20-30]%
Norway	[20-30]%	[20-30]%
Poland	[30-40]%	[30-40]%
Portugal	[20-30]%	[20-30]%
Romania	[20-30]%	[20-30]%
Slovakia	[20-30]%	[20-30]%
Slovenia	[20-30]%	[20-30]%
Spain	[20-30]%	[20-30]%
Sweden	[20-30]%	[20-30]%
United Kingdom	[20-30]%	[20-30]%

Source: Commission computation.

No reliable data available for fields marked with “*”.

Table 13: Google’s national market shares in online display advertising off-social networks, on the basis of revenues (2018 and 2019)

EEA countries	2018	2019
Austria	[50-60]%	[60-70]%
Belgium	[50-60]%	[60-70]%
Bulgaria	[50-60]%	[50-60]%
Croatia	[50-60]%	[60-70]%
Cyprus	[50-60]%	[40-50]%
Czechia	[60-70]%	[60-70]%
Denmark	[50-60]%	[50-60]%
Estonia	[60-70]%	[60-70]%
Finland	[40-50]%	[50-60]%
France	[50-60]%	[50-60]%

EEA countries	2018	2019
Germany	[50-60]%	[50-60]%
Greece	[60-70]%	[60-70]%
Hungary	[60-70]%	[60-70]%
Iceland	[60-70]%	[60-70]%
Ireland	[50-60]%	[50-60]%
Italy	[50-60]%	[50-60]%
Latvia	[60-70]%	[50-60]%
Liechtenstein	[40-50]%	[40-50]%
Lithuania	[60-70]%	[60-70]%
Luxembourg	[50-60]%	[50-60]%
Malta	*	*
Netherlands	[50-60]%	[50-60]%
Norway	[40-50]%	[50-60]%
Poland	[50-60]%	[60-70]%
Portugal	[60-70]%	[60-70]%
Romania	[60-70]%	[60-70]%
Slovakia	[50-60]%	[60-70]%
Slovenia	[60-70]%	[60-70]%
Spain	[50-60]%	[50-60]%
Sweden	[50-60]%	[50-60]%
United Kingdom	[50-60]%	[50-60]%

Source: Commission computation.

No reliable data available for fields marked with “”.*

- (344) As illustrated in the Tables 12 and 13, in 2019 Google’s market share was:²³⁶
- (a) Above 30%:
 - In the supply of online display advertising services in: Germany and Poland;
 - In the supply of online display advertising services off-social networks in: Cyprus and Liechtenstein;
 - (b) Above 50%:
 - In the supply of online display advertising services off-social networks in: Finland, Norway, Ireland, Luxembourg, Italy, the Netherlands, Denmark, Spain, Germany, the United Kingdom, Latvia, Bulgaria, France, Sweden, Austria, Belgium, Croatia, Poland, Slovakia, Island, Czechia, Hungary, Lithuania, Slovenia, Estonia, Greece, Romania and Portugal;
- (345) In addition to display advertising on its own properties, Google also serves display ads to third parties, via its intermediation services. Although the associated revenues belong to those third party publishers, Google has a decisive role in determining its allocation. In 2019, the share of the national markets served by Google to third

²³⁶ Countries are ordered by increasing size of Google’s market share.

parties corresponded to (i) between [...] % and [...] % of the total revenues with display advertising and (ii) between [...] % and [...] % of the total revenues with display advertising off-social networks, depending on the EEA country.

(346) Sub-market/segment shares at national level in relation to the supply of online display advertising on video and on non-video and on desktop and on mobile could not be calculated (as data from some of the main players was not available). For the purpose of this investigation, the Commission has no reason to believe that Google’s shares at national level for these sub-markets/segments would differ from those for online display advertising overall in way that would change the Commission’s conclusions in Section 9.3.3.2.

9.1.6. *Ad tech services*

(347) The Notifying Party has not provided market shares for the supply of the ad tech services listed at recital (168) above.

(348) For the purpose of this Decision, Table 14 presents estimates of Google’s shares for the EEA markets for the supply of display ads DSP services, display ads SSP services and analytics services and the overall supply of ad network services (namely without considering the split between search and display services), based on data extracted from www.datanyze.com on 30 July 2020. The data is based on technographics, a data set that consists of real-time insights on the tools and applications used by companies and their buying habits. Datanyze collects technographics by analyzing over 35 million domains on a daily basis and from other sources (such as third parties). Datanyze collects data at national level. The EEA data has been compiled by the Commission by summing up the national data. Data from Datanyze is used to estimate Google’s position in relation to the segments of ad tech services where it is active and the Commission does not exclude that Google’s market shares could be higher - especially for some Member States - if market shares would have been estimated in terms of the value of the services. Table 14 shows Google’s shares at EEA level, as well as the underlying national data.

Table 14: Google’s shares of “ad tech” services

Country	Google’s share	Google’s number of domains	Market’s number of domains	Google’s share	Google’s number of domains	Market’s number of domains
	Display ads DSP services			Display ads SSP services		
Austria	[60-70]%	[...]	[...]	[60-70]%	[...]	[...]
Belgium	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Bulgaria	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Croatia	[70-80]%	[...]	[...]	[50-60]%	[...]	[...]
Czechia	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Denmark	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Estonia	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Finland	[70-80]%	[...]	[...]	[50-60]%	[...]	[...]
France	[50-60]%	[...]	[...]	[40-50]%	[...]	[...]
Germany	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
Greece	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Hungary	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Iceland	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Ireland	[60-70]%	[...]	[...]	[60-70]%	[...]	[...]

Country	Google's share	Google's number of domains	Market's number of domains	Google's share	Google's number of domains	Market's number of domains
Italy	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
Latvia	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Liechtenstein	[70-80]%	[...]	[...]	[70-80]%	[...]	[...]
Lithuania	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Luxembourg	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Malta	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
Netherlands	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Norway	[60-70]%	[...]	[...]	[40-50]%	[...]	[...]
Poland	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Portugal	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
Cyprus	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Romania	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Slovakia	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Slovenia	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Spain	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
Sweden	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
UK ²³⁷	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
EEA	[60-70]%	[...]	[...]	[50-60]%	[...]	[...]
	Analytics services			Ad networks services		
Austria	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Belgium	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Bulgaria	[70-80]%	[...]	[...]	[80-90]%	[...]	[...]
Croatia	[80-90]%	[...]	[...]	[80-90]%	[...]	[...]
Czechia	[80-90]%	[...]	[...]	[90-100]%	[...]	[...]
Denmark	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Estonia	[70-80]%	[...]	[...]	[70-80]%	[...]	[...]
Finland	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
France	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Germany	[70-80]%	[...]	[...]	[80-90]%	[...]	[...]
Greece	[80-90]%	[...]	[...]	[80-90]%	[...]	[...]
Hungary	[70-80]%	[...]	[...]	[80-90]%	[...]	[...]
Iceland	[70-80]%	[...]	[...]	[60-70]%	[...]	[...]
Ireland	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Italy	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Latvia	[70-80]%	[...]	[...]	[70-80]%	[...]	[...]
Liechtenstein	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Lithuania	[70-80]%	[...]	[...]	[70-80]%	[...]	[...]
Luxembourg	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
Malta	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]

²³⁷ According to the CMA's Online platforms and digital advertising. Market study final report, 1 July 2020, Google's market shares in the different possible ad tech markets are the following: [50-60]% in the supply of DSP services and [50-60]% in the supply of SSP/exchange services and ad networks.

Country	Google's share	Google's number of domains	Market's number of domains	Google's share	Google's number of domains	Market's number of domains
Netherlands	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Norway	[70-80]%	[...]	[...]	[70-80]%	[...]	[...]
Poland	[80-90]%	[...]	[...]	[80-90]%	[...]	[...]
Portugal	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Cyprus	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Romania	[70-80]%	[...]	[...]	[80-90]%	[...]	[...]
Slovakia	[70-80]%	[...]	[...]	[80-90]%	[...]	[...]
Slovenia	[80-90]%	[...]	[...]	[80-90]%	[...]	[...]
Spain	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]
Sweden	[70-80]%	[...]	[...]	[50-60]%	[...]	[...]
UK	[80-90]%	[...]	[...]	[60-70]%	[...]	[...]
EEA	[80-90]%	[...]	[...]	[70-80]%	[...]	[...]

Source: www.datanyze.com

- (349) As illustrated in Table 14, Google's shares is currently above [70-80]% in all markets listed at recital (348).
- (350) Market shares specifically for search and display ad network services and for publisher and advertiser ad serving could not be calculated (as data was not available). For the purpose of this investigation, the Commission has no reason to believe that Google's shares for search and display ad networks markets would differ from those for the overall ad networks market in a way that would change the conclusions in Section 9.3.3.2. In relation to publisher and advertiser ad server markets, for the purpose of this investigation, the Commission has also no reason to believe that the market shares would be such to change the conclusions in Section 9.3.3.2 about the effects on "ad tech" services.

9.1.7. Health and fitness apps

- (351) Table 15 sets out the Parties' and their main competitors' shares in the supply of health and fitness apps on smart mobile devices by the number of monthly active users ("MAU") in 2019, globally and in the EEA.

Table 15: Shares in health and fitness apps on smart mobile devices by MAU in 2019

MAU	Worldwide (in %)	EEA (in %)
Google Fit	[0-5]	[0-5]
Fitbit	[5-10]	[0-5]
Combined	[5-10]	[5-10]
Samsung Health	[20-30]	[10-20]
Apple Health	[5-10]	[5-10]
Huami (Mi Fit ²³⁸)	[5-10]	[0-5]
ABISHKKING	[5-10]	[0-5]
MyFitnessPal	[0-5]	[0-5]
Garmin Connect	[0-5]	[5-10]
Flo Period	[0-5]	[0-5]

²³⁸ Huami develops Mi Fit, a companion app, for both Huami and Xiaomi products.

Huawei Health	[0-5]	[0-5]
Strava Running & Cycling	[0-5]	[0-5]
Others ²³⁹	[30-40]	[30-40]
Total	100	100
Total (mn)	[...]	[...]

Source: Form CO, Table 28 and Annex 7.1 (Tables 297 and 299), based on App Annie data. App Annie covers apps downloaded and used on smart mobile devices. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

- (352) Based on this data, Google (Google Fit app) and Fitbit (Fitbit app) had a combined share of [5-10]% globally and [5-10]% in the EEA in 2019.
- (353) The shares of both Samsung Health and Apple Health were larger than the Parties' combined share, both globally and in the EEA. Other health and fitness apps of wearable OEMs are for instance those of Huami, Garmin and Huawei. Health and fitness apps are also offered by ABISHKING, MyFitnessPal, Strava and many others.
- (354) As regards other possible segmentations, the Commission notes that there is no indication that the Parties' shares would be significantly higher in any plausible segment of the market. In terms of functionality, it is worth noting that the Parties' apps differ: the Fitbit app serves mainly as companion app to users of Fitbit devices, while the Google Fit app collects data from various sources. In terms of platform, the Google Fit app is available on wearable and smart mobile devices, while the Fitbit app is accessible via a PC or a smart mobile device. The large majority of competing apps are also available via smart mobile devices, both on Android and iOS. As regards Google's presence on wrist-worn wearable devices, given its limited distribution to Wear OS devices so far, the Notifying Party submits that Google's share would likely be lower than for smart mobile devices. Therefore, shares on smart mobile devices give a sufficient indication of Google's market position for the purpose of the assessment undertaken in this Decision. Finally, the Notifying Party submits that the Parties' position at national level within the EEA does not materially diverge from its overall position at EEA level.²⁴⁰

9.1.8. Mobile payment services

- (355) Table 16 and Table 17 set out the Parties' and their main competitors' shares in the supply of (contactless) proximity/offline mobile payment services for selected mobile and wearable device OEMs, globally and in the EEA, by the number of users and transaction value for the years 2017, 2018 and 2019.²⁴¹

²³⁹ Given the shares contain all competitors listed under App Annie's health and fitness category, the "Others" category may contain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

²⁴⁰ Notifying Party's reply to RFI 39, question 15(e).

²⁴¹ The Notifying Party also provided shares by transaction volume, which are always in the same range as the presented shares by users and transaction value.

Table 16: Shares in proximity/offline mobile payment services (worldwide, 2017-2019)

Worldwide	Users (in %)			Transaction Value (EUR ²⁴²) (in %)		
	2017	2018	2019	2017	2018	2019
Google Pay	[10-20]	[10-20]	[10-20]	[10-20]	[20-30]	[20-30]
Apple Pay	[60-70]	[50-60]	[50-60]	[60-70]	[60-70]	[60-70]
Samsung Pay	[10-20]	[20-30]	[20-30]	[10-20]	[10-20]	[10-20]
Other OEM-Pay (incl. Fitbit)	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Total	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 301,303), based on report “Juniper Research Contactless Payments”.

Table 17: Shares in proximity/offline mobile payment services (EEA, 2017-2019)

EEA	Users (in %)			Transaction Value (EUR) (in %)		
	2017	2018	2019	2017	2018	2019
Google Pay	[0-5]	[5-10]	[10-20]	[0-5]	[0-5]	[10-20]
Apple Pay	[60-70]	[50-60]	[50-60]	[80-90]	[70-80]	[60-70]
Samsung Pay	[30-40]	[30-40]	[30-40]	[10-20]	[20-30]	[20-30]
Other OEM-Pay (incl. Fitbit)	-	[0-5]	[0-5]	-	-	[0-5]
Total	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 304,306), based on report “Juniper Research Contactless Payments”. The report does not enable breakdown by individual countries within the regions. The EEA shares presented are therefore based on combining the data covering the West Europe and the Central and East Europe regions.

- (356) The Commission considers that the provided shares are conservative as the underlying data focuses on proximity/offline mobile payment services for selected mobile and wearable device OEMs.²⁴³ Fitbit is not active in remote/online mobile payments, therefore no overlap arises in this regard.
- (357) Based on this data, Google (Google Pay) had a share of at most [20-30]% globally (by transaction value) and at most [10-20]% in the EEA (by users) in 2019. Fitbit is included in the Other category, together with other OEMs’ payment services, such as Huawei Pay and Garmin Pay. Samsung Pay’s share is larger than Google Pay’s, except for worldwide shares by transaction value. Apple Pay is significantly larger than any of its competitors.
- (358) Based on the number of users, the Notifying Party estimates that Fitbit’s share was [0-5]% in 2018 and [0-5]% in 2019 on a world-wide basis and [0-5]% in 2018 and 2019 in the EEA.²⁴⁴ The Notifying Party was not able to submit estimates of Fitbit’s individual share for the year 2016 nor based on the transaction value.

²⁴² All value figures in Section 9.1.8 have been converted into EUR using the annual average ECB exchange rates.

²⁴³ The Juniper Research report does not track mobile payment services other than OEM Pay, and thus excludes peer-to-peer payments, direct bank transfers, and other payments initiated via mobile applications, Notifying Party’s reply to RFI 41, question 3.

²⁴⁴ Notifying Party’s reply to RFI 40, question 2.

(359) As regards other possible segmentations, the Commission notes that there is no indication that the Parties' combined shares would be significantly higher in any plausible segment of the market. In terms of platform, there is no indication that the Parties' shares would be significantly higher on a specific platform (smart mobile device or wrist-worn wearable). In terms of OS, there is no overlap between the Parties' offerings: Google Pay is offered on Android, certain iOS and Wear OS devices, while Fitbit Pay is offered on its own devices running on its proprietary OSs. Finally, the Notifying Party is not aware of national-level data on mobile payment apps.²⁴⁵ Nevertheless, the evidence in the Commission's file has not provided any indication which would suggest that the Parties' position at national level within the EEA would materially diverge from its overall position at EEA level.

9.1.9. Other digital apps and services

9.1.9.1. Navigation

(360) Tables 18 and 19 set out Google's and its main competitors' shares in the supply of navigation apps offering turn-by-turn navigation on smart mobile devices, globally and in the EEA, by the number of MAU for the years 2017, 2018 and 2019.

Table 18: Shares in navigation apps on smart mobile devices by MAU (worldwide, 2017-2019)

MAU	Worldwide (in %)		
	2017	2018	2019
Google Maps	[60-70]	[60-70]	[60-70]
Waze	[10-20]	[10-20]	[10-20]
Maps (Apple)	[10-20]	[10-20]	[5-10]
Here WeGo	[0-5]	[0-5]	[0-5]
Yandex Navigator	[0-5]	[0-5]	[0-5]
Transit Directions (Moovit)	[0-5]	[0-5]	[0-5]
2GIS Listings	[0-5]	[0-5]	[0-5]
Others ²⁴⁶	[5-10]	[5-10]	[5-10]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 39, Annex 1 (Table 1), based on App Annie data. Google has manually reviewed the top 100 apps in App Annie's travel and navigation categories. On the basis of this review, Google manually excluded apps that do not appear to provide turn-by-turn navigation.

App Annie covers apps downloaded and used on smart mobile devices. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

²⁴⁵ Notifying Party's reply to RFI 39, question 15(e).

²⁴⁶ Given Google's manual review of the list of apps, the "Others" category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

Table 19: Shares in navigation apps on smart mobile devices by MAU (EEA, 2017-2019)

MAU	EEA (in %)		
	2017	2018	2019
Google Maps	[50-60]	[50-60]	[50-60]
Waze	[5-10]	[5-10]	[5-10]
Apple Maps	[10-20]	[10-20]	[10-20]
Yanosik navi	[0-5]	[0-5]	[0-5]
JakDojade	[0-5]	[0-5]	[0-5]
Transit Directions (Moovit)	[0-5]	[0-5]	[0-5]
Here WeGo	[0-5]	[0-5]	[0-5]
SNCF	[0-5]	[0-5]	[0-5]
Citymapper	[0-5]	[0-5]	[0-5]
MAPS.ME	[0-5]	[0-5]	[0-5]
Others ²⁴⁷	[10-20]	[10-20]	[5-10]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 39, Annex 1 (Table 2), based on App Annie data. Google has manually reviewed the top 100 apps in App Annie's travel and navigation categories. On the basis of this review, Google manually excluded apps that do not appear to provide turn-by-turn navigation. App Annie covers apps downloaded and used on smart mobile devices. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

- (361) Based on this data, Google (with Google Maps and Waze) had a share of [70-80]% globally and [60-70]% in the EEA in 2019. The next largest competitor is Apple (with Maps) with a share of [5-10]% globally and [10-20]% in the EEA. All other competitors are significantly smaller.
- (362) As regards Google's presence on wrist-worn wearable devices, given its limited distribution to Wear OS devices so far (and only recent launch on the Apple Watch), the Notifying Party submits that Google's share would likely be lower than for smart mobile devices. Therefore, shares on smart mobile devices give a sufficient indication of Google's market position for the purpose of the assessment undertaken in this Decision.

9.1.9.2. Virtual assistants

- (363) Table 20 sets out Google's and its main competitors' shares in the supply of virtual assistants, globally and in the EEA, by the number of units sold for the years 2017, 2018 and 2019.

²⁴⁷ Given Google's manual review of the list of apps, the "Others" category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

Table 20: Shares in virtual assistants (volume, 2017-2019)

Volume	Worldwide (in %)			EMEA ²⁴⁸ (in %)		
	2017	2018	2019	2017	2018	2019
Google Assistant	[30-40]	[30-40]	[30-40]	[40-50]	[30-40]	[40-50]
Apple Siri	[30-40]	[20-30]	[20-30]	[20-30]	[20-30]	[20-30]
Microsoft Cortana	[20-30]	[20-30]	[10-20]	[20-30]	[20-30]	[20-30]
Amazon Alexa	[5-10]	[5-10]	[5-10]	[0-5]	[5-10]	[5-10]
Samsung Bixby	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]
Yandex Alice	-	-	-	-	[0-5]	[0-5]
Others ²⁴⁹	[0-5]	[5-10]	[10-20]	-	-	[0-5]
Total	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 39, Annex 1 (Tables 7-8), based on FutureSource's Virtual Assistants Market Tracker. This information is based on EMEA shipment volume of all devices with "built-in" virtual assistants.

- (364) Based on this data, Google (with the Google Assistant) had a share of [30-40]% globally and [40-50]% in the EEA in 2019. The next largest competitors are Apple (with Siri), Microsoft (with Cortana) and Amazon (with Alexa).
- (365) Table 21 sets out Google's and its main competitors' shares in the supply of virtual assistants on smartwatches, globally and in the EEA, by the number of units sold for the years 2016, 2017, 2018 and 2019.

Table 21: Shares in virtual assistants on smartwatches (volume, 2016-2019)

Volume	Worldwide (in %)				EEA (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Google Assistant	-	[10-20]	[10-20]	[5-10]	-	[10-20]	[10-20]	[10-20]
Apple Siri	[70-80]	[70-80]	[70-80]	[60-70]	[70-80]	[60-70]	[60-70]	[50-60]
Samsung Bixby	[20-30]	[10-20]	[10-20]	[20-30]	[20-30]	[10-20]	[10-20]	[20-30]
Amazon Alexa (on Fitbit)	-	-	-	[5-10]	-	-	-	[0-5]
Xiaomi Xiao AI	-	-	[0-5]	[0-5]	-	-	-	-
Amazon Alexa (non-Fitbit)	[0-5]	[0-5]	[0-5]	[0-5]	-	-	[0-5]	[0-5]
Total	100	100	100	100	100	100	100	100
Total (mn)	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]

Source: Form CO, Annex 7.1 (Tables 322-323), based on Notifying Party's assumptions.

- (366) Based on this data, Google had a share of [5-10]% globally and [10-20]% in the EEA in 2019. The largest competitors are Apple and Samsung (with Bixby).
- (367) The shares of virtual assistants on smartwatches reflect the following assumptions, which are based on public information: (i) Google Assistant is conservatively assumed to have been available on all Wear OS devices since 2017, (ii) Apple's virtual assistant, Siri, is on all Apple smartwatches, (iii) Samsung's virtual assistant, Bixby, is on all Samsung smartwatches, (iv) one of Fitbit's smartwatch models (i.e.

²⁴⁸ EMEA stands for Europe, Middle East and Africa. EEA-only data was not available, but Google considers the EMEA data is likely to provide a reasonable proxy for the EEA.

²⁴⁹ On the worldwide market, "others" contains following competitors: Baidu DuerOS, Alibaba AliGenie and Xiaomi Xiao Ai.

Versa 2) incorporates Amazon’s Alexa virtual assistant, (v) Xiaomi’s virtual assistant, Xiao AI, is incorporated in one model as of 2018, and (vi) Amazon’s Alexa virtual assistant is integrated into Amazfit’s Verge, Guess’s Connect, and Martian’s Passport, Victory, G2G, Active, and mVoice.²⁵⁰

(368) The Notifying Party submits that Google’s position at national level within the EEA does not materially diverge from its overall position at EEA level.²⁵¹

9.1.9.3. Digital music distribution

(369) Table 22 sets out Google’s and its main competitors’ shares in the supply of digital music streaming apps on smart mobile devices, globally and in the EEA, by the number of MAU for the years 2017, 2018 and 2019. Google is not active in the supply of digital music downloading services.

Table 22: Shares in digital music streaming apps on smart mobile devices by MAU (worldwide, 2017-2019)

AU	Worldwide (in %)		
	2017	2018	2019
YouTube Music & Google Play Music	[20-30]	[20-30]	[20-30]
Spotify	[10-20]	[20-30]	[20-30]
Apple Music	[20-30]	[20-30]	[20-30]
SoundCloud	[5-10]	[5-10]	[5-10]
Amazon Music	[0-5]	[0-5]	[0-5]
Pandora	[0-5]	[0-5]	[0-5]
Deezer	[0-5]	[0-5]	[0-5]
TIDAL	[0-5]	[0-5]	[0-5]
Napster	[0-5]	[0-5]	[0-5]
Others ²⁵²	[10-20]	[10-20]	[10-20]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties’ reply to RFI 39, Annex 1 (Table 3) and Notifying Parties’ reply to RFI 42, Annex 1 (Table 2), based on App Annie data. Google has manually reviewed the top 100 apps in App Annie’s music category. On the basis of this review, Google manually excluded apps that do not appear to provide music streaming (such as radio apps and music players). App Annie covers apps downloaded and used on smart mobile devices. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment

Table 23: Shares in digital music streaming apps on smart mobile devices by MAU (EEA, 2017-2019)

MAU	EEA (in %)		
	2017	2018	2019
YouTube Music & Google Play Music	[10-20]	[20-30]	[10-20]
Spotify	[30-40]	[30-40]	[30-40]
Apple Music	[30-40]	[20-30]	[20-30]

²⁵⁰ Form CO, paragraph 318.

²⁵¹ Notifying Party’s reply to RFI 39, question 15(e).

²⁵² Given Google’s manual review of the list of apps, the “Others” category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided market share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

MAU	EEA (in %)		
	2017	2018	2019
Amazon Music	[5-10]	[5-10]	[5-10]
Deezer	[5-10]	[5-10]	[0-5]
SoundCloud	[0-5]	[0-5]	[0-5]
TIDAL	[0-5]	[0-5]	[0-5]
Napster	[0-5]	[0-5]	[0-5]
Others ²⁵³	[0-5]	[0-5]	[0-5]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 42, Annex 1 (Table 2), based on App Annie data. Google has manually reviewed the top 100 apps in App Annie's music category. On the basis of this review, Google manually excluded apps that do not appear to provide music streaming (such as radio apps and music players). App Annie covers apps downloaded and used on smart mobile devices. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

- (370) Based on this data, Google (YouTube Music and Google Play Music) had a share of [20-30]% globally and [10-20]% in the EEA in 2019. Spotify was the second largest competitor globally (with a share of [20-30]%) and the market leader in the EEA (with a share of [30-40]%). Other important competitors are Apple Music, Amazon Music, Deezer and SoundCloud.
- (371) As regards the possible segmentation by platform, the Commission notes that there is no indication that Google's shares would be significantly higher on other platforms (PC or wrist-worn wearable). As regards Google's presence on wrist-worn wearable devices, given its limited distribution to Wear OS devices so far (and only recent launch on the Apple Watch), the Notifying Party submits that Google's share would likely be lower than for smart mobile devices. Therefore, shares on smart mobile devices give a sufficient indication of Google's market position for the purpose of the assessment undertaken in this Decision.
- (372) The Notifying Party submits that Google's position at national level within the EEA does not materially diverge from its overall position at EEA level.²⁵⁴

9.1.9.4. Digital translation

- (373) Table 24 and 25 set out Google's and its main competitors' shares in the supply of digital translation apps on smart mobile devices, globally and in the EEA, by MAU for the years 2017, 2018 and 2019.

Table 24: Shares in digital translation apps on smart mobile devices by MAU (worldwide, 2017-2019)

MAU	Worldwide (in %)		
	2017	2018	2019
Google Translate	[90-100]	[90-100]	[90-100]
Naver Papago Translate	[0-5]	[0-5]	[0-5]
iTranslate (Sonico)	[0-5]	[0-5]	[0-5]

²⁵³ Given Google's manual review of the list of apps, the "Others" category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

²⁵⁴ Notifying Party's reply to RFI 39, question 15(e).

MAU	Worldwide (in %)		
	2017	2018	2019
Microsoft Translator	[0-5]	[0-5]	[0-5]
Translate All	-	[0-5]	[0-5]
Reverso Translation	[0-5]	[0-5]	[0-5]
Others ²⁵⁵	[0-5]	[0-5]	[0-5]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 39, Annex 1 (Table 5). App Annie does not maintain a category for translation apps. For shares relating to a segment for translation apps, Google therefore manually generated an indicative list of competing apps based on a manual review of the apps available in Google's Play Store and Apple's App Store. App Annie covers apps downloaded and used on mobile devices and tablets. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

Table 25: Shares in digital translation apps on smart mobile devices by MAU (EEA, 2017-2019)

MAU	EEA (in %)		
	2017	2018	2019
Google Translate	[80-90]	[80-90]	[80-90]
Reverso Translation	[0-5]	[0-5]	[0-5]
Microsoft Translator	[0-5]	[0-5]	[0-5]
iTranslate (Sonic)	[0-5]	[0-5]	[0-5]
PONS Online Translator	[0-5]	[0-5]	[0-5]
Linguee	[0-5]	[0-5]	[0-5]
dict.cc	[0-5]	[0-5]	[0-5]
Others ²⁵⁶	[0-5]	[0-5]	[0-5]
Total	100	100	100
Total (mn)	[...]	[...]	[...]

Source: Notifying Parties' reply to RFI 39, Annex 1 (Table 6). App Annie does not maintain a category for translation apps. For shares relating to a segment for translation apps, Google therefore manually generated an indicative list of competing apps based on a manual review of the apps available in Google's Play Store and Apple's App Store. App Annie covers apps downloaded and used on mobile devices and tablets. App Annie does not track data for wrist-worn wearable devices. According to the Notifying Party, there are no available data sources for this segment.

- (374) Based on this data, Google (with Google Translate) had a share of [90-100]% globally and [80-90]% in the EEA. All other competitors had a share of below 5%.
- (375) As regards the possible segmentation by platform, the Commission notes that there is no indication that Google's shares would be significantly higher on other platforms (PC or wrist-worn wearable). As regards Google's presence on wrist-worn wearable devices, given its limited distribution to Wear OS devices so far, the Notifying Party submits that Google's share would likely be lower than for smart mobile devices. Therefore, shares on smart mobile devices give a sufficient

²⁵⁵ Given Google's manual review of the list of apps, the "Others" category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

²⁵⁶ Given Google's manual review of the list of apps, the "Others" category may still contain certain competitors, which are not in line with market definition. Nevertheless, the Commission considers that the provided share estimates are sufficient for the purpose of the assessment undertaken in this Decision.

indication of Google's market position for the purpose of the assessment undertaken in this Decision.

(376) The Notifying Party submits that Google's position at national level within the EEA does not materially diverge from its overall position at EEA level.²⁵⁷

9.1.10. *Digital Healthcare*

(377) The Transaction does not lead to any horizontal overlaps with regard to digital healthcare. As explained above, either Google or Fitbit (but not both) are active in the following markets for digital healthcare: (i) the provision of cloud and data analytics services (Google); (ii) patient monitoring services (Google); (iii) the provision of data for medical research and real-world evidence (Google); and (iv) corporate wellness programmes (Fitbit).

(378) The competitive position of each Google or Fitbit remains very modest in these markets. In the Form CO, the Notifying Party provides the following estimates for the Parties' market shares at worldwide level in the relevant markets in the digital healthcare sector identified in Section 8.11:

(a) Cloud and analytics services: Google had a market share of below [0-5]% in the last three years, while Fitbit is not active.²⁵⁸

(b) Patient monitoring services: Google had a market share of not more than [0-5]% in the last three years, while Fitbit is not active.

(c) Provision of data for medical research or real world evidence: Google had a market share of not more than [0-5]% in the last three years, while Fitbit is not active.

(d) Corporate wellness programs: Fitbit had a market share of below [0-5]% in the last three years, while Google is not active.

(379) In each of the identified markets where either of the Parties is active, there will remain many alternative players that will continue to constrain the merged entity post-Transaction, both worldwide and in the EEA.

(380) With regard to cloud and data analytics, Google Cloud competes with other cloud service businesses, including Amazon Web Services, Microsoft Azure, IBM (Red Hat), and Oracle.

(381) The following suppliers indicated that they are active in patient monitoring services: mySugr Inc./mySugr GmbH, Intel Corporation, ResMed, Parexel International, PHILIPS (Royal) International Group / Koninklijke Philips, N.V.(incl. Philips Electronics), Apple Inc., AstraZeneca, Flatiron, IQVIA, WellDoc.

²⁵⁷ Notifying Party's reply to RFI 39, question 15(e).

²⁵⁸ Cloud computing is not a necessary vertical input for Fitbit's activities either, nor are Fitbit's data a necessary vertical input for Google's cloud services. It is true that Fitbit today uses Google's cloud computing services to host some of its data storage and data processing services. But this simply reflects that Fitbit – like any other modern company – needs data storage and processing services. It can meet these needs in various ways, including through Google Cloud's offering, rival cloud offerings, and on-premise processing.

(382) Google’s (through Verily) competitors in the provision of data for medical research and real-world evidence include: IMS Health, Quintiles, ICON, MAPI, PAREXEL, PPD, RTI Health Solutions, and IPSOS.

(383) Corporate wellness programs are characterized by competition from: (i) Wearable OEMs who offer such programs (such as Garmin, Withings, Polar, Apple, and Samsung), (ii) Device-agnostic platforms such as the global Dacadoo or Fjuul (who partner with healthcare companies (for example, Optum), insurance companies (for example, Irish Life, Aon), health IT players (for example, Oracle Healthcare) and corporate customers, and other local players.

9.2. Affected markets resulting from the Transaction

9.2.1. Overview of affected markets and other relationships between the Parties

(384) Table 26 below lists the relevant markets assessed in this Decision and indicates if the Parties’ combined market share is above 20% thus giving rise to a horizontally affected market or the Parties’ individual market share exceeds 30% in vertically related or neighbouring markets thus giving rise to vertically affected markets or conglomerate relationships.

Table 26: Overview of affected markets

Relevant market	Overlap with combined market share above 20%	Individual market share above 30%	Affected market
Wrist-worn wearable devices			
Fitness trackers			
With or without GPS connectivity	No	Fitbit’s market share >30%	Yes (vertical, conglomerate)
Smartwatches			
With or without GPS connectivity	No	No	Yes (vertical, conglomerate)
With or without cellular connectivity	No	No	Yes (vertical, conglomerate)
Full or basic smartwatches	No	No	Yes (vertical, conglomerate)
Operating Systems (OSs)			
Licensable OSs for smart mobile devices	No	Google’s market share >30%	Yes (conglomerate)
Licensable OSs for wrist-worn wearable devices ²⁵⁹	No	Google’s market share >30%	Yes (vertical)
App Stores			
App stores for a given OS platform of smart mobile devices (Android App stores)	No	Google’s market share >30%	Yes (vertical)
App stores for a given OS platform of wrist-worn wearable devices (Wear OS)	No	Google’s market share >30%	Yes (vertical)
App stores for a given OS platform of wrist-worn wearable devices (Fitbit App Gallery)	No	Fitbit’s market share >30%	Yes (vertical)
General Search Services	No	Google’s market share >30%	Yes (horizontal (data), vertical)
Online Advertising Services			
Online Search Advertising Services	No	Google’s market share >30%	Yes (horizontal (data))

²⁵⁹ Potentially also segmented based along the lines of the segments of the wrist-worn wearables market.

Relevant market	Overlap with combined market share above 20%	Individual market share above 30%	Affected market
Online Display Advertising Services	No	Google's market share >30%	Yes (horizontal (data))
Online Display Advertising Off-Social Networks	No	Google's market share >30%	Yes (horizontal (data))
Ad Tech Services			
SSP Services	No	Google's market share >30%	Yes (horizontal (data))
DSP services	No	Google's market share >30%	Yes (horizontal (data))
Search ad network services and display ad network services	No	Google's market share >30%	Yes (horizontal (data))
Ad server services	No	Google's market share >30%	Yes (horizontal (data))
Analytics services	No	Google's market share >30%	Yes (horizontal (data))
Health and Fitness Apps	No	No	Yes (vertical)
Mobile Payment Services Proximity/offline mobile payment services	Combined market share >20%	No	Yes (horizontal, vertical)
Navigation Apps	No	Google's market share >30%	Yes (vertical)
Virtual Assistants	No	Google's market share >30%	Yes (vertical)
Digital Music Distribution	No	No	Yes (vertical)
Digital Translation	No	Google's market share >30%	Yes (vertical)
Digital healthcare			
Cloud and data analytics services	No	No	No (Commission assessed horizontal (data) and vertical)
Patient monitoring services	No	No	No (Commission assessed horizontal (data) and vertical)
Medical research and real-world evidence	No	No	No (Commission assessed horizontal (data) and vertical)
Corporate wellness programmes	No	No	No (Commission assessed horizontal (data) and vertical)

- (385) With the exception of mobile payment services (as discussed in the following recital), the Commission notes that there are no horizontally affected markets arising from the Transaction in the traditional sense. However, in the sections 9.3.3-9.3.5 below, the Commission will assess the potential effects of the Transaction from Google's acquisition of Fitbit as a source of data, and the use thereof – in view of Google's existing databases (and data collection capabilities) – for the supply of (i) online advertising services, (ii) general search services and (iii) digital healthcare services. For the purposes of this Decision, these potential effects are discussed in the section on horizontal effects (as well as in the section vertical effects as regards digital healthcare).
- (386) With regard to mobile payment services, Google Pay had a market share of at most [20-30]% worldwide (by transaction value) and of [10-20]% in the EEA (by users) in the supply of proximity/offline mobile payment services, while Fitbit Pay's

market share was negligible. Based on transaction value, Fitbit is listed in the category of other OEMs, including Huawei, Xiaomi, Garmin, which together account for [0-5]% based on Transaction value). Based on the number of users, the Notifying Party estimates that Fitbit's market share was [0-5]% in 2018 and [0-5]% in 2019 on a world-wide basis and [0-5]% in 2018 and 2019 in the EEA. The evidence in the Commission's file has not provided any indication which would suggest that the Parties' position at national level within the EEA would materially diverge from their overall position at EEA level.

- (387) The Commission considers that the Transaction does not give rise to horizontal non-coordinated effects in the market for mobile payments. As indicated at section 9.1.8 the market share estimates of the Parties are already very conservative as they focus on proximity/offline mobile payment services for selected mobile and wearable device OEMs. In addition, the Transaction results in a very small increment added by Fitbit (at maximum [0-5]%, likely much less). Post-Transaction, the merged entity will continue to be constrained by other OEMs with their own payment services, such as Apple Pay, Samsung Pay, Huawei Pay, Garmin Pay etc. Given the large number of established mobile payment services by wearable OEMs, it follows that wearable OEMs have already developed or could easily develop their own mobile payment services or could team up with other players.
- (388) The Transaction also creates vertical relationships between some of Google's and Fitbit's activities thereby resulting in vertically affected markets pursuant to Table 26 above), namely between (i) Fitbit's activities in the upstream market for the provision of wrist-worn wearable devices and Google's activities in the downstream market for the provision of digital healthcare services, (ii) Google's activities in the upstream market for the supply of licensable OS for wrist-worn wearable devices (Wear OS) and Fitbit's activities in the downstream market for the supply of wrist-worn wearable devices, (iii) Google's activities in the upstream markets for the supply of various apps and services and Fitbit's activities in the downstream market for the supply of wrist-worn wearable devices, (iv) Google's activities in the upstream market for the supply of app stores for a given OS platform (Android) of smart mobile devices (Google Play) and Fitbit's activities in the downstream market for the supply of wrist-worn wearable devices, (v) Google's activities in the upstream market for general search services and Fitbit's activities in the downstream market for the supply of wrist-worn wearable devices, (vi) Fitbit's activities in the upstream market for the supply of app stores for a given OS platform of wrist-worn wearable devices (Fitbit App Gallery) and Google's activities in the downstream market for the supply of digital apps and services.
- (389) On these vertically affected markets, the concern investigated by the Commission concerns the foreclosure of an input, regarding which the merged entity will hold a significant market share, potentially affecting competitors of the merged entity active on downstream markets. Accordingly, in this Decision (Section 9.4), the Commission will assess the potential vertical effects of the Transaction as regards (i) input foreclosure from access to Fitbit data to the detriment of digital healthcare players, (ii) input foreclosure from access to Wear OS to the detriment of wrist-worn wearable suppliers, (iii) input foreclosure from access to various Google apps and services to the detriment of wrist-worn wearable suppliers, (iv) input foreclosure from access to Google Play to the detriment of wrist-worn wearable suppliers, (v) input foreclosure from access to Google Search to the detriment of wrist-worn

wearable suppliers, (vi) input foreclosure from access to Fitbit app stores to the detriment of app developers.

- (390) The Transaction also creates conglomerate relationships between some of Google's and Fitbit's activities (thereby resulting in some market shares above 30% pursuant to Table 26 above), namely Google's activities in the market for the supply of licensable OSs for smart mobile devices (Android OS) and Fitbit's activities in the market for the supply of wrist-worn wearable devices. Accordingly, in this Decision (Section 9.5), the Commission will assess the potential conglomerate effects of the Transaction stemming from the possible leveraging of Google's position in the supply of licensable OSs for smart mobile devices (Android OS) into the supply of wrist-worn wearable devices.
- (391) Moreover, in this Decision (Section 9.6), the Commission will also assess possible non-horizontal competition concerns arising from Google's access to commercially sensitive information relating to third-party apps through Fitbit (as Fitbit allows its users to connect their Fitbit accounts with a number of third-party apps, Fitbit might then be able to gain access to additional information on the respective third-party apps) and whether this could lead to any non-horizontal non-coordinated anticompetitive effects.

9.2.2. *The possible effects of the Transaction on potential competition in the supply of smartwatches*

- (392) [...]. The Commission therefore also assessed the possible effects of the Transaction on potential competition in this market as regards (i) the elimination of Google as a potential competitor [...] and (ii) the potential effects of Google's entry post-merger (under the assumption that entry would take place despite the Transaction).
- (393) According to the Notifying Party [Google's product strategy].²⁶⁰ In particular, [Google's product strategy]. Google viewed this [Google's product strategy].²⁶¹ [Google's product strategy].²⁶²

²⁶⁰ Based on the Notifying Party's submission, Alphabet's subsidiary Verily Life Sciences ("Verily") designed the Verily Study Watch focused on health research. The Verily Study Watch is a wearable device designed to capture patient health data during clinical trials. The Notifying Party explains that the Study Watch is not a fitness tracker or smartwatch, nor is it a precursor to a consumer wrist-worn wearable device – it is a niche product for purely clinical use. The Study Watch was launched in April 2017 but it has never been commercially available [Verily's product strategy]. The Study Watch is solely distributed to participants in medical research studies run by Verily through its partners. The Study Watch's functionality is limited to the features necessary for its clinical purpose. It has simple display and user interface that can show either the time or usage instructions. The device provides no other information or feedback to users (it cannot provide users with information on their step count or heart rate, in the way that even the simplest of fitness trackers do, nor can it run apps or perform any of the other functions associated with smartwatches). See Form CO, paragraphs 207-211. Furthermore, in the Response to the 6(1)(c) decision, the Notifying Party explained that Verily is active in the provision of data for medical research or real-world evidence services via the Study Watch, while Fitbit is not active in this space and does not provide relevant inputs for these activities. In any event, Verily's work with healthcare institutions (be it in research, clinical care, or innovation) is generally based on a much larger range of data points, including medical imagery or electronic health records for instance. Consumer devices on the other hand collect a relatively limited number of health data points. The Commission considers on that basis that the Verily Study Watch is not part of the market for wrist-worn wearable devices assessed in this Decision, irrespective of any potential segmentation as set out in Section 8.2.1 and therefore is not reflected in the market shares provided for the possible segmentations.

²⁶¹ [Google's product strategy]. [Google's product strategy].

- (394) Based on the Notifying Party's submission, [product strategy]. Therefore, in the Notifying Party's view, [product strategy]. In addition, the Notifying Party submits that, [product strategy].²⁶³
- (395) Based on [Google's product strategy]. [Google's product strategy]. [Google's product strategy].²⁶⁴ Based on the information currently available, [Google's product strategy].
- (396) As regards the first scenario, whereby the Transaction would have eliminated Google as a potential competitor which would have entered the market absent the Transaction, according to paragraph 60 of the Horizontal Merger Guidelines, for a merger with a potential competitor to have significant anti-competitive effects, two basic conditions must be fulfilled: (i) the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force and (ii) there must not be a sufficient number of other potential competitors, which could maintain sufficient competitive pressure after the merger. The Commission considers that [Google's product strategy], Google would be unlikely to be able to exert a significant competitive constraint on established market players, at least in the short term. [Google's product strategy].²⁶⁵ Therefore, the Commission considers that the first condition of paragraph 60 of the Horizontal Merger Guidelines is not met. In any event post-Transaction there will remain a sufficient number of alternative players as indicated in Section 9.1.1 to maintain sufficient competitive pressure in the market for smartwatches and thus the second condition set out in paragraph 60 of the Horizontal Merger Guidelines is not met either.
- (397) In the alternative, even if Google [...] decided to enter the market for smartwatches post-Transaction [...] (independently from Fitbit's future product offering), based on the information currently available, the Commission considers it unlikely that the Transaction would give rise to any competition concern in this regard. Fitbit has a market share below 30% in the smartwatches segment as well as in the overall wrist-worn wearable market under any plausible market definition and has been struggling in the recent past, while the market for wrist-worn wearable devices seems to be very competitive (see Section 9.1.1.1). While Fitbit's market share is above 30% in the fitness tracker segment, [...] the fitness tracker segment is also very competitive (see Section 9.1.1.3).
- (398) As regards Fitbit's ability to compete in innovation with regard to smartwatches, the Commission notes that [Fitbit's product strategy], there are also no competitive relationships that would lead to the Transaction reducing Google's incentives to innovate in the future. Based on the Notifying Party's submission, the Commission considers that there is no possible market assessed in this Decision where Fitbit is the only or main source of pressure on Google to innovate.²⁶⁶ For these reasons, the Commission considers that the Transaction would not unduly restrict competition in

²⁶² Form CO, paragraphs 196-205.

²⁶³ Form CO, paragraph 34.

²⁶⁴ Form CO, paragraphs 34-35.

²⁶⁵ See [Reference to internal documents].

²⁶⁶ Form CO, paragraphs 36 and 461.

innovation as regards the supply of smartwatches. This issue will, therefore, not be further discussed in this Decision.

9.3. Horizontal effects

9.3.1. Introduction

- (399) On the basis of the analysis of the shares of the relevant markets, the Commission finds that the Transaction does not give rise to any horizontally affected markets in a traditional sense.²⁶⁷ However, the Commission considers that, after the Transaction, Google's availability of data pertaining to certain health and personal activities, which can be obtained from Fitbit's wearable devices, would increase Google's power in some data-based markets by further strengthening Google's ability to commercially exploit such data.
- (400) In particular, the Transaction will combine under the ownership of Google the databases (and data collection capabilities) of the Parties. [Parties' product strategy]. It is therefore foreseeable that Google's availability of a new dataset from Fitbit post-Transaction could add to the current portfolio of data exploitable by Google, in particular for advertising purposes and in digital healthcare, that would be impossible in the absence of the Transaction.
- (401) According to paragraph 36 in the Horizontal Merger Guidelines, a merger can significantly impede effective competition if the merged entity gains such a degree of control over an asset that expansion or entry by rival firms may be more difficult.
- (402) In the present case, the Transaction would allow Google to combine its already very prominent datasets with those of Fitbit, thus strengthening the Parties' ability to supply relatively better services in certain data-based supply markets and foreclose the competitors' entry and ability to expand in such markets. Such a concern would arise to the extent the merged entity has the ability to combine the two datasets and is therefore merger specific.
- (403) In that respect, as set out in *Apple/Shazam*, the Commission notes that there are certain regulatory limitations to prevent the illegal combination of datasets.²⁶⁸ However, in the present circumstances, Google's availability of additional datasets as a result of the Transaction, even account taken of the regulatory limits, would not eliminate the risks that the Parties' control on such data could render the expansion or entry by rival firms more difficult if not impossible, as laid down in paragraph 36 of the Horizontal Merger Guidelines.
- (404) First, the Commission recalls that the processing of personal data is subject to the applicable EU rules dealing with data protection, and most notably to the Regulation (EU) 2016/679 of the European Parliament and of the Council²⁶⁹ ("GDPR"). Such

²⁶⁷ With the exception of Mobile Payment Services, see recital (379).

²⁶⁸ Commission decision of 6 September 2018 in case M.8788 – Apple/Shazam, recitals 225-235.

²⁶⁹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1). In this Decision, the Commission discusses the rules under that Regulation only for the purposes of the assessment the Transaction under the Merger Regulation. The analysis in this Section is therefore entirely without prejudice to the relevant administrative or legal procedures where the Parties' compliance with those rules may be assessed.

rules apply to personal data, that is "any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person"²⁷⁰.

- (405) Pursuant to Article 5(1)(b) GDPR, personal data which has been collected for specified, explicit and legitimate purposes may not be further processed in a manner that is incompatible with those purposes. Data which qualifies as personal data under the GDPR can be transmitted to and processed by a third party only to the extent that there exists a legal basis for the transmission to the third party and a legal basis for the processing by that third party.
- (406) Further, the GDPR requires that individuals concerned by the processing must be informed in a transparent manner on all relevant circumstances of the processing, including on the identity of each controller and the purposes of the processing.²⁷¹
- (407) Finally, to the extent the data processing activities concern health data, Article 9 of GDPR provides a general, although not absolute, prohibition.²⁷²
- (408) Second, the Commission also recalls that Union rules dealing with privacy and the protection of the confidentiality of communications, notably Directive 2002/58/EC of the European Parliament and of the Council²⁷³ ("the e-Privacy Directive") may also pose some limitations to data combinations.
- (409) Article 5(3) of the e-Privacy Directive requires that Member States ensure that the storing of information or gaining access to information already stored in the terminal equipment of a subscriber or user is only allowed on condition that the subscriber or user concerned has given his or her consent, having been provided with clear and comprehensive information, in accordance with the GDPR, inter alia, about the purposes of the processing. This does not prevent any technical storage or access for the sole purpose of carrying out the transmission of a communication over an electronic communications network, or as strictly necessary for the provider of an information society service explicitly requested by the subscriber or user to provide the service.
- (410) Google and Fitbit are accountable to implement appropriate technical and organisational measures to ensure and to be able to demonstrate that processing is performed in accordance with the GDPR and the e-Privacy Directive, as transposed in Member States' laws. In particular, they must ensure the lawfulness of their data

²⁷⁰ GDPR, Article 4 of the GDPR.

²⁷¹ GDPR, Article 5 of the GDPR.

²⁷² Article 9(1) GDPR provides that "Processing of [...] data concerning health [...] shall be prohibited". However, this general prohibition does not apply, upon the occurrence of one of the exceptions provided for in Article 9(2), including the case where the user has given consent to the data processing.

²⁷³ Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector ("Directive on privacy and electronic communications" or "e-Privacy Directive", OJ L 201, 31.7.2002, p.37-47). In this Decision, the Commission discusses these rules only for the purposes of the assessment the Transaction under the Merger Regulation. The analysis in this Section is therefore without any prejudice to the relevant administrative or legal procedures where the Parties' compliance with those rules may be assessed.

collection from the users' devices and of the processing of personal data they collect and comply with the principles relating to the processing of personal data, including the principles of purpose limitation, fairness, legality (in particular having chosen appropriate legal basis) and transparency.

- (411) Without prejudice to the assessment of the matter by the competent data protection authorities and based on the representations made by the Parties in the course of the proceedings, the assessment of the effects of the Transaction under the Merger Regulation in the present proceedings is predicated on the assumption that the Parties could lawfully combine their datasets. Should such assumption prove to be incorrect, the assessment of the effects of the Transaction under the Merger Regulation would be the same, but the Parties remain accountable for any breach of GDPR or the e-Privacy Directive, as transposed in Member States' laws.
- (412) The Commission concludes that, while there EU rules dealing with data protection, privacy, and the protection of the confidentiality of communications that have the aim to prevent the illegal combination of datasets, these regulations do not eliminate the risks that the Parties' control on such data could render the expansion or entry by rival firms more difficult if not impossible.
- (413) Against this background, in the following sections the Commission examines whether, the combination of Fitbit to Google's data (and data collection capabilities) could give rise to anticompetitive horizontal non-coordinated effects by strengthening Google's market position in the supply of (i) online search and display advertising services and ad tech services, (ii) general search services, or (iii) digital healthcare services, thereby significantly impeding effective competition in these market.

9.3.2. *Fitbit data*

- (414) By means of its own devices and services, Fitbit collects several types of data. The source of these types of data can be:
- (a) A connected device, usually a Fitbit device (wrist-worn wearable device of scale) but exceptionally it can also be non-Fitbit devices on which Fitbit apps are installed (for example, via "MobileTrack", a solution which enables the use of the Fitbit mobile app without a Fitbit device, using the user's smartphone's sensors to track basic activity data such as steps, distance, and calories burned);
 - (b) A manual data input by a user on the Fitbit apps;
 - (c) An inference, when the data is generated from the user's interaction with Fitbit's services and/or calculated from other types of data.²⁷⁴
- (415) Table 27 lists the type of data collected by Fitbit from the three above mentioned sources.

²⁷⁴ When data is generated from "raw" data points that are collected by the Fitbit device, the calculations generally take place on the device itself without the raw data being transferred to the Fitbit server. [Fitbit's business processes].

Table 27: Types of data collected by Fitbit

Fitbit data category	Data	Data source
User Profile and Account	User Names and IDs	Manual, Inference
	Email Address	Manual
	Biography	Manual
	Join Date	Inference
	Location	Manual, Inference
	Gender	Manual
	Date of Birth	Manual
	Height	Manual
	Stride Length	Manual, Inference
	Units of Measurement Used	Manual, Inference
	Sleep Tracking Setting (Normal Or Sensitive)	Manual, Inference
	Clock Time Display Setting	Manual, Inference
	Status as Active	Inference
	Status as Child Account	Inference
	User Account Access and Management Events	Inference
	Fitbit Premium Subscriptions and Transactions	Inference
Fitbit Protection Plan Information	Inference	
Weight and Body Fat	Weight	Manual, Device
	Body Mass Index	Manual, Device
	Body Fat Percentage	Manual, Device
Device	Steps	Device, Inference
	Distance	Device, Inference
	Floors	Device, Inference
	Altitude	Device, Inference
	Calories	Device, Inference
	Basal Metabolic Rate (BMR) Calories	Device, Inference
	Device Information (for example, Type, Last Sync Date and Time, Alarm Update Date and Time, Battery Level)	Manual, Inference
	Device Configuration Information (for example, Display, Right/Left Handedness, Payments Enabled, Wi-Fi Connection, Mobile App Information)	Manual, Inference
Activities and Active Minutes	Activity Name	Device, Inference, Manual
	Activity Minutes (duration)	Device, Inference, Manual
	Activity Calories	Device, Inference, Manual
	Activity Distance	Device, Inference, Manual
	Activity Steps	Device, Inference
	Activity Floors	Device, Inference
	Activity Altitude	Device, Inference
	Activity Heart Rate	Device, Inference

Fitbit data category	Data	Data source
	Activity Speed	Device, Inference
	Activity GPS	Device, Inference
	Activity Pace	Device, Inference, Manual
	Activity Floors	Device, Inference
	Lightly Active Minutes	Device, Inference
	Moderately Active Minutes	Device, Inference
	Sedentary Minutes	Device, Inference
	Very Active Minutes	Device, Inference
	Active Zone Minutes	Device, Inference
	Swimming (length, stroke style)	Device, Inference
	Activity Pace	Device, Inference, Manual
Female Health	Menstrual Cycle Log	Manual
	Menstrual Cycle Dates	Manual, Inference
	Birth Control Log	Manual
	Pregnancy History Note	Manual
	Birth Control History Note	Manual
	Average Period Stats	Inference
Sleep	Sleep Log (for example, date, duration)	Device, Inference, Manual
	Sleep Efficiency	Device, Inference
	Sleep Stages (for example, timestamp, length)	Device, Inference
	Sleep Score	Device, Inference
Biometrics	Blood Glucose	Device, Inference
Nutrition	Water Intake	Manual
	Food Log Item	Manual, Inference
	Favorite Foods	Manual, Inference
	Food Log Item Nutritional Information (for example, calories, macronutrients)	Manual, Inference
Heart Rate and VO2 Max (maximal oxygen consumption)	Heart Rate	Device, Inference
	Heart Rate Variability	Device, Inference
	Cardio Fitness Score	Device, Inference
	Time In Heart Rate Zones	Device, Inference
	Resting Heart Rate	Device, Inference
	VO2 Max Values	Device, Inference
	Electrocardiogram	Device, Inference
	Breathing Rate	Device, Inference
Estimated Oxygen Variation	Estimated Oxygen Variation	Device, Inference
	Blood Oxygen Saturation (SpO2)	Device, Inference
Electrodermal Activity (EDA)	Electrodermal Activity Responses	Device, Inference

Fitbit data category	Data	Data source
Temperature and Symptoms	Body Temperature	Manual
	Sickness Symptoms Log	Manual
	Skin Temperature Variation	Device, Inference
Social	Friends	Manual
	Messages and Conversations	Manual
	Social Feed Posts, Comments, and Cheers	Manual
	Social Groups	Manual
	Blocked Users	Manual
Corporate Wellness	Corporate Wellness Program Participation	Inference
Mindfulness	Meditation Minutes	Device, Inference
	Mood Reflection	Manual
	Stress Management Score	Device, Inference
Achievements	Badges derived from Measured Body Data or Health and Fitness Activity Location Data	Device, Inference
	Trophies derived from Measured Body Data or Health and Fitness Activity Location Data	Inference
	Challenge Participation	Inference
	Challenge Messages and Cheers	Inference
Fitbit Coach	Fitbit Coach Workouts (for example, Workout Duration, Calories Burned)	Device, Manual, Inference
	Fitbit Coach Achievements	Inference

Source: Form CO, Annex 6.1. (Table 1) and Notifying Party's reply to RFI 41, question 4.

- (416) Fitbit also collects data about the third-party devices and computers that a user employs to access the Fitbit services, including IP addresses, browser type, language, OS, Fitbit or mobile device information (including device and app identifiers), the referring web page, pages visited, and cookie information.²⁷⁵
- (417) Finally, the Fitbit services include features that use geolocation data, including GPS signals, device sensors, Wi-Fi access points and cell tower IDs. Fitbit collects this type of data if the user grants Fitbit access to its location. Users can always remove this access using their Fitbit device or mobile device settings. Fitbit may also derive a user's approximate location from their IP address.²⁷⁶ As of November 2020, four Fitbit devices have on-board GPS: the Charge 4 fitness tracker (launched in April 2020), as well as the smartwatches Ionic (launched in September 2017), Sense and Versa 3 (both launched in September 2020). The GPS only tracks the user location when activated (for example, when the user prompts the device to track a run).²⁷⁷ None of Fitbit's other devices has on-board GPS or cellular connectivity, meaning

²⁷⁵ Form CO, Annex 6.1, paragraph 3.

Fitbit does not receive data from Apple HealthKit when the Fitbit app is installed on iOS devices, though Google Fit does. See Form CO, Annex 6.1, footnote 6, and response to RFI 12, question 6 (annexed to the Form CO).

²⁷⁶ Form CO, Annex 6.1, paragraph 4.

²⁷⁷ Form CO, footnote 68.

they cannot collect location data independently (but, instead, rely on the paired smart mobile device and its GPS functionality for information on the user's location).²⁷⁸ [Fitbit's product strategy].²⁷⁹

(418) To assess the relevance of Fitbit's database, the Commission has requested data from the main wearable OEMs on several metrics related to data collection. That analysis allowed the Commission to determine the volume, value, variety and velocity of update of the databases maintained by Fitbit, its competitors and also Google. On that basis, the Commission determined that Fitbit entertains a significant number of monthly active users in the EEA, namely more than [...] million in March 2019. It also emerged that Fitbit collects data about a very significant number of user/days,²⁸⁰ including from devices with optical sensors, and that it covers a large diversity of data types (as listed in Table 27).

9.3.3. *Fitbit as source of data for possible use in online advertising services*

(419) Several respondents to the market investigation expressed the concern that post-Transaction, Google could start using Fitbit users' data with a view to strengthening its position on the concerned online advertising markets.²⁸¹ The Commission assesses that claim below, by reviewing the effects of the possible exploitation by Google of such data.

9.3.3.1. The Notifying Party's view

(420) In the Form CO and in its Response to the Article 6(1)(c) Decision as well as in further submissions made during the course of the proceedings, the Notifying Party submits that the Fitbit data would not be particularly useful to Google's core areas of activity in online advertising.

(421) First, the Notifying Party claims this would be evidenced by the fact that Google does not use Google Fit health and wellness data for its ads and that Google has publicly committed not to use Fitbit health and wellness data for Google ads.

(422) Second, the Notifying Party claims that Fitbit does not use user health and wellness data for ads and that access to Fitbit user health and wellness data will not allow Google to foreclose advertising competitors.

(423) Third, the Notifying Party claims that health and wellness data is not a valuable input for search and display advertising.

²⁷⁸ Form CO, paragraphs 6 and 122.

²⁷⁹ Form CO, paragraphs 122-124.

²⁸⁰ User/days of data correspond to the sum, for a given time horizon, of the total number of users from which a company collected data on each day (via its wearable devices and any of its companion apps and health and fitness apps/services); for example for an horizon of 2 days, if in the first day a company collected data from a total of 10 users and in the second day from a total of 13 users, there would be 23 user days of data.

²⁸¹ The Commission does not assess the potential anti-competitive effects that could stem from a foreclosure of access to Fitbit data by Google's competitors in advertising (which currently rely on such data) because today Fitbit data are not used for advertising purposes (see replies to questionnaire QA on wearables, search and advertising, questions D.17, D.18, D.23, and D.24), neither there is evidence in the file suggesting that Fitbit had a plan to offer access to its data for advertising purposes absent the Transaction. Likewise the Commission has not found any evidence suggesting that Fitbit was likely to make any material entry in an online advertising market.

- (424) Finally, the Notifying Party claims that Fitbit is just one of many sources of health and wellness data and that any (unlikely) use of Fitbit user health and wellness data to improve Google advertising would be procompetitive. This would be in particular because Fitbit users' health and wellness data is not particularly historic or voluminous and does not cover unique data types. Notably there would be only [...] million Fitbit's monthly active users in the EEA (against [...] million Google Display Network users and [...] million logged-in Google Search users in 2019 in the EEA) and approximately [...]% of Fitbit users active in the first quarter of 2020 in the EEA did not use a Fitbit device before January 2017. Fitbit users' data would be hypothetically relevant to, at most, improving the targeting of ads accounting of just up to [0-0.5]% of Google's search ad revenues and [0-0.5]% of Google's display ad revenues.
- (425) In its Response to the Article 6(1)(c) Decision, the Notifying Party additionally submits that, since pre-Transaction Google and Fitbit are not competing in the same market, a "horizontal" theory of harm can be excluded. The theory of harm could at most be an "efficiency offence," which postulates that Google will use Fitbit users' data to improve its online advertising services, and that rivals might not be able to compete with Google's improved offering.
- (426) The Notifying Party moreover argues that, since in its decision the Commission would have claimed that the Parties would derive an efficiency with likely anticompetitive effects from the Transaction, it would be the Commission's burden to (i) quantify the efficiency it claims will cause foreclosure and (ii) prove that this efficiency will be outweighed by the anticompetitive effects.

9.3.3.2. The Commission's assessment

- (427) The Commission considers that, although pre-Transaction Fitbit is not competing in the same markets as Google, the Transaction would give Google control over an important asset, the Fitbit data, that would further strengthen Google's dominance in the markets for the supply of online search advertising services. The Commission thus maintains its concerns, as set out in the Article 6(1)(c) Decision, as to the compatibility of the Transaction with the internal market relating to a strengthening of Google's dominant position in the supply of online search advertising (and possible segments thereof).
- (428) In the opinion of the Commission, such concerns would exist in view of: (i) the relevance of the data (and data collection capabilities) acquired by Google as a result of the Transaction for serving and displaying ads; (ii) Google's position in the relevant markets related to the supply of online search advertising services, and sub-markets/segments thereof, referred to in Section 8; (iii) the strengthening of Google's market position and impairment of rivals' expansion in the mentioned markets as a result of the data combination; and (iv) the absence of countervailing entry or buyer power. Each of these aspects is assessed in detail below.
- (429) The Commission cannot exclude concerns in relation to the supply of online display advertising markets (and possible segments thereof) and the supply of "ad tech" services.

9.3.3.2.1. Relevance of Fitbit data for online advertising

- (430) As regards the relevance of Fitbit data for online advertising the Commission notes that, in the market investigation, all respondents who provided an informative response (including players active in the advertising sector at different level of the

value chain) indicated that Fitbit's data could be important for the supply of competitive online search and display advertising services.

- (431) In particular, with respect to the supply of online search advertising services, whilst several respondents acknowledged that the importance of search query data is much greater than that of any other data, the vast majority of respondents stressed the valuable insights that Fitbit data could profile to build user profiles that could be used to serve better-tailored ads.²⁸² For example, one respondent explained that “[d]ata on users behaviour (being able to differentiate sedentary behaviours or to split audiences according to how sportive they are, for example [sic] targeting heavy runner only) is something we cannot find in another search engine”. For example, “if the advertiser is producing high-performance triathlon suits for 500 EUR, it might be able to not only bid on key words "thriathlon" [sic] and "gear", but also to select only user who seem to be triathletes (based on Fitbit's data).” “Fitbit's data could be important for the supply of competitive online search advertising services. In particular, location data, collected by Fitbit, is a very important signal; apart from that, demographic data and activity data can be used to improve the relevance of advertising”.
- (432) With respect to the supply of online display advertising services, respondents also highlighted the relevance of Fitbit data and the value that such data could generate for display advertising purposes by allowing a better targeting of the ads to be displayed.²⁸³ For example, one respondent explained that “Fitbit's data regarding location and biometrics could be useful in targeting display advertising.” In the same vein, other respondents explained that “the additional data could help the suppliers [of display ads] to complete the user profile and hence provide better advertising services through better personalization”, “Fitbit's data could be important for the supply of competitive online display advertising services. In particular, location data, collected by Fitbit, is a very important signal. Apart from that, demographic data and activity data can be used to improve the relevance of advertising” and that Fitbit data “would allow more precise consumer targeting in combination with other factors”. One respondent added that “[f]itness data and health data is very interesting for providers of sports and health display advertising. The pharmaceutical industry represents a large part of the best-booking advertisement customers which are especially interested in the data described above [the data collected by Fitbit]”.
- (433) Respondents also explained that for both online search and display advertising, ad targeting was important in the advertisers' decision of where to allocate their online search advertising services.²⁸⁴ Respondents explained:
- (a) “ad targeting is very important to advertiser's decisions of where to allocate their online ad spend in general. Generally, the more personalised an

²⁸² Replies to questionnaire QA on wearables, search and advertising, question D.19 and replies to questionnaire QE to online advertising services providers, questions in section D.

²⁸³ Replies to questionnaire QA on wearables, search and advertising, question D.25, replies to questionnaire QE to online advertising services providers, questions in section E, and replies to questionnaire QF to advertisers and media agencies, questions in section E.

²⁸⁴ Replies to questionnaire QE to online advertising services providers, questions D.16 and E.24, and replies to questionnaire QF to advertisers and media agencies, question E.20.

advertisement is, the more useful it is to the user and the more likely the advertiser is to achieve its objectives”;

- (b) “with audience targeting, advertisers can evaluate on an ongoing basis which audiences are engaging with their ads. Based on that information, advertisers are able to optimize their campaigns by shifting fund allocation towards the right audience”.

(434) On this basis the Commission considers that, for the purpose of this Decision, Fitbit data is likely a relevant and new addition to Google’s datasets as it constitutes a valuable input in the markets for online display advertising services, and sub-markets/segments thereof, whilst it cannot be excluded that such data is also relevant and constitutes a valuable input in the markets for the supply of online search advertising services. The Commission also considers that the same considerations would apply to the availability of the data in question for Google’s ad tech services: indeed, these services aim at ultimately enabling the delivery of an effective and targeted ad, thus the analysis on the relevance of Fitbit data equally applies at all level of the online advertising value chain.²⁸⁵

9.3.3.2.2. Google’s market position

(435) As regards Google’ position in the affected markets, the Commission notes the following.

(436) In relation to online search advertising, in Google AdSense Google has been found to hold a dominant position in at least the following national markets in the EEA and during at least the following periods:²⁸⁶

- (a) between 2006 and 2016 in Austria, Belgium, Cyprus, Denmark, Estonia, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Spain and the United Kingdom;
- (b) between 2007 and 2016 in Norway and Poland;
- (c) between 2008 and 2016 in Hungary, Romania and Sweden;
- (d) between 2009 and 2016 in Finland and Slovenia;
- (e) between 2010 and 2016 in Bulgaria and Slovakia;
- (f) between 2011 and 2016 in the Czechia and
- (g) between 1 July 2013 and 2016 in Croatia.

(437) In Google AdSense, the Commission based its conclusion on the market shares of Google, which in many cases was close to 100%, and competing online search

²⁸⁵ See in this regards also replies to questionnaire QA on wearables, search and advertising, question D.29.

²⁸⁶ The Commission’s conclusion is conservative and favourable to Google because the Commission has left open whether Google may have been dominant in certain national markets for online search advertising in the EEA during years when Google has been unable to provide information on market shares in the Google AdSense proceedings; see Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, footnote 249.

advertising providers, the existence of barriers to entry and expansion and the lack of countervailing buyer power.²⁸⁷

- (438) For the purpose of this Decision, the Commission considers that the evidence in the Commission's file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to Google's position in any national market for the supply of online search advertising (including if the split between desktop and mobile is considered) than the view that the Commission has taken in Google AdSense.
- (439) First, as outlined in Section 9.1.5, Google's market shares have not materially changed compared to the Commission's findings in Google AdSense. Indeed, as illustrated by Table 11 above, in all national markets for online search advertising for which the Commission could compute market shares, Google's shares are above 90%. The Commission's conclusion is not affected by Google's claim that the data on the basis of which the Commission has calculated market shares is unreliable.²⁸⁸ In any event, Google has not proposed any alternative method of calculating market shares; thus the market shares presented in Section 9.1.5 represent, for the purpose of this Decision, the most reliable proxy of Google's market position.
- (440) Second, no evidence in the file suggests that the situation as regards barriers to entry and expansion has materially changed compared to the Commission's findings in Google AdSense (see Section 9.3.3.2.4.1).
- (441) Third, no evidence in the file suggests that the buyer power of advertisers has materially changed compared to the Commission's findings in Google AdSense (see Section 9.3.3.2.4.2).
- (442) In relation to online display advertising, and sub-markets/segments thereof, as well as ad tech services, for the purpose of this Decision, the Commission considers that despite holding some degree of market power, Google's position in these markets is overall weaker than on the markets for online search advertising. The Commission bases this conclusion on the market shares of Google and on the fact that it cannot exclude that the market for online display advertising is characterised by the existence of barriers to entry and expansion and the lack of countervailing buyer power, as described in Sections 9.3.3.2.4.1 and 9.3.3.2.4.2. However, the Commission does not exclude that Google could hold a dominant position at national level in some specific segments of ad tech services.
- (443) It follows from the above considerations that Google should be considered to be dominant in the market for the supply of online search advertisement. Google also holds some degree of market power in the market for the supply of online display advertising, and sub-markets/segments thereof, as well as "ad tech services".

9.3.3.2.3. Effects of the data combination

- (444) As regards the effects of the data combination in the various markets for the supply of online advertising services, the Commission notes the following.

²⁸⁷ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, Section 7.2.

²⁸⁸ Reply to RFI 24.

- (445) In the market investigation, all respondents who provided an informative response (including players active in the advertising sector at different level of the value chain) expressed the view that the aggregation of Fitbit's data to the large database of Google would materially improve Google's ability to personalise and target its online advertisement and strengthen Google's position in the supply of online search and display advertising services.²⁸⁹
- (446) In particular, with respect to the supply of online search advertising services, respondents explained their answer as follows:²⁹⁰
- (a) "Google already has an unassailable position in online search advertising services, but any data that Google obtains access to in addition to the copious amounts of data it already possesses will enable it to create ever more detailed user profiles and ad targeting capabilities, and hence will strengthen its position as a provider of online search advertising services";
 - (b) "Adding in Fitbit's data would enrich the dimensions and granularity of Google's user data and consequently would help strengthen Google's services in advertising through better personalization";
 - (c) "The more Google acquires users related data, the more Google strengthens its position in the supply of online search advertising services";
 - (d) "By getting access to Fitbit data, Google can target customers at an even more granular level, making its advertising services even more powerful barriers to entry. For instance, having access to healthcare data would allow Google to offer advertisers a target segment of consumers with higher cardiac risks based on heartbeat rate values";
 - (e) "Google has the capabilities to develop detailed profiles of individual users, with information about particular user's search history, browsing, location and other information. It seems very valuable to supplement this with Fitbit data, because wearables data is unique to a certain extent (e.g. heart rate, sleep activity and oxygen saturation). This would allow Google to gain further helpful insights. These insights may prove helpful for targeted advertisement";
 - (f) "Example: If the advertiser is producing high-performance triathlon suits for 500 EUR, it might be able to not only bid on key words "thriathlon" [sic] and "gear", but also to select only user who seem to be triathletes (based on Fitbit's data). The more information on a person can be extracted/extrapolated from the Fitbit data, the more valuable the information for Google";
 - (g) Privacy International stated that the "proposed acquisition would reinforce Google's market power in the search and search advertising markets, in which Google already holds a very significant dominant position".²⁹¹

²⁸⁹ Replies to questionnaire QA on wearables, search and advertising, questions D.21 and D.27; replies to questionnaire QE to online advertising services providers, questions D.15, D.17, D.19, E.23, E.25, and E.27, and; replies to questionnaire QF to advertisers and media agencies, questions E.19, E.21, and E.23.

²⁹⁰ Replies to questionnaire QA on wearables, search and advertising, question D.21, and; replies to questionnaire QE to online advertising services providers, question D.15.

²⁹¹ Privacy International, Submission to the European Commission regarding the proposed acquisition of Fitbit, Inc. by Google LLC, page 9.

- (447) With respect to the supply of online display advertising services, respondents explained as follows:²⁹²
- (a) “any additional and unique data sources complementing the copious amounts of data Google already possesses can be expected to increase the strength of its online display advertising services by making it more attractive”;
 - (b) “Google can integrate this information in its offerings; any additional data helps Google better understand customers and build up distance to its competitors with less data and therefore less targeted and less informative search results;”
 - (c) “As a result of the Transaction, Google will acquire an additional, unique and rich source of user data that has the potential to strengthen Google’s data advantage in online advertising. [...] Aggregation of Fitbit’s data has the potential to incrementally increase Google’s data dominance, and by extension further strengthen Google’s dominance on the demand-side”.
- (448) Respondents in particular explained that Fitbit’s database would provide Google with an increment of location data that materially improves its ad targeting in relation to online search and display advertising. However, there was no consensus on whether improved targeting based on Fitbit’s location data would imply an important increment in the advertisers’ decision of where to allocate their advertisement spending.²⁹³ Respondent explained:
- (a) “Google likely already has substantial location data relating to its users. The incremental importance of Fitbit’s data depends on whether that data fills in any gaps in the data which Google already possesses”;
 - (b) “this specific location increment probably wouldn't represent any new significant argument for Google's advertisers, as Google Android phones are already providing majority of such location data that are of same quality as would be the data from Fitbit, ie. phone is with you almost all the time as well as your watches. Exception would be for those cases where Fitbit owner is not a Google Android device owner”;
 - (c) “Fitbit may allow Google access to the location data of a subset of consumers to whom it does not yet have access: Apple iPhone users that use Fitbit but who do not have any of Google’s location tracking apps installed. As long as those users enable the Fitbit app to track their location, Google would gain location data for users for whom Google did not have location data before”.
- (449) More generally, in relation to both online search and display advertising, one respondent explained that “Google relies on intimate profiles of users for its behavioural advertising services, both for search and for display on social media networks and other domains. The more intimate the level of personalised information which Google holds about a user, the greater Google’s ability to direct targeted behavioural advertising to that user, and the greater Google’s ability to sell its behavioural advertising services to advertisers. Put simply, the acquisition by

²⁹² Replies to questionnaire QA on wearables, search and advertising, question D.27.

²⁹³ Replies to questionnaire QE to online advertising services providers, questions D.20 and E.28, and; replies to questionnaire QF to advertisers and media agencies, questions E.24.

Google of even more personal data to add to user profiles can only increase their intimacy and thus their utility for behavioural advertising.”²⁹⁴ In the same vein, another respondent explained that, “[b]y combining data they already have with other data types held by Fitbit, Google could potentially enrich their datasets and provide more detailed audience insights and segmentation that advertisers could use to target consumers on the basis of (inferred) data pertaining to lifestyle”.²⁹⁵

- (450) In this context, the overwhelming majority of respondents to the market investigation consider that the Transaction would have a negative impact on the supply of online search and display advertising services in the EEA as well as intermediation services for online advertising in the EEA, including analytics and data management services.²⁹⁶ This would be because, by increasing the amount of data that Google could use for personalisation of the ads it serves and displays (as a result of a search query or not), it would be harder for competitors to match Google’s services and attract advertisers. According to respondents, this would translate in a reduction of choice and in an increase of the prices of Google’s services. Respondents unanimously indicated that the impact of the Transaction would not be different depending on the EEA country at stake.
- (451) In particular, as regards the impact of the Transaction on the supply of online search advertising services in the EEA,²⁹⁷ one respondent explained that “[a]ccess to additional data will enable Google to build more detailed user profiles that it can use for ad targeting, thereby further strengthening and protecting its monopoly position as a provider of online search advertising services at the expense of competition and consumers”. Another respondent stated that “[h]aving a better competitive position after the Transaction, Google would be able to dictate higher prices and market players would have less choice”; in the same vein, another player stated that “[b]etter targeting of the Google users will probably lead to higher prices of online search advertising services”.
- (452) More generally, the consumer organisation BEUC stated that the “merger would also not only further increase Google’s market power, scale and network effects, in the supply/use of data in online advertising (with increased accuracy of targeting), search and other markets, but also increase barriers to entry/expansion in these markets for actual or potential competitors, who would likely need this data to operate on these markets. Google’s strength in data is already unmatched.”²⁹⁸ Privacy International explained that the “reduction in competition will undoubtedly affect consumers. [...], competition in digital markets takes place along various price and non-price parameters, with examples of the latter being quality, innovation and privacy. The importance of non-price parameters is to be expected, as the ‘price’ for service usage which consumers must pay is more often than not that of their data.

²⁹⁴ Replies to questionnaire QA on wearables, search and advertising, question D.21.

²⁹⁵ Replies to questionnaire QC – market test of commitments, question D.1.

²⁹⁶ Replies to questionnaire QA on wearables, search and advertising, questions D.22, D.28 and D.29, and; replies to questionnaire QF to advertisers and media agencies, questions E.26, F.33, F.34.

²⁹⁷ Replies to questionnaire QA on wearables, search and advertising, question D.22, and; replies to questionnaire QE to online advertising services providers, question D.15.

²⁹⁸ BEUC, Google-Fitbit Merger. Competition concerns and harms to consumers, public statement of May 2020, page 4.

However, in data-intensive digital markets characterised by increased corporate concentration, as those of search and digital advertising are, Google, as the occupant of dominant positions, has very little incentive to adopt a business model and/or practices which enhance consumers' privacy.²⁹⁹ Google's acquisition of Fitbit would further reduce any competitive pressure on Google to compete on these non-price (namely quality, privacy) aspects, since the acquisition would further entrench Google's dominance and preclude the possibility of competition from another entity acquiring/partnering with Fitbit to compete with Google in this space.”³⁰⁰

- (453) The Commission also notes that only a minority of respondents to the market investigation active in the supply of online advertising services, at different levels of the value chain, indicated to have currently access, to a certain extent, to data equivalent to that collected by Fitbit for the supply of online search and display advertising services.³⁰¹ At the same time, those who do not have access to data equivalent to that collected by Fitbit indicated that it would not be possible for them to access similar data in the short term and without incurring in significant investments (for example via partnerships, developing their own products, etc.).³⁰²
- (454) Google's acquisition of Fitbit (its data and data collection capabilities) creates the possibility of raising barriers to entry or expansion for competitors. This is because, thanks to the data increment, Google would be able to marginalise even further its limited competitors in online search advertising. The marginalisation is likely to

²⁹⁹ During the proceedings, general concerns were raised that users are not sufficiently aware how their data is used and have limited control over the use of their data even when they are aware as well as that users would directly be harmed by reduced privacy (e.g., Submission to the European Commission, “Google/Fitbit will monetise health data and harm consumers” signed by various authors, also available at https://cepr.org/sites/default/files/policy_insights/PolicyInsight107.pdf). The Commission notes that the GDPR is designed to enhance transparency over data processing, accountability by data controllers and, ultimately, users' control over their data. Another concern raised by stakeholders is that Google would manage to obtain user consent to data usage more easily than absent the Transaction because of Google's popularity and wide penetration of its services free of charge. In this respect, the Commission observes that, even in such a case, Google will have to comply with the GDPR, which requires that individuals concerned by the data processing must be informed in a transparent manner on all relevant circumstances of the processing, including on the identity of each controller and the purposes of the processing. Fitbit (and Google post-Transaction) are accountable to implement appropriate technical and organisational measures to ensure and to be able to demonstrate that processing is performed in accordance with the GDPR. In particular, they must ensure the lawfulness of the processing of personal data collected by Fitbit and transmitted to Google and comply with the principles relating to the processing of personal data, including the principles of purpose limitation, fairness and transparency.

³⁰⁰ Source: Privacy International, Submission to the European Commission regarding the proposed acquisition of Fitbit, Inc. by Google LLC, page 12. The Commission, observes, in relation to such concern, that, [Reference to internal documents], there is no evidence in the file about the importance of privacy as a parameter of competition in wearables (data is being collected by wearable devices), in particular in the EEA. In addition, any decision or initiative that the Parties might adopt, in relation to privacy and data protection, will have to be in compliance with the data protection rules set forth by the GDPR, which provides a high standard of privacy and data protection for the industry and leaves little room for differentiation. In this respect is also worth mentioning that there is no horizontal concern in the wearables market (where competition on privacy between Fitbit and Google would be hypothetically eliminated) given that Google is not yet active in the wearable market. Any non-horizontal concerns in relation to a possible foreclosure of Fitbit's wearable competitors are either dismissed or addressed by the commitments.

³⁰¹ Replies to questionnaire QA on wearables, search and advertising, questions D.20 and D.26, and replies to questionnaire QE to online advertising services providers, questions D.18 and E.26.

³⁰² Replies to questionnaire QA on wearables, search and advertising, questions D.21 and D.27.

result in a further stifling competition in these markets in terms of choice for advertisers which in turn would allow Google to increase prices or reduce quality (in particular in terms of innovation).³⁰³ On this basis, the Commission considers that, the addition of Fitbit data to the database of Google for search advertising purposes as a result of the Transaction would strengthen Google's dominance in online search advertising, including possible sub-markets/segments thereof, and therefore would raise serious doubts as to its compatibility with the internal market. In relation to online display advertising markets, and sub-markets/segments thereof, and the supply of "ad tech" services, despite Google's market shares being lower, the Commission cannot exclude that the Transaction raise serious doubts as to its compatibility with the internal market.

- (455) In this context, giving the large amount of data already used for advertising purposes that Google holds, the increase in Google's data collection capabilities, which goes beyond the mere number of active users for which Fitbit has been collecting data so far, the Transaction is likely to have a negative impact on the development of an unfettered competition in the markets for online advertising. This is because, given the large analytics capabilities of Google, it cannot be excluded that Google could made inferences about profiling for advertising purposes for groups of individuals larger than the number of users for which Fitbit today, and Google post-Transaction, collects data.

9.3.3.2.4. Absence of countervailing factors

- (456) The Commission considers that the following countervailing factors, namely (i) the entry or expansion of competitors; (ii) the buyer power of customers and (iii) the raise of efficiencies, cannot dismissed the concerns as to the compatibility of the Transaction with the internal market. Each of these aspects is assessed in detail below.

9.3.3.2.4.1. *Barriers to entry and expansion*

- (457) The Commission notes that, whilst, as the Notifying Party claims, Fitbit is just one of many sources of health and wellness data, the evidence in the file suggests that none of Google's competitors in online advertising has access to a database or data collection capabilities equivalent to those of Fitbit and it is not likely that they would acquire such assets without incurring into significant costs and in timely manner.³⁰⁴ In fact, no competitors of Fitbit seems to make its data available for advertising purposes. Against this background, the Commission doubts that the present competitors of Google in the online advertising markets would be able to expand (by

³⁰³ The Commission considers that the risk of such competition concerns arising is not mitigated by the fact that Google does not currently use Google Fit health and wellness data for its ads and that Google has made a public pledge not to use Fitbit health and wellness data for Google ads. Indeed, the fact that Google has not used that data so far does not mean that it will not do so in the future and a public pledge does not give rise to any legal obligation not to do so. In fact, respondents to the market investigation have pointed out to past instances where statements made by Google at the time of an acquisition have then not matched with its behaviour (e.g. in relation to the acquisition of Deep Mind); see replies to questionnaire QA on wearables, search and advertising, section D.

³⁰⁴ Replies to questionnaire QA on wearables, search and advertising, questions D.17, D.18, D.20, D.23, D.24, D.26, and replies to questionnaire QE to online advertising services providers, questions D.18 and E.26.

gaining access to datasets comparable to those offered by Fitbit) so to offset the concerns raised by the Transaction.

- (458) In addition, the Commission notes that the online advertising markets are characterised by considerable barriers to entry and expansion.
- (459) In particular, with respect to the supply of online search advertising services, in Google AdSense the Commission concluded that the national markets for online search advertising in the EEA are characterised by the existence of a number of barriers to entry and expansion, in particular the need of undertaking significant investments for the development of a general search engine and in search ad technology and the presence of network effects.³⁰⁵ For the purpose of this Decision, the Commission considers that the evidence in the Commission's file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to the presence of barriers to entry and expansion in any national market for the supply of online search advertising than the view that the Commission has taken in Google AdSense. To the contrary, as explained in Section 9.3.3.2.3, the Transaction is likely to increase barriers to entry and expansion for Google's rivals.
- (460) This view is supported by the market investigation, where respondents explained that Google's access to Fitbit's dataset would increase the barriers to entry and expansion of competitors of online search and display advertising services:³⁰⁶
- (a) "one of the barriers to entry for competitors in online display advertising services is that new or fledgling companies do not have nearly the quantum of user data that established companies have. Without that data, new and fledgling companies cannot target advertisements anywhere near as well as the established companies that have incredibly rich user data, so supplying their own ad service products will not offer nearly the value to advertisers as the offerings from dominant companies that have tremendous amounts of user data. The more user data that existing companies get, the greater that disparity, and the harder it becomes for new and fledgling companies to match the ad targeting offerings of the existing companies";
 - (b) "such personal data, with the ability to combine them with already existing user's profile, may establish a new standard in the eyes of advertisers that would be impossible to compete with"
 - (c) "we expect that, if Google has access to FitBit's data, entry barriers to provide targeted display advertising (which are already very high) will increase in the relevant verticals.
 - (d) "barriers to entry and barriers to expansion would likely increase with Google's access to Fitbit's dataset and compound the existing advantages that Google already enjoys as a dominant provider of online display advertising services".
- (461) With respect to the supply of online display advertising services as well as the other ad tech services, for the purpose of this Decision, the Commission cannot exclude

³⁰⁵ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, Section 7.2.2.

³⁰⁶ Questionnaire QE to online advertising services providers, questions D.22 and E.30.

that they are also characterised by barriers to entry and expansion. This is in particular in view of the network effects and the dependence on data that may characterise the relevant markets and make it difficult to build attractive display networks of databases to improve profiling for targeting ads.

9.3.3.2.4.2. *Lack of countervailing buyer power*

- (462) With respect to the supply of online search advertising services, in Google AdSense the Commission concluded that the national markets for online search advertising in the EEA are characterised by a lack of countervailing buyer power on the part of advertisers. Among others, this was because of the fact that each advertiser represents only a small part of the total demand in the national markets for online search advertising in the EEA and that advertisers cannot rely solely on online advertising platforms of Google’s rivals given their limited scale compare to Google.³⁰⁷ For the purpose of this Decision, the Commission considers that the evidence in the Commission's file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to the lack of countervailing buyer power in any national market for the supply of online display advertising than the view that the Commission has taken in Google AdSense. To the contrary, as explained in Section 9.3.3.2.3 below, the Transaction is likely to further marginalise Google’s rivals with a consequent reduction of choice for advertisers, which will see their buyer power further reducing.
- (463) With respect to the supply of online display advertising services, the Commission considers that the national markets for online display advertising, and sub-markets/segments thereof, in the EEA are also likely to be characterised by a lack of countervailing buyer power on the part of advertisers. Indeed, also in relation to the supply of these services each advertiser represents only a small part of the total demand. Whilst the number of players active in the supply of online display advertising services is larger than with respect to online search advertising, Google, together with Facebook, is the supplier with the most ample reach: in fact, Google estimates that the 2019 EEA reach of its Display Network was [...] million viewers (over a total population of around 520 million³⁰⁸). Thus, it is likely that Google constitutes an unavoidable counterparty for advertisers willing to run effective advertising campaigns off-social networks. The fact that advertisers in the EEA can choose between different forms of online display advertising, and in particular Facebook’s social network platform, does not strengthen their bargaining position vis-à-vis Google, in particular when it comes to online display advertising off-social networks, because substitutability between these different forms of online advertising may be limited.
- (464) Finally, as regards buyer power in relation to the “ad tech” services, for the purpose of this Decision, the Commission considers that the customer of these services, which are not only the advertisers but also the publishers, are lacking countervailing buyer power. Indeed, also in relation to the supply of these services each customer represents only a small part of the total demand and is unlikely to have alternatives to Google.

³⁰⁷ Commission decision of 20 March 2019 in case AT.40411 – Google AdSense, Section 7.2.3.

³⁰⁸ Source: Eurostat, table *demo_pjan*.

(465) It follows from the above considerations that, because of a lack of countervailing buyer power in the relevant markets, customers would not be in a position to counter the increase in market power the Transaction might to create.

9.3.3.2.4.3. *Efficiencies*

(466) For efficiencies to be taken into account in the context of horizontal mergers, the efficiencies have to benefit consumers, be merger-specific and be verifiable.

(467) Although post-Transaction the quality of Google's services may increase in the short term as a result of better ads targeting, as explained above this will be accompanied by an increase in barriers to entry and expansion. In the long term, given the lack of contestability in these markets, Google would likely raise its prices to both advertisers and publishers (in the case of intermediation services) and would likely reduce its innovation efforts. This would have a detrimental effect on advertisers and publishers which would likely more than compensate the short term gains of better ads targeting.

9.3.3.2.5. *Conclusion*

(468) In light of the above considerations and based on the results of the market investigation, the Commission maintains its concerns, as set out in the Article 6(1)(c) Decision, as to the compatibility of the Transaction with the internal market relating to a strengthening of Google's dominant position in the supply of online search advertising (and possible segments thereof). The Commission cannot exclude concerns in relation to the supply of online display advertising markets (and possible segments thereof) and the supply of ad tech services.

9.3.4. *Fitbit as source of data for general search services*

(469) According to this possible theory of harm, post-Transaction, Google could start using Fitbit users' data with a view to strengthening its market position in the supply of general search services. The Commission assesses the potential effects of such conduct below.

9.3.4.1. *The Notifying Party's view*

(470) The Notifying Party submits that the Fitbit data would not be particularly useful to Google's core areas of activity in general search services for the same reasons outlined in Section 9.3.3.1 in relation to search advertising.

9.3.4.2. *The Commission's assessment*

(471) In Google Android and Google Shopping, Google has been found to hold a dominant position in each national market for the supply of general search services since 2008, apart from in the Czechia, where Google holds a dominant position since 2011.³⁰⁹ The Commission based its conclusion on the market shares of Google, the existence of barriers to entry and expansion, the infrequency of user multi-homing and the existence of brand effects as well as the lack of countervailing buyer power. For the purpose of this Decision, the Commission considers that the evidence in the Commission's file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to Google's position in any

³⁰⁹ Commission decision of 18 July 2018 in case AT.4009 – Google Android, Section 9.5; Commission decision of 27 June 2017 in case AT.39740 – Google Shopping, section 6.2.

national market for the supply of online search advertising than the view that the Commission has taken in Google Android and Google Shopping. In particular, as outlined in Section 9.1.4, Google's market shares have not materially changed compared to the Commission's findings in Google Android and Google Shopping. As illustrated in Table 9, Google's market share in general search services was above 90% in almost all EEA countries in 2019, except for Czechia (84.4%). For the other EEA countries, Google's share varied from 92.4% in France to 98.5% in Poland, with the other EEA countries lying within this range.

- (472) The results of the market investigation suggest that Fitbit data, despite being potentially a valuable input in the markets for general search services by themselves,³¹⁰ is less relevant than it is in the case of online search ads targeting. In the case of general search services click-and-query data are significantly more relevant.³¹¹
- (473) The Commission therefore considers that the Transaction would not cause any significant increase in Google's data advantage in the supply of general search services and would therefore not likely lead to a further strengthening of Google's dominant position in this market.
- (474) In conclusion, on the basis of the considerations formulated in recitals (471) to (473), the Commission considers that the Transaction will not likely lead to a significant impediment of effective competition as a consequence of the possible horizontal effects arising from the combination of Google's and Fitbit's user databases and data collection capabilities for use in the field of general search services.

9.3.5. *Fitbit as a source of data for possible use in digital healthcare services*

- (475) According to this possible theory of harm, post-Transaction, Google could start using Fitbit users' data with a view to strengthening its market position in certain markets in the digital healthcare sector.³¹² The Commission assesses the effects of the possibility that Google could engage in such conduct below.

9.3.5.1. The Notifying Party's view

- (476) The Notifying Party argues that no concerns should arise with respect to Google's use of Fitbit data in the digital healthcare sector. Improving products or services to the benefit of consumers in ways that rivals, without access to similar datasets, might not be able to match should not be a competition concern at all, but rather count as a procompetitive efficiency of the Transaction.

³¹⁰ Replies to questionnaire QA on wearables, search and advertising, questions D.7-D.9.

³¹¹ Annex I of the CMA on "Online platforms and digital advertising" available at https://assets.publishing.service.gov.uk/media/5efb1db6e90e075c5674db35/Appendix_I_-_search_quality_v.3.pdf.

³¹² Such concern has also been expressed by a market participant "Health Data may greatly expand and improve Google's monetization capabilities. Their use is by no means limited to Google's ad business. (...) First, Health Data is a personal, intimate, and therefore highly valuable resource in its own right, as it is the fundamental basis from which to gain health insights or for the development (via healthcare analytics) of data-dependent health services, such as clinical delivery, personalized medicine and optimizations in population health, and to integrate performance modelling with financial and predictive care monitoring. Thus, access to Health Data is important for effective competition in these nascent, but quickly developing markets". See non-confidential submission of 28 September 2020 (anonymous), page 4.

- (477) With specific respect to the use of Fitbit data for healthcare purposes, the Notifying Party notes that Google launched Google Health in November 2018, with the mission of better coordinating teams and work streams that are focused on health-related research and development initiatives. Google Health's interests in the Transaction reflect a belief that Fitbit data might conceivably be of some value in the future in trying to predict certain health outcomes.
- (478) However, the possible insights that Google Health might in the future be able to glean from Fitbit data are, according to the Notifying Party, still unknown and uncertain. Any suggestion that they might be relevant to any existing Google products or services would be entirely speculative.
- (479) The Notifying Party, in addition, notes that the Fitbit data would not give Google an advantage that rivals could not match. Notably, they would not provide Google with an important input that would allow it to strengthen its position in other markets and thereby exclude rivals. Fitbit data are not unique: other wearable OEMs and health and fitness app developers gather a similar volume and variety of data at a similar velocity from wearable devices, and can also gather it from other types of devices besides fitness trackers and smartwatches.
- (480) The Notifying Party notes that Fitbit's competitors also make user data available via their APIs. Further, there is no third party that depends on Fitbit's data and might be harmed by the acquisition of these data by Google. Rather, the Parties characterise this acquisition as a first necessary step for Google and Fitbit to compete with more established players (Apple, Samsung, Amazon, IBM, among others).
- (481) In its Reply to the Article 6(1)(c) Decision, the Notifying Party adds that the theory of harm in question is not "horizontal," because it is not a function of any loss of actual or potential competition between the Parties. Google's clinical-facing efforts, [Strategy], while Fitbit is not active in any such areas. On the consumer-facing side, Fitbit's health-related innovation efforts focus on improving its wearable devices, while Google is not active in the field. Both Parties have APIs that allow data transfer, but these are not revenue-generating business initiatives, but rather a means by which users themselves can consent to make their data available to third parties.

9.3.5.2. The Commission's assessment

- (482) The Commission assesses the data-related, horizontal effects potentially arising in connection with the Transaction in recitals (483) to (496) while the non-horizontal effects concerning the relevance of Fitbit data as possible essential input for a foreclosure strategy are examined in Section 9.4.2.
- (483) In Phase I of the investigation, the Commission has sent a data request to competing wearable OEMs on several metrics which allowed to appreciate the volume, value, variety and velocity of update of several databases. The results of this exercise confirmed that other wearable OEMs collect a (i) similar amount of data (in terms of user/days of data and volume of data), (ii) similar frequency and (iii) similar variety of data points as Fitbit. This supports the conclusion that there are alternative data providers available: (i) health data is also collected by smartphones (Apple, Huawei, Samsung) and can be shared with and accessed via health and fitness apps (Strava, MMF, MyFitnessPal, etc.); (ii) there are "aggregation services" or "aggregators", such as Validic and Human API, which use a platform to connect multiple individuals, mine and collect their health data. They charge a fee for access to their API, in consideration of the specialized nature of their services; (iii) health data can

be collected also through corporate wellness programmes (data from health risk assessment, exercise data, lifestyle data, etc.); and (iv) electronic health records, that are aggregated and used to provide analytics services.

- (484) The Commission considers that the combination of Fitbit database and data collecting capabilities with those already held by Google do not lead to any risk of significant impediment to effective competition as a result of horizontal effects in the concerned market for the supply of digital healthcare services. This is because the parties are neither actual nor potential competitors in the collection or marketing of user health and fitness data.
- (485) With respect to actual competition, the Commission notes, as the Notifying Party already did, that neither party is currently marketing their user data, but the circulation of data is a consequence of the users' decision to actively share them with third parties (apps and websites) that offer value added services to them. The Commission therefore considers that there is no actual competition between the parties, in relation to the user data they store or collect.
- (486) As regards potential competition between the parties in relation to data, the Commission, having investigated the rationale of the Transaction, the current status of the market for digital healthcare services and its possible developments, considers that the Transaction is not likely to have an impact on potential competition for user health data either.
- (487) Concerning the rationale of the Transaction, in fact, the Commission has examined, in Phase II, whether at least part of the Transaction rationale was linked to digital healthcare as a reason for possible concerns. In this respect, Google's internal documents show that [Strategy].³¹³ [Strategy].³¹⁴
- (488) [Strategy]. Based on the internal documents [Strategy], the Commission considers that Fitbit users' data is clearly not at the centre of Google's rationale for the acquisition.
- (489) In addition [Google's strategy], the Commission considers that also the current structure of the digital healthcare market (with a multiplicity of different initiatives) and the signs of its future development (with the entry of new large technology players) contribute to dispel concerns as to the possible restriction of potential competition based on the control of user health data.
- (490) As to the presence of multiple players in digital healthcare, in the absence of evidence (including internal documents) concerning the use and integration of Fitbit into Google's digital healthcare initiatives, the Commission explored possible use cases for user data, including the role of wearable devices in the insurance sector. For each of the four use cases identified (namely cloud and data analytics, patient

³¹³ The Commission observes that even market participants that expect Google to draw a significant advantage in digital healthcare from the acquisition of Fitbit, could not specifically point to a market or to the modalities with which anticompetitive effects would manifest. At most, these submissions refer to Google's significant investments in the healthcare sector, to its multiple initiatives in studies and research, without indicating a product or service that is already available on the market. See, for example, See non-confidential submission of 28 September 2020 (anonymous).

³¹⁴ Internal documents show that [Google's business intelligence]. [Google's business intelligence]. See [Reference to internal documents]. See also [Reference to internal documents].

monitoring, provision of data for scientific studies and corporate wellness programmes), among the numerous digital healthcare initiatives, the Commission observes that there are already well established alternatives to the parties, in particular:

- (491) For cloud and data analytics: Amazon Web Services, Microsoft Azure, IBM (including Red Hat), and Oracle.
- (492) For patient monitoring services: mySugr Inc./mySugr GmbH, Intel Corporation, ResMed, Parexel International, PHILIPS (Royal) International Group / Koninklijke Philips, N.V. (incl. Philips Electronics), Apple Inc., AstraZeneca, Flatiron, IQVIA, WellDoc.
- (493) For the provision of data for medical research and real-world evidence: IMS Health, Quintiles, ICON, MAPI, PAREXEL, PPD, RTI Health Solutions, and IPSOS.
- (494) For corporate wellness programmes: wearable OEMs who offer such programs (such as Garmin, Withings, Polar, Apple, and Samsung), device-agnostic platforms such as the global Dacadoo or Fjuul (who partner with healthcare companies (for example, Optum), insurance companies (for example, Irish Life, Aon), health IT players (for example, Oracle Healthcare) and corporate customers, and other local players.
- (495) In addition to a multitude of business initiatives already ongoing in the digital healthcare sector,³¹⁵ new entry from well-established players, in possession of a large user database and/or relevant data-collecting capabilities, is taking place. In fact, the Commission observes that on 27 August 2020, Amazon, which is already active in cloud computing and data analytics, launched *Halo*, a new service platform dedicated to helping customers improve their individual health and wellness. Amazon Halo combines a suite of health features based on artificial intelligence that provide health insights via the new Halo app associated with the Halo band. While the platform is currently only available in the US, it provides Amazon a technology platform that could be offered also in the EEA and help Amazon to collect user data that it could combine with its user information originating from e-commerce transactions.
- (496) In conclusion, on the basis of the considerations formulated in recitals (482) to (495), the Commission considers that the Transaction will not likely lead to any significant impediment of effective competition as a consequence of the likely horizontal effects arising from the combination of Google's and Fitbit's user databases and data collection capabilities for use in the field of digital healthcare.

³¹⁵ The Commission observes that even market participants who expressed concern about the Transaction acknowledge “*Other players in this area are currently conducting a broad range of related project (...) There are a number of players in this area that compete with each other, as well as co-operate – key ingredients for innovation*”. See non-confidential submission of 5 October 2020, slide 6 (anonymous).

9.4. Vertical effects

9.4.1. Introduction

- (497) According to the Non-Horizontal Merger Guidelines, a vertical merger may significantly impede effective competition as a result of non-coordinated effects if such merger gives rise to foreclosure.³¹⁶
- (498) The Non-Horizontal Merger Guidelines distinguish between two forms of foreclosure. Input foreclosure occurs where the merger is likely to raise the costs of downstream competitors by restricting their access to an important input. Customer foreclosure occurs where the merger is likely to foreclose upstream competitors by restricting their access to a sufficient customer base. The present case only raises possible input foreclosure concerns, therefore customer foreclosure is not further discussed in this Decision.
- (499) In assessing the likelihood of an anticompetitive input foreclosure scenario, the Commission examines, first, whether the merged entity would have, post-merger, the ability to substantially foreclose access to inputs, second, whether it would have the incentive to do so, and third, whether a foreclosure strategy would have a significant detrimental effect on competition.³¹⁷
- (500) As regards ability to foreclose, under the Non-Horizontal Merger Guidelines, input foreclosure may lead to competition problems if the upstream input is important for the downstream product.³¹⁸ For input foreclosure to be a concern, a vertically integrated merged entity must have a significant degree of market power in the upstream market. It is only in those circumstances that the merged entity can be expected to have significant influence on the conditions of competition in the upstream market and thus, possibly, on prices and supply conditions in the downstream market.³¹⁹
- (501) With respect to incentives to foreclose, paragraph 40 of the Non-Horizontal Merger Guidelines states that the incentive of the merged entity to foreclose depends on the degree to which foreclosure would be profitable. The vertically integrated firm will take into account how its supplies of inputs to competitors downstream will affect not only the profits of its upstream division, but also of its downstream division. Essentially, the merged entity faces a trade-off between the profit lost in the upstream market due to a reduction of input sales to (actual or potential) rivals and the profit gain, in the short or longer term, from expanding sales downstream or, as the case may be, being able to raise prices to consumers.³²⁰ Additionally, paragraph 42 of the Non-Horizontal Merger Guidelines indicates that “[t]he incentive for the integrated firm to raise rivals’ costs further depends on the extent to which downstream demand is likely to be diverted away from foreclosed rivals and the share of that diverted demand that the downstream division of the integrated firm can capture”.

³¹⁶ Non-Horizontal Merger Guidelines, paragraph 18.

³¹⁷ Non-Horizontal Merger Guidelines, paragraph 32.

³¹⁸ Non-Horizontal Merger Guidelines, paragraph 34.

³¹⁹ Non-Horizontal Merger Guidelines, paragraph 35.

³²⁰ Non-Horizontal Merger Guidelines, paragraph 40.

(502) As regards the effects of input foreclosure, the Non-Horizontal Merger Guidelines explain that such conduct raises competition concerns when it leads to increased prices on the downstream market. First, anticompetitive foreclosure may occur when a vertical merger allows the merging parties to increase the costs of downstream rivals in the market thereby leading to an upward pressure on their sales prices. Second, effective competition may be significantly impeded by raising barriers to entry to potential competitors.³²¹ The Non-Horizontal Merger Guidelines further state that if there remain sufficient credible downstream competitors whose costs are not likely to be raised, for example because they are themselves vertically integrated or they are capable of switching to adequate alternative inputs, competition from those firms may constitute a sufficient constraint on the merged entity and therefore prevent output prices from rising above pre-merger levels.³²²

9.4.2. *Foreclosure from access to Fitbit data to the detriment of digital healthcare players (input foreclosure)*

(503) The Commission has considered the relevance of user data to the development of business solutions in digital healthcare and the possibility that, after the Transaction, Google may have the ability and incentive to foreclose access to Fitbit's data (i.e. the users' data that Fitbit currently makes available via its Web API). On that basis, the Commission has assessed whether the Transaction is likely to lead, as a consequence of such foreclosure, to anticompetitive effects in the development of the digital healthcare markets.

(504) In the nascent digital healthcare industry, third-party apps and websites that provide fitness and healthcare solutions derive the user data they need from APIs, made available by wearable OEMs or other entities that have or generate personal data. The API is the technical mechanism to allow the sharing. Once the API is in place, data sharing takes place at the request of the users, who are interested to make their personal data available to third-party for the use of their services.

(505) In order to allow its users to share their data with third parties, Fitbit operates the Web API that, upon user consent, allows third-party applications and websites (such as Strava, MyFitnessPal, Walgreens, Humana, UnitedHealthcare, National Institutes of Health, etc.) to access for free the individual user's data.³²³

(506) A number of market participants have raised concerns that, post-Transaction, Google would have the ability and incentive to discontinue access to Fitbit's Web API or to provide such access on less favourable conditions than those that currently apply, with a significant negative impact on competitors in digital healthcare markets, due to the absence of alternative user data sources.

9.4.2.1. *The Notifying Party's view*

(507) The Notifying Party has argued, throughout the procedure, that no concerns should arise with respect to Google's use of Fitbit data in the digital healthcare sector.

³²¹ Non-Horizontal Merger Guidelines, paragraphs 47-49.

³²² Non-Horizontal Merger Guidelines, paragraph 50.

³²³ Two kind of access are foreseen: (i) standard level access, which allows the third party to see the same data as the user, and (ii) intraday level access, offering access to more granular data collected throughout the day, which allows the third party to draw more detailed inferences and statistics as to the user's behaviour.

Improving products or services to the benefit of consumers in ways that rivals, without access to similar datasets, might not be able to match should not be a competition concern at all, but rather count as a procompetitive efficiency of the Transaction.

- (508) In relation to the Fitbit’s Web API, in the Reply to the Article 6(1)(c) Decision, Google argues that no risk of foreclosure exists, as digital healthcare service providers do not depend on access to Fitbit users’ data. The Parties articulate their position on the lack of relevance of the Web API by arguing that:
- (a) Digital healthcare businesses do not depend on the Web API, as only a virtual fraction of their users are Fitbit users;
 - (b) Post-Transaction, Google would not have any incentive to cut access to the Web API, because it is committed to data portability and because an open API access is the market norm and cutting access to the Web API would reduce the attractiveness of Fitbit’s wearables and its whole ecosystem;
 - (c) There is a broad availability of alternative data sources.
- (509) In fact, the Notifying Party notes that the Fitbit data are not unique: other wearable OEMs and health and fitness app developers gather a similar volume and variety of data at a similar velocity from wearable devices and can also gather it from other types of devices besides fitness trackers and smartwatches.
- (510) In addition, the Notifying Party notes that Google’s rivals can also access similar data from Fitbit’s competitors, which also make user data available via APIs. Therefore, there is no third party that depends on Fitbit’s data and might be harmed by the acquisition of these data by Google. Rather, the Parties characterise this acquisition as a first necessary step for Google and Fitbit to compete with more established players (Apple, Samsung, Amazon, IBM, among others).

9.4.2.2. The Commission’s assessment

9.4.2.2.1. As regards ability to foreclose

- (511) In the Phase I investigation, the Commission has collected evidence of the relevance of Fitbit’s user database for the development of innovative solutions in digital healthcare. Internal documents submitted by Google, for example, identify Fitbit [Internal analysis].³²⁴ This view was shared by some respondents to the market investigation, one of which indicated that “*Fitbit health and fitness related dataset is likely the largest in the world (after perhaps Apple), due to its large customer base*”.³²⁵
- (512) In the Phase II investigation, the Commission has investigated the relevance of access to data via APIs for the growth of the digital healthcare industry and for competition therein. The results of the Phase II market investigation have confirmed that digital health players access users’ data via APIs, including Fitbit’s Web API, in cases where Fitbit’s users decide to make their user data available to third parties.³²⁶

³²⁴ In internal document [Reference to internal documents]. See also [Reference to internal documents].

³²⁵ Replies to questionnaire QA on wearables, search and advertising, question D.30.1.

³²⁶ Replies to questionnaire QG to digital health players, questions 10 and 15; Replies to questionnaire QD on wearables, smartphones and apps, question 29.3.

- (513) Information submitted by the Parties indicates that, pre-Transaction, a certain number of third parties such as apps and websites (approximately [...]) access the data of Fitbit's users via the Web API and some for a significant number of users (up to [...] million users).³²⁷
- (514) The replies to the market investigation provide examples of businesses connecting to Fitbit's Web API. One respondent explains that it "*help[s] users get their personal data via Fitbit Web API, then pass through their personal data to their own iPhone devices' Apple Health apps*". Another respondent indicates: "*The UA Fitness Apps integrate with Fitbit via an API connection. The purpose of the integration is to present Fitbit activity data within the UA Fitness Apps, with the broad objective of attracting users to and engaging them with the UA Fitness Apps. The integration between the UA Fitness Apps and Fitbit is prompted by and conditioned upon the end user's decision to share his or her fitness and wellness data stored in its Fitbit account with the UA Fitness Apps*".³²⁸ Some of these technology partners have connected to Fitbit Web API as far back in time as 2010.³²⁹
- (515) The majority of respondents to the market investigation consider that, in their experience, it is a common practice, for digital players that gather personal data from their users, to set up APIs to allow third-party access to, and sharing of, their users' data.³³⁰ The Commission, therefore, considers that Fitbit is not a unique, source of user data relevant to digital healthcare players.
- (516) At the same time, however, the Commission observes that access to the Web API is at least needed to have access to Fitbit's user community. In this respect, respondents to the market investigation in Phase II indicated that the data of the Fitbit's users could not be accessed in any other way than through the Web API. According to a respondent "*if Google would not provide access to Fitbit's Web API, there would not be [any] alternative to reach the data of Fitbit's customers*". While the respondent acknowledges that there are alternative data sets provided by other wearable OEMs "*Apple, Garmin, Samsung, Polar, and Suunto*", restricting access to Fitbit's Web API "*would limit access [to the] fairly significant user base of Fitbit*".³³¹
- (517) The results of the market investigation indicated that post-Transaction Google will have the technical ability to engage in input foreclosure by restricting the access to the Web API.³³²
- (518) One respondent considers that "Google will have the ability to restrict access to Fitbit's Web API or to stop providing access to it altogether. Post-transaction, Google will be in total control of Fitbit's Web API and will be able to dictate access

³²⁷ See Annex 6 to Notifying Party's Reply to the Commission 6(1)(c) Decision.

³²⁸ See replies to questionnaire QG to digital health players, question 10.1.

³²⁹ See replies to questionnaire QG to digital health players, question 10.2.

³³⁰ Replies to questionnaire QD on wearables, smartphones and apps, question 30.

³³¹ Replies to questionnaire QD on wearables, smartphones and apps, question 36.

³³² Replies to questionnaire QD on wearables, smartphones and apps, question 34 and Replies; replies to questionnaire QG to digital health players, questions 20 and 20.1.

as it deems fit”.³³³ According to another respondent, “Google has the technological expertise and resources to achieve that”.³³⁴

- (519) One respondent expressed the opinion that “[t]hrough Google Fit, Google will have complete control over what it exposes or doesn’t expose. They could expose less through Google Fit than was exposed in Fitbit’s API. That could change depending on what terms and conditions they want to give to particular third parties. If Google had the incentive to limit what data they expose, they could reduce the availability of data from third party devices and services”.³³⁵
- (520) Based on the evidence and on the considerations in the above Recitals (511) to (519), the Commission considers that, while, in general terms, user health data are available from a number of data sources, the user data of Fitbit’s users are only available through the Web API and a number of players in digital healthcare access such data through the Web API, in order to provide services to Fitbit users and obtain their data in return. In these terms, the Commission considers that it cannot be excluded that Google will have, after the Transaction, the ability to foreclose competitors in the downstream markets for digital healthcare by restricting access to the Fitbit Web API.

9.4.2.2.2. As regards incentives

- (521) The views of respondents to the market investigation in Phase II and the arguments submitted by some market participants during the procedure appears to indicate that Google may have an incentive to reduce or discontinue third-party access to the Web API.
- (522) While recognising users’ interest in sharing data, one respondent indicates that Google might choose “*with whom they share data, limit some companies they see as competitors*”.³³⁶ Another respondent notes: “*to the extent such strategy would allow Google to weaken the competition, they could have the incentive to provide access to Fitbit’s Web API at less favourable terms and conditions than today or to stop providing access to Fitbit’s Web API to the merged entity’s competitors*”.³³⁷ Another respondent points out that Google will have an incentive to restrict or discontinue access to the Web API “*in the future, with the achievement of a satisfactory number of customers [...]*”.³³⁸
- (523) Another respondent also argues that “Google has offered a significant premium for Fitbit and must be expecting to recoup that investment. (...) Google is prepared to limit the use of Fitbit data for its online advertising business so there must be other areas where Google expects to be making significant profits”.³³⁹
- (524) Another respondent, active in the pharmaceutical sector, replied: “It is likely that Google [...] might also want to restrict cooperation/integration of Fitbit data with

³³³ Replies to questionnaire QD on wearables, smartphones and apps, question 34.1.

³³⁴ Replies to questionnaire QG to digital health players, question 20.1.

³³⁵ Replies to questionnaire QD on wearables, smartphones and apps, question 34.1.

³³⁶ See replies to questionnaire QD on wearables, smartphones and apps, question 35.1.

³³⁷ See replies to questionnaire QD on wearables, smartphones and apps, question 35.1.

³³⁸ See replies to questionnaire QG to digital health players, question 20.1.

³³⁹ See respondent’s reply to questionnaire QG to digital health players, question 20.1.

solutions offered by Google's main competitors in other fields (for example mobile platforms etc.). Additionally Google could aim to complicate integration of other wellness and fitness provider data into the Google ecosystem".³⁴⁰

(525) In the light of the evidence and considerations formulated in recitals (521) to (524), the Commission considers that it cannot be excluded that, after the Transaction, Google will have the incentive to restrict access to the Fitbit Web API.

9.4.2.2.3. As regards effects on competition in the digital healthcare markets

(526) Digital healthcare is a nascent and currently still fragmented sector. However, it hosts a large number of very active start-up companies and it is expected to diversify and grow to a significant economic size.

(527) A significant number of companies active in digital healthcare rely on the access to Fitbit's Web API, in order to access the user health data they need to develop their services. In fact, based on the Annex 6 to the Reply to the Article 6(1)(c) Decision submitted by Google, almost [...] third parties currently access the Web API to obtain the health data of a varying number of Fitbit's users. The first ten third parties accessing the Web API, do so in order to obtain the data of at least [...] users (up to a maximum of almost [...] million, that is about [...] % of the entire Fitbit's user base).

(528) Restricting access to Fitbit's Web API post-Transaction may impact on the success of those start-ups. In addition, the Commission notes that, should access to the Web API be restricted or discontinued, at least a part of Fitbit users will lose access to apps that might be very desirable to them.

(529) The Commission, therefore, considers that a restriction or interruption of third-party access to the Web API would negatively affect providers of apps and websites across the digital healthcare spectrum, including start-ups and small players that, under current access conditions, would capitalise even on relatively small amounts of Fitbit users' data to compete and contribute to innovation and diversification of the digital healthcare sector.

(530) In light of recitals (526) to (529), the Commission considers that it cannot be excluded that the Transaction would have a significant detrimental effect on competition in the digital healthcare sector if the merged entity would restrict access to Fitbit's Web API.

9.4.2.2.4. Conclusion

(531) In light of the above, the Commission maintains its concerns, as set out in the Article 6(1)(c) Decision, as to the compatibility of the Transaction with the internal market as a result of input foreclosure of providers of digital healthcare services caused by the merged entity restricting those providers' access to the Web API and, therefore, their access to the data of Fitbit's users.

³⁴⁰ See replies to questionnaire QG to digital health players, question 21.1.

9.4.3. *Foreclosure from access to Wear OS to the detriment of wrist-worn wearable suppliers (input foreclosure)*

- (532) Google maintains and develops a wearable OS called Wear OS, based on Android OS, which it licenses to OEMs for use on smartwatches [Google’s strategy]. Wear OS includes the required companion apps which are essential for the proper functioning of the smartwatch, that is to say, the Wear OS companion app which enables a user to sync their Wear OS to their Android or iOS smart mobile device and the app store Google Play. Google offers a number of consumer-facing apps for use on or with Wear OS devices: Google Fit, Google Pay, Google Maps, Google Assistant (incl. access to Google Search), Google Play Music (and its successor YouTube Music), and Google Translate, together referred to hereinafter as “Google apps”.³⁴¹³⁴²
- (533) During the market investigation the concern has been raised that Google could foreclose access to Wear OS.³⁴³ Notably, some respondents indicated that Google could (i) degrade Wear OS (for example by investing less into Wear OS), (ii) degrade access to Wear OS (for example by providing less Google apps, less functionalities, or deteriorating the licensing terms and conditions), or (iii) stop licensing Wear OS, in order to foreclose competing suppliers of wrist-worn wearables.
- (534) Therefore, the assessment in this section consists in determining whether the Transaction would likely confer on the merged entity the ability and incentive to foreclose access to Google’s licensable OS for wrist-worn wearable devices (Wear OS) and whether this would have a significant detrimental effect on competition in the downstream wrist-worn wearables market, thus causing harm to customers. As Wear OS only runs on smartwatches and not on fitness trackers, the assessment focusses on this segment of the market for wrist-worn wearable devices. As regards the overall market for wrist-worn wearable devices, the merged entity’s position as supplier of licensable wearable OS would be even smaller and concerns can be excluded.

9.4.3.1. The Notifying Party’s view

- (535) The Notifying Party submits that Google will not have the ability or the incentive to stop or degrade access to Wear OS for downstream competitors of Fitbit post-Transaction.

³⁴¹ Google also supplies some other apps to Wear OS devices. However, these either operate in the background as non-consumer facing apps or simply provide basic utilities (for example alarm, stopwatch, timer, notes, calendar etc.) to Wear OS users. For completeness, Google also makes a version of its “Google Keep” noting app available on the Apple Watch. Google could not plausibly foreclose the Apple Watch or any third-party wrist-worn wearable device by withdrawing or degrading Google Keep, which does not qualify as important input for wrist-worn wearable devices.

³⁴² In addition, respondents to the market investigation pointed to other consumer-facing apps offered by Google, which are not yet offered on Wear OS devices, in particular [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy]. Notifying Party’s reply to RFI 39, question 10.

³⁴³ Replies to questionnaire QA on wearables, search and advertising, question 21.2.

9.4.3.1.1. As regards ability

- (536) First, the Notifying Party submits that Google does not have a sufficient degree of market power vis-à-vis suppliers of wearables. According to the Notifying Party, the major wearable OEMs (for example, Apple, Samsung, and Garmin) use their own wearable OSs.³⁴⁴ Today, there would be fewer than [...] partners that license Wear OS and even fewer that still sold wearables devices running on Wear OS of which many did not use Wear OS for all of their devices.
- (537) Second, even OEMs that use Wear OS today would have access to alternative OSs.³⁴⁵ They could switch to their own OS solution. Apple, but also Samsung, Garmin and Fitbit developed their own OSs. Huawei would be in the process of developing a licensable wearable OS. In particular, Wear OS licensees could build on open-source code, such as Android OS and Linux. Although it currently has not been adopted in Europe, worldwide, the vast majority of smartwatches running a licensable OS would run on re-purposed versions of Android OS, not Wear OS. Android OS would be freely available and no agreements or licenses with Google would be required. According to IDC, in total, [Third party data] OEMs have developed their own wearable OS, from scratch or based on open-source code, including many smaller players.

9.4.3.1.2. As regards incentives

- (538) The Notifying Party submits that Google had launched Wear OS precisely with the aim of attracting users to its ecosystem (or preventing their exit), [Strategy].³⁴⁶ Therefore, Google has no incentive to reserve Wear OS to Fitbit post-Transaction. Google's interest would be in ensuring the widest possible distribution for its products and services, and it would likely precipitate a strong backlash from its partners were it to withhold or degrade Wear OS. In particular, Google would fear the following consequences from a foreclosure strategy: (i) reputational damage, (ii) deterioration of Google's relationship with OEMs that are also important Android partners through their smart mobile device offerings, and (iii) reduction of the attractiveness of developing apps for Google Play, which competes with the Apple App Store to attract users and developers.
- (539) The Notifying Party indicates that these concerns are particularly relevant because it is highly unlikely that Google could move all, or even a significant portion, of the users of Wear OS wrist-worn wearable devices to Fitbit devices. In the first place, at least some, if not all, of the OEMs that currently use Wear OS could switch to an alternative wearable OS. In the second place, even to the extent that Google could completely foreclose a given OEM through this strategy, Google would only stand to gain the portion of that OEM's users that opted to migrate to Fitbit devices.

9.4.3.1.3. As regards the effects on competition

- (540) The Notifying Party argues that even if Google were to adopt a foreclosure strategy, such strategy would not, in any event, lead to anticompetitive foreclosure.³⁴⁷ The

³⁴⁴ Form CO, paragraphs 506-508.

³⁴⁵ Form CO, paragraphs 509-515.

³⁴⁶ Form CO, paragraphs 523-526.

³⁴⁷ Form CO, paragraphs 527-528.

most popular wearable devices today do not rely on Wear OS (for example, Apple, Samsung, Garmin), hence the vast majority of smartwatches would be completely unaffected by any attempt to withhold or degrade Wear OS. As Wear OS's share was in further decline in 2019, the size of the unaffected segment would further increase.

9.4.3.2. The Commission's assessment

9.4.3.2.1. As regards ability

- (541) In the upstream market, Google is currently the only supplier of a licensable wearable OS for smartwatches in the EEA. On a worldwide level, Wear OS has a market share of [10-20]% in licensable wearable OSs in 2019, the remaining share being attributed to re-purposed versions of open-source code, Android ([80-90]%) and Linux ([0-5]).
- (542) As preliminary remark, the Commission notes that, in order to assess Wear OS' relevance for competition on the downstream market, it is also relevant to look at all competing OSs, licensable and non-licensable. Since Google would only be able to foreclose downstream competitors that rely on licensable OS, its ability to foreclose would be significantly weakened if a large share of downstream suppliers use their own, non-licensable OS. Table 28 sets out the Parties' and their main competitors' market shares in OSs for smartwatches, globally (excl. China) and in the EEA, by sales volumes for the years 2016, 2017, 2018 and 2019.

Table 28: Market shares in OSs for smartwatches (volume, 2016-2019)

Volume	Worldwide (excl. China) (in %)				EEA (in %)			
	2016	2017	2018	2019	2016	2017	2018	2019
Wear OS	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[10-20]	[5-10]	[5-10]
Fitbit (basic)	[20-30]	[5-10]	[0-5]	[0-5]	[10-20]	[5-10]	[0-5]	-
Fitbit (smart)	[0-5]	[0-5]	[10-20]	[10-20]	[0-5]	[0-5]	[5-10]	[5-10]
Combined	[30-40]	[10-20]	[10-20]	[10-20]	[20-30]	[10-20]	[10-20]	[10-20]
<i>AOSP</i>	<i>[0-5]</i>	<i>[0-5]</i>	<i>[0-5]</i>	<i>[0-5]</i>	<i>[0-5]</i>	<i>[0-5]</i>	-	-
Apple watchOS	[20-30]	[40-50]	[40-50]	[40-50]	[30-40]	[30-40]	[30-40]	[30-40]
Samsung Tizen	[5-10]	[5-10]	[10-20]	[10-20]	[5-10]	[5-10]	[10-20]	[10-20]
Garmin RTOS smart	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[5-10]	[10-20]
Linux	[0-5]	[0-5]	[0-5]	[0-5]	[0-5]	-	-	-
Pebble OS	[0-5]	-	-	-	[0-5]	-	-	-
Others (basic)	[20-30]	[20-30]	[10-20]	[10-20]	[20-30]	[20-30]	[20-30]	[20-30]
Others (smart)	[0-5]	[0-5]	[0-5]	[0-5]	-	-	-	-
Total	100	100	100	100	100	100	100	100

Source: Form CO, Annex 7.1 (Table 195 and 243), based on IDC data.

- (543) Against this background, the Commission considers that Google would not have the ability to engage in an input foreclosure strategy.
- (544) First, the Commission notes that the largest suppliers of smartwatches are fully vertically integrated, that is to say their smartwatches run solely on their own (proprietary) OSs. This is the case for Apple, Samsung and Garmin. Apple's smartwatches run on a wearable version of Apple's iOS for smartphones. Samsung,

which has previously been a licensee of Wear OS, exclusively uses its own OS, called Tizen OS. Garmin's smartwatches run on an RTOS-based proprietary OS. On a worldwide level (excl. China), Apple had a market share of [40-50]% in volume terms and [50-60]% in value terms in 2019, Samsung of [10-20]% (volume)/[10-20]% (value) and Garmin of [5-10]/[5-10]%. In the EEA, the corresponding market shares were [30-40]/[40-50]% for Apple, [10-20]/[10-20]% for Samsung and [10-20]/[10-20]% for Garmin.

- (545) Those three competitors taken together represent between [60-70]% (volume) and [70-80]% (value) of the supply of smartwatches worldwide (excl. China) and between [60-70]% and [70-80]% in the EEA. In the market investigation, these competitors were also consistently named as the strongest players in the smartwatches segment.³⁴⁸ This segment of the strongest market players could not be affected at all by a possible input foreclosure strategy.
- (546) Second, as Huawei [Information on distribution]³⁴⁹, it switched its smartwatches from Wear OS to its own RTOS-based Huawei Lite OS. In addition, Huawei is currently in the process of further developing Harmony OS as open-source platform across devices. Harmony OS currently runs smart TVs, while Harmony OS 2.0, expected to be released in 2020/2021, will be customised also for other smart devices, including for smartwatches.³⁵⁰ Huawei had a worldwide³⁵¹ market share of [5-10]% in volume terms and [0-5]% in value terms and an EEA market share of [5-10]% in volume terms and [0-5]% in value terms.
- (547) Third, the results of the market investigation indicated that at least two of the mentioned OSs represent alternatives for Wear OS licensees. First, market participants, including Samsung, named Samsung's Tizen OS as possible licensable alternative, although it has not yet been licensed out by Samsung in the past.³⁵² Second, Harmony OS, the OS currently being developed by Huawei, will be released as an open-source platform: "*The success of HarmonyOS will depend on a dynamic ecosystem of apps and developers. To encourage broader adoption, Huawei will release HarmonyOS as an open-source platform, worldwide. Huawei will also establish an open-source foundation and an open-source community to support more in-depth collaboration with developers.*"³⁵³
- (548) Fourth, the share of smartwatches running on Wear OS in the downstream market for supply of smartwatches has constantly declined³⁵⁴ over the past three years, reaching a level of below or close to 5%. In 2019, of all smartwatches sold worldwide, only [5-10]% were running Wear OS (down from [5-10]% in 2017).³⁵⁵

³⁴⁸ Replies to questionnaire QA on wearables, search and advertising, question C.8.1.

³⁴⁹ Form CO, paragraph 217.

³⁵⁰ <https://consumer.huawei.com/en/press/news/2019/huawei-launches-harmonyos/>;
<https://www.huaweicentral.com/breaking-harmonyos-2-0-launched-now-supports-tablets-wearable-and-even-smartphones/>.

³⁵¹ Huawei's market share at worldwide level (excl. China) are not available.

³⁵² Replies to questionnaire QA on wearables, search and advertising, question C.19.1 and C.22.2.

³⁵³ <https://consumer.huawei.com/en/press/news/2019/huawei-launches-harmonyos/>

³⁵⁴ This likely because of the reasons set out below in recital 544.

³⁵⁵ Market exits have also contributed to the declining Wear OS share. For instance, LG Electronics submitted that the declining sales and revenue of its wearables product contributed to the decision to exit the wearables

This decline continued further in the first quarter of 2020 to [0-5]%. Of all smartwatches sold in the EEA in 2019, only [5-10]% were running on Wear OS (down from [10-20]% in 2017). This decline also continued further in the first quarter of 2020 to [0-5]%. Wear OS devices' market shares in value terms followed the same trend and have reached similarly low levels, as illustrated in Figure 5.³⁵⁶

Figure 5: Wear OS market share (2016-2020 (Q1))

[Market share graph]

Source: Form CO, Annex 7.1.

- (549) Wear OS therefore accounts for only a small share of wrist-worn wearable devices sold to consumers today. In light of this evolution, the Commission considers that it can be excluded that Wear OS is a critical component or significant source of product differentiation.
- (550) Fifth, the results of the market investigation confirmed the Parties' view that one of the reasons for Wear OS' limited success are its technical limitations. One respondent to the market investigation summarised Wear OS' competitive position as follows: "*Currently, although Wear OS is used on a number of devices, it is not very successful and its market share remains relatively small. This is due to a number of reasons, including functionality, reliability, features, user experience and battery efficiency.*"³⁵⁷ Wear OS devices' short battery life was mentioned by several respondents as one of its main shortcomings.³⁵⁸ This is in line with Fitbit's observations on Wear OS, [Strategy].³⁵⁹ Google explains [Strategy].³⁶⁰ [Google's product strategy]. [Google's product strategy].
- (551) Sixth, current Wear OS licensees have alternatives to Wear OS. Notably, they could switch to one of the two licensable OSs mentioned in Recital (547). While several respondents to the market investigation claimed that the involved switching costs for OEMs would be high, respondents did not substantiate these replies.³⁶¹
- (552) Current Wear OS licensees could also develop their own wearable OS.
- (553) In the first place, the development of a wearable OS is facilitated by:
- (a) the availability for free of open-source code from existing AOSP³⁶², Linux³⁶³, Tizen³⁶⁴, and RTOS³⁶⁵ solutions,³⁶⁶

business (Reply of LG Electronics to questionnaire QA on wearables, search and advertising). Sony discontinued the production of smartwatches before 2019 (Notifying Party's reply to RFI 27, question 15).

³⁵⁶ Wear OS devices' market shares are also low in any plausible sub-segments of the smartwatches segment. Most importantly, even in the full smartwatches segment (where RTOS-based OSs are less strong), Wear OS only had a market share of [5-10]% worldwide and of [10-20]% in the EEA in 2019, with the same declining trend. Form CO, Annex 7.1.

³⁵⁷ Replies to questionnaire QA on wearables, search and advertising, question C.20.4.

³⁵⁸ Replies to questionnaire QA on wearables, search and advertising, question C.20.4; Non-confidential minutes of call of 18 March 2020.

³⁵⁹ Form CO, footnote 737.

³⁶⁰ Form CO, paragraphs 38 and 216-219.

³⁶¹ Replies to questionnaire QA on wearables, search and advertising, question C.22.3.

³⁶² AOSP is controlled by Google. [Strategy] (see Section 9.4.3). If Google decided to stop releasing new AOSP code, it could not withdraw (or degrade) the AOSP code that it has already released. [Strategy].

- (b) available off-the-shelf chipsets that incorporate hardware and software components, which may also include a license to an OS. Notably, Qualcomm has developed a number of smartwatch chipsets under the “Snapdragon Wear” platform, which are designed to run on a number of OSs, including an optimised version of AOSP developed by Qualcomm³⁶⁷;
- (c) a number of independent contract developers (such as Borqs, Thundersoft, Filip, Mediatek, Kiddo, Intrinsic) that incorporate other features in a customised turnkey wearable OS solutions, partly alongside the Qualcomm Snapdragon Wear platform.³⁶⁸ This allows OEMs without any background in OS development to acquire the required engineering capabilities.
- (554) In the second place, several of Wear OS licensees have also introduced smartwatches with alternative wearable OSs, even though the respective devices are mainly sold outside the EEA for now.³⁶⁹ In 2015, three (Mobvoi, Sony and Samsung) of [...] OEMs tracked by IDC as selling Wear OS devices were also selling smartwatches with a wearable OS other than Wear OS.³⁷⁰ In the following year, ASUS also moved to its own proprietary RTOS solution. In 2019, Casio, eBuyNow, Fossil, Huawei, Hublot, LVMH, Mobvoi, Montblanc, Movado, Polar³⁷¹, Suunto, Tag Heuer, Timex, and Xiaomi sold wearable devices running Wear OS, of which the following also sold smartwatches running on alternative wearable OSs: Huawei, Mobvoi, LG Electronics³⁷², and Xiaomi.³⁷³ In addition, Huami currently

³⁶³ The Linux kernel is licensed under free open-source license and is hosted and governed by the Linux Foundation. AOSP, Wear OS, and Tizen are all Linux distributions based on the Linux kernel.

³⁶⁴ Tizen is an open-source OS backed by the Linux foundation (<https://source.tizen.org/>). Tizen Wearable, the wearable adaptation of Tizen, powers Samsung’s wearable devices. While Samsung’s Tizen Wearable implementation contains proprietary components owned by Samsung, Tizen’s source code remains freely available under open-source license.

³⁶⁵ There is a long list of RTOSs that are available under an open-source license and are freely available as building blocks for the development of an OS by wearable OEMs. A list of RTOS distributions available under open-source license is available at <https://www.osrtos.com/>.

³⁶⁶ By way of example, BBK (which distributes brands including Oppo and Vivo), Qihoo 360, Amazfit, Continental Wireless Technology, Sogou have successfully adapted AOSP for their own smartwatch OSs, Tizen and AsteroidOS are both based on Linux, and Huawei’s LiteOS, Fitbit’s OSs, and Garmin’s OS are just a few examples of many successful RTOS solutions. Form CO, footnote 690.

³⁶⁷ Based on a search of publicly available sources by reference to the smartwatch models that run on Qualcomm Snapdragon Wear chipsets optimised for AOSP, the Notifying Party has identified the following OEMs that offer smartwatches running on AOSP-based wearable OS developed by Qualcomm: Mobvoi, Qihoo 360, Sprint, Timex, XTC and Huami. Form CO, Annex RFI 12, question 8.

³⁶⁸ See for example <http://www.borqs.com/SmartDevices/WEARABLES/>, <https://www.thundersoft.com/index.php/iot/wearable/2-81-121>, <https://www.wearable-technologies.com/2018/10/qualcomm-unveils-ecosystem-collaborations-to-accelerate-wearables-growth-based-on-snapdragon-wear-platforms/> (accessed on 16 July 2020).

³⁶⁹ Form CO, paragraph 53.

³⁷⁰ Form CO, Annex 7.4.

³⁷¹ Polar indicated in the market investigation that it manufactured Wear OS powered smartwatch called M600 in the past but that this product has been ramped down from Polar's portfolio. Notifying Party’s reply to questionnaire QA on wearables, search and advertising, question, question B.3.1.

³⁷² However, as mentioned in footnote,355, LG Electronics exited the wearables business in the meantime, according to the Notifying parties, during the course of 2019 (Notifying Party’s reply to RFI 27, question 15).

³⁷³ Form CO, paragraph 53.

sells AOSP-based smartwatches in the EEA under the Amazfit brand and also manufacturers such devices for Xiaomi to be sold under the Xiaomi brand in the EEA.³⁷⁴

- (555) In the third place, several smartwatch suppliers have already developed their own wearable OS. In total, based on IDC data, there are 58 OEMs that have developed and used their own wearable OS, thereof at least 22 for smartwatches, including relatively smaller players such as MyKronoz and Withings.³⁷⁵ This suggests that developing a wearable OS is an economically and technically viable alternative even for Wear OS licensees that do not already have experience developing an OS. Garmin (and Fitbit) have developed RTOS-based OS that are capable of running third-party apps.³⁷⁶ Instead of carrying third-party apps directly on the watch, many wearable OEMs, including Suunto and Polar, decide to achieve the desired use case through third-party integration on the paired smart mobile device. In this case, the wearable OEM fully controls all of the user interaction and the third-party integration takes place only on the smart mobile device.³⁷⁷
- (556) Several respondents to the market investigation submitted that the switching costs, in terms of investment and time, to a newly developed OS would be very high.³⁷⁸ However, the Parties' experience suggests that it would be possible for Wear OS licensees to obtain and implement an alternative wearable OS within around a year with a budget of less than EUR [Fitbit's strategy].³⁷⁹
- (557) The Notifying Party also submitted evidence on the revenues from smartwatch sales of the Wear OS licensees. The largest Wear OS licensee today is Fossil with a market share of about [0-5]% globally and [0-5]% in the EEA in 2019. It distributes devices under a variety of mainly fashion brands, including Fossil, Misfit, Skagen, Michael Kors, Diesel, and Emporio Armani. Fossil sold more than [...] million smartwatches and achieved revenues of more than EUR [...] million in 2019. Therefore, the required investment (estimated at EUR [...] million) is modest relative to its current revenues. Even the Wear OS licensees that generate the least revenues had annual revenues from smartwatch sales several times the required investment: Casio generated more than EUR [...] million and Movado more than EUR [...] million in 2019.³⁸⁰ Moreover, these competitors have even higher revenue opportunities, given that the global smartwatch segment was worth more than EUR [...] billion in 2019 and continues to grow.
- (558) Based on the evidence and on the considerations in the above recitals, the Commission considers that the Transaction is not likely to grant the merged entity

³⁷⁴ Notifying Party's reply to RFI 27, question 17. According to IDC, Technos and Zhenshi Tech both currently sell RTOS-based smartwatches running third-party apps. Their worldwide sales were below 50 000 devices in 2019.

³⁷⁵ IDC Quarterly Wearable Device Tracker - Final Historical 2019Q4; Notifying Party's reply to RFI 27, question 16.

³⁷⁶ Notifying Party's reply to RFI 27, question 18.

³⁷⁷ Notifying Party's reply to RFI 27, question 18.

³⁷⁸ Replies to questionnaire QA on wearables, search and advertising, question C.23.3.

³⁷⁹ Form CO, paragraph 513.

³⁸⁰ IDC Quarterly Wearable Device Tracker - Final Historical 2019Q4.

the ability to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Wear OS.

9.4.3.2.2. As regards incentives

- (559) The Commission considers that Google would not have the incentive to engage in an input foreclosure strategy with regard to Wear OS.
- (560) As explained by the Notifying Party, Google had launched Wear OS precisely with the aim of attracting users to its ecosystem (or preventing their exit), [Google’s product strategy]. The Commission considers that the Transaction will not significantly change Google’s incentive in this respect and Google will continue to aim for the widest possible distribution of Wear OS.
- (561) First, Fitbit only had a small market share of in the growing smartwatches segment in 2019: globally, it had a volume market share of [5-10]% and value market share of [0-5]%, while, in the EEA, it had a volume market share of [5-10]% and value market share of [0-5]%. It is highly unlikely that Google could move all, or even a significant portion, of the users of Wear OS wrist-worn wearable devices to Fitbit devices. Even if Google foreclosed access to Wear OS, most concerned wearable OEMs would switch to an alternative OS. Even to the extent that Google could completely foreclose a given OEM through this strategy, Google would only stand to gain the portion of that OEM’s users that opted to migrate to Fitbit devices (as opposed to those users that would migrate to Fitbit’s competitors that do not depend on Wear OS). Therefore, in order to continue to sell its Google apps on wrist-worn wearable devices (see next recital), Google will have to continue to rely on both Fitbit as well as Wear OS licensees.³⁸¹ This corresponds to the same strategy that Google has been following in the market for smart mobile devices, where Google offers both Pixel devices as well as the licensable Android OS.
- (562) Second, Second, [Google’s product strategy], Google benefits from licensees’ use of Wear OS by keeping users in the Android ecosystem and [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy]. More generally, Google generates all types of information on users from their use of Google apps. The Commission considers that Google will have an incentive to preserve these revenue and data streams.
- (563) Third, according to the Notifying Party, and as confirmed by Google’s internal documents. Google has no plans to discontinue or degrade access to Wear OS. To the contrary, Google seems to have plans to continue developing Wear OS [Strategy].^{382,383}
- (564) In fact, [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy].³⁸⁴

³⁸¹ Section 9.5.2.1. addresses the “opposite” theory of harm that Google would degrade interoperability with Android OS for third-party wrist-worn wearable devices in order to induce switching to Fitbit or Wear OS.

³⁸² See for example [Reference to internal documents].

³⁸³ For instance, [Google’s product strategy]. [Google’s product strategy]. Form CO, Annex 7.5.

³⁸⁴ [Google’s product strategy]. Form CO, Annex 7.10.

- (565) This view is also reflected in the responses of several wearable OEMs responding to the market investigation, which also expect that Google will improve and continue to offer Wear OS.³⁸⁵
- (a) “Post-Transaction, Google can get more experience about wearable devices and speed up the market penetration/occupation of Wear OS, thereby making it more competitive than Watch OS in high end market and more competitive than RTOS in low-medium market.”
 - (b) “pixel or nexus mode will help Google to improve the user experience of WearOS. acquiring Fitbit will speed up the pixel Watch development.”
 - (c) “After transaction, Google will get SW & HW feedback from Fitbit directly, which make it possible to fit all the user's needs much faster than other companies.”
 - (d) “At the moment Wear OS device options are scattered and there is no viable competition against Apple or Samsung. Fitbit market positioning and know-how in the fitness segment will significantly strengthen Google's ability to enter the smartwatch market with a viable product offering.”
 - (e) “Fitbit acquisition is a sign of commitment to the smartwatch market. Fitbit resources, assets and competencies can improve Wear OS competitiveness.”
- (566) Based on the evidence and on the considerations in the recitals (559) to (565), the Commission considers that the Transaction is not likely to grant the merged entity the incentive to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Wear OS.

9.4.3.2.3. As regards effects on competition in the wrist-worn wearables market

- (567) Regardless of whether Google has either the ability or the incentive to foreclose competing downstream rivals with regard to the supply of Wear OS, such strategy would be unlikely to have any significant detrimental effect on competition in the downstream market for wrist-worn wearables.
- (568) The most popular smartwatches today do not run on Wear OS. The largest suppliers of smartwatches are fully vertically integrated, i.e. their smartwatches run solely on their own (proprietary) OSs. In fact, only about [5-10]% of all smartwatches worldwide (excl. China) integrated Wear OS in 2019 ([5-10]% in the EEA). This would therefore leave [90-100]% of smartwatches worldwide by volume completely unaffected by any attempt to withhold or degrade Wear OS (in the EEA, the unaffected segment would be [90-100]%). By value, only about [0-5]% of all smartwatches worldwide (excl. China) integrated Wear OS in 2019 ([5-10]% in the EEA). This would therefore leave [90-100]% of smartwatches worldwide (excl. China) by value completely unaffected by any attempt to withhold or degrade Wear OS (in the EEA, the unaffected segment would be [90-100]%). In addition, the Commission recalls that current Wear OS licensees could also develop their own wearable OS, as explained in detail in Section 9.4.3.2.1.

³⁸⁵ Replies to questionnaire QA on wearables, search and advertising, question C.20.4.

9.4.3.3. Conclusion

(569) In light of the above considerations and based on the results of the market investigation, the Commission concludes that the Transaction is not likely to significantly impede effective competition in the market for wrist-worn wearable devices and possible segments, as a result of any input foreclosure strategies with regard to Google's Wear OS.

9.4.4. *Foreclosure from access to various Google apps and services to the detriment of wrist-worn wearable suppliers (input foreclosure)*

(570) As mentioned in Section 9.4.3, Google apps are primarily available on Wear OS devices.

(571) Nevertheless, during the market investigation, some respondents claimed that Google may be less likely to develop integrations for Google apps with third-party wrist-worn wearable devices post-Transaction in order to gain a competitive advantage for Fitbit.³⁸⁶

(572) Therefore, in this section, the Commission assesses whether the Transaction would likely confer on the merged entity the ability and incentive to foreclose access to various Google apps and whether this would have a significant detrimental effect on competition in the downstream market for wrist-worn wearables, thus causing harm to customers. The concerned markets, where Google offers competing apps, are the supply of (i) general search services, (ii) health and fitness apps, (iii) mobile payment services, (iv) navigation apps offering turn-by-turn navigation; (v) virtual assistants, (vi) digital music distribution services and (vii) digital translation services (and possible segments of the listed markets). As many relevant arguments apply across these different markets, the assessment only distinguishes between these different markets where necessary.

9.4.4.1. The Notifying Party's view

9.4.4.1.1. As regards ability

(573) The Notifying Party submits that the analysis is the same as in Section 9.4.3.1.1 regarding Wear OS, as the accompanying Google apps are not distributed on non-Wear OS wearable devices.³⁸⁷

(574) Google emphasises that Google's apps are only available on Wear OS devices today. But the absence of Google apps has clearly not prevented rival wearable OSs from achieving significant sales. Notably, Apple, Samsung, and Garmin do not currently offer Google apps on their wrist-worn wearable devices, yet are the leading players in Europe. Conversely, Wear OS devices, which do carry Google apps, have achieved significantly smaller shares. Preference for Google apps, if any exists, therefore does not significantly influence most users' choice of wearable device. In any event, virtually all non-Fitbit device owners would have smartphones (or other devices) through which they could access Google apps and services.³⁸⁸

³⁸⁶ Replies to questionnaire QA on wearables, search and advertising, questions C.40.1-40.4.

³⁸⁷ Form CO, paragraph 506.

³⁸⁸ Form CO, paragraph 521.

9.4.4.1.2. As regards incentives

- (575) The Notifying Party submits the same arguments as in relation to Wear OS (see Section 9.4.3.1.2). In particular, given Fitbit's limited position in smartwatches, Google would have no incentive to reserve Google apps to Fitbit smartwatches post-Transaction or otherwise block rival OEMs' access to the apps licensed alongside Wear OS. Google's interest is in ensuring the widest possible distribution for its products and services.³⁸⁹
- (576) Furthermore, irrespective of any merger-specific change, the Notifying Party explains that Google's decisions around whether and when to develop versions of its apps for other smartwatch platforms are based on whether the size of the opportunity justifies the time and engineering effort that would be associated with development and supporting versions of its apps for an ecosystem running on a different code base.³⁹⁰

9.4.4.1.3. As regards effects on competition

- (577) The Notifying Party argues that even if Google were to adopt a foreclosure strategy, such strategy would not, in any event, lead to significant anticompetitive effects.³⁹¹ The most popular wearable devices today do not rely on Wear OS (for example, Apple, Samsung, Garmin) and associated Google apps, hence the vast majority of smartwatches would be completely unaffected by any attempt to withhold or degrade Google apps.

9.4.4.2. The Commission's assessment

9.4.4.2.1. As regards ability

- (578) As a preliminary remark, the Commission notes that none of Google's apps are currently available on wrist-worn wearable devices other than those running on Wear OS or have only very recently become available on the Apple Watch and certain Fitbit devices. Accordingly, the foreclosure assessment is substantially the same as regards Wear OS (see Section 9.4.3). Nevertheless, the Commission has assessed the importance of each of Google apps in more detail below.
- (579) **Google Search** can be accessed from a mobile or desktop browser, from an Android or iOS mobile app, or on Wear OS through a virtual assistant.³⁹² [Google's product strategy]. [Google's product strategy]. [Google's product strategy].³⁹³
- (580) **Google Fit** is available for free on smart mobile devices (Android and iOS) and Wear OS devices, but not on other wearables.³⁹⁴ The Google Fit app is licensed along with Wear OS to wearable OEMs [Google's product strategy]. [Google's product strategy]. [Google's product strategy].³⁹⁵

³⁸⁹ Form CO, paragraph 523.

³⁹⁰ Form CO, Annex 7.6; Notifying Party's reply to RFI 36, question 2.

³⁹¹ Form CO, paragraphs 527-528; Notifying Party's reply to RFI 42, question 2.

³⁹² Form CO, paragraph 253; Notifying Party's reply to RFI 42, question 2.

³⁹³ Notifying Party's reply to RFI 36, question 2(d).

³⁹⁴ Form CO, paragraph 239; Notifying Party's reply to RFI 42, question 2.

³⁹⁵ Form CO, Annex 7.1.

- (581) **Google Pay** is available on smart mobile devices (Android and iOS) and Wear OS devices, but not on other wearables.³⁹⁶ On iOS devices, availability is limited to the U.S. and India and does not include the functionality of proximity/offline payments.³⁹⁷ [Google’s product strategy].³⁹⁸ Google Pay’s proximity payment functionality is only available in selected EEA countries based and with the technical support of the user’s bank.³⁹⁹
- (582) **Google Maps** is available for download as an app for smart mobile devices (Android and iOS) and Wear OS devices.⁴⁰⁰⁴⁰¹ In addition, the Google Maps Apple Watch app launched in September 2020⁴⁰² and is now publicly available for Apple Watch users with Google Maps installed on their iPhone and on WatchOS 5+.⁴⁰³ [Google’s product strategy].⁴⁰⁴
- (583) **Google Assistant** is available on many different devices, including Android smartphones, smart displays, smart speakers, smart TVs, and in automotive applications.⁴⁰⁵ Google Assistant is preinstalled on Wear OS devices, but OEMs are free to preinstall rival virtual assistants. [Google’s product strategy].⁴⁰⁶ [Google’s product strategy].⁴⁰⁷ [Google’s product strategy].
- (584) **Google Play Music and/or its successor YouTube Music** are available for free on various devices, such as PCs, smart mobile devices (Android, iOS, Tizen) and wearable devices.⁴⁰⁸ Before its discontinuation, the Google Play Music app was available on Wear OS devices, but not on other wearables. The YouTube Music app is [Google’s product strategy] for the Apple Watch for which it launched on 15 October 2020.⁴⁰⁹ [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy].⁴¹⁰
- (585) **Google Translate** offers a website interface, an app for smart mobile devices (Android and iOS) and for Wear OS devices, but is not available for other wearables.⁴¹¹⁴¹² [Google’s product strategy].⁴¹³

³⁹⁶ In fact, Wear OS devices that are capable of running Google Pay are required to offer Google Pay or a third-party app providing equivalent functionality.

³⁹⁷ Notifying Party’s reply to RFI 42, questions 1(a), 1(b), 2.

³⁹⁸ Notifying Party’s reply to RFI 39, question 7.

³⁹⁹ Notifying Party’s reply to RFI 42, question 1(b).

⁴⁰⁰ Form CO, paragraph 273; Notifying Party’s reply to RFI 42, question 2.

⁴⁰¹ Google also licenses a Google Maps API, allowing third parties to use the service in their own apps.

⁴⁰² Google previously offered a version of Google Maps on the Apple Watch. However, the app’s usage rate remained low and was discontinued in 2017, [Google’s product strategy].

⁴⁰³ Notifying Party’s reply to RFI 36, question 2(c).

⁴⁰⁴ Notifying Party’s reply to RFI 39, question 9.

⁴⁰⁵ Form CO, paragraph 269.

⁴⁰⁶ Form CO, Annex 7.1; Notifying Party’s reply to RFI 36, question 2e.

⁴⁰⁷ [Parties’ product strategy]. [Parties’ product strategy]. Notifying Party’s reply to RFI 43, question 1.

⁴⁰⁸ Form CO, paragraph 273; Notifying Party’s reply to RFI 42, question 2.

⁴⁰⁹ Notifying Party’s reply to RFI 39, question 9.

⁴¹⁰ Notifying Party’s reply to RFI 36, questions 2(a) and 2(b).

⁴¹¹ Form CO, paragraph 273; Notifying Party’s reply to RFI 42, question 2.

⁴¹² Google also licenses an API allowing translation in third-party apps.

- (586) Against this background, the Commission considers that Google would not have the ability to engage in an input foreclosure strategy.
- (587) First, the Commission notes that Google's apps have clearly not been an important input for wrist-worn wearable devices in the past. Indeed, the absence of Google apps has not prevented rival wearable OSs from achieving significant sales. Notably, as pointed out by the Notifying Party and confirmed by the results of the market investigation, Apple (until very recently), Samsung and Garmin do not offer Google apps on their wrist-worn wearable devices, yet are the leading players in Europe. In contrast, Wear OS devices, which do carry Google apps, have achieved only a small share of wrist-worn wearable devices sold to consumers today. Therefore, the presence of Google apps on Wear OS devices has not been a significantly important distinguishing factor as to attract users' choice of wearable device in the past.
- (588) Second, there is no indication that the importance of Google apps on wrist-worn wearable device has increased. To the contrary, as explained in recitals (548) to (549), Wear OS devices' market share in the downstream market for supply of smartwatches has constantly declined over the past three years, reaching a level of below or close to 5%.
- (589) Third, there is no basis to claim that Google apps would become more relevant in the next two to three years. As explained above, the starting point is that Google apps do not represent a significant distinguishing factor today. There is no evidence on the Commission's file suggesting that Google apps would become more relevant in the next two to three years.
- (590) Finally, wearable OEMs have alternatives available to Google apps. On the one hand, for certain apps, there are competing apps available to or even developed by wearable OEMs (see Section 9.1 for further details). On the other hand, for certain apps, Google licenses APIs which allow third parties to use Google apps within other apps or for notifications.
- (591) **Google Search** had an estimated share in general search services of 90% in almost all EEA countries in 2019. Google's competitors are Microsoft's Bing, Yahoo and DuckDuckGo, but their combined share is never above 10%. On Wear OS, Google Search can only be accessed through the Google Assistant integration (or through a web browser, if available on the wearable device). Competing virtual assistants may also use Google Search (for example, Bixby, Siri⁴¹⁴) or other general search services (for example, Alexa uses Bing, while Xiao AI uses Baidu).⁴¹⁵
- (592) **Google Assistant** is present on only [5-10]% of smartwatches worldwide and [10-20]% in the EEA in 2019, albeit its share was higher across platforms, i.e. [30-40]% globally and [40-50]% in the EEA. Google Assistant's competitors on smartwatches are Siri (Apple), Bixby (Samsung), Xiao AI (Xiaomi) as well as Alexa (Amazon). While the former competitors mentioned, Apple, Samsung, Xiaomi, develop their virtual assistant for their own devices, at least Alexa is available for use on third-party devices. For instance, Alexa is integrated into certain Fitbit and Amazfit

⁴¹³ Notifying Party's reply to RFI 39, question 8.

⁴¹⁴ Siri syndicates blue link search results from Google as a fall back but also provides its own results and results from other providers.

⁴¹⁵ Notifying Party's reply to RFI 39, questions 11 and 12.

devices. Given the small screen and keyboard, it is likely that any search services will mainly be accessed via the virtual assistant.

- (593) **Google Fit** had an estimated share of [0-5]% worldwide and [0-5]% in the EEA in 2019 in the supply of health and fitness apps on smart mobile devices. The Fitbit app, which is in any case not available for use with third-party wrist-worn wearable devices, had a share of [5-10]% worldwide and [0-5]% in the EEA. Google Fit's competitors are both health and fitness apps by smartphone and wearable OEMs (for example, Apple Health, Samsung Health, Mi Fit by Huami, Garmin Health etc.) as well standalone health and fitness apps (for example, MyFitnessPal, Strava etc.). Hence, wearable OEMs without own health and fitness app could also cooperate with a number of standalone apps.
- (594) **Google Pay** had an estimated share of at most [20-30]% worldwide and of [10-20]% in the EEA in the supply of (contactless) proximity/offline mobile payment services, while Fitbit Pay's share was negligible. Google Pay's competitors are other OEMs with own payment service, such as Apple Pay, Samsung Pay, Huawei Pay, Garmin Pay etc. Given the large number of established mobile payment services by wearable OEMs, it follows that wearable OEMs have already developed or could easily develop their own mobile payment services or could team up with other players.
- (595) Besides **Google Maps**, Waze is also controlled by Google. Google Maps and Waze had an estimated share of [70-80]% worldwide and [60-70]% in the EEA in 2019 in the supply of navigation apps offering turn-by-turn navigation on smart mobile devices. Google is clearly the leading supplier of navigation apps and there are few credible competitors, besides Apple maps, which is only available on iOS devices. However, while Google Maps is not available on third-party devices, Google publicly offers Google Maps APIs. Any developer (wrist-worn wearable OEMs, app developers, device manufacturers, etc.) may sign up to use these APIs on their devices. The Google Maps integrations allow wearable OEMs to display maps in their companion apps, for various uses, including allowing users to plan a course, or review the GPS track of a previous activity. In addition, while Google Maps APIs do not themselves support notifications, wearable OEMs could access Google Maps app notifications using the public Notification API provided by Android and display them on a paired wrist-worn wearable. There are third-party apps that offer this functionality, such as "Navigation Pro" for Samsung smartwatches.⁴¹⁶
- (596) **Google Play Music and its successor YouTube Music** had an estimated share of [20-30]% worldwide and [10-20]% in the EEA in 2019 in the supply of digital music streaming apps on smart mobile devices. Google's competitors are both music streaming apps by wearable OEMs (for example, Apple Music) as well as standalone music apps (for example Spotify, Deezer etc.). Therefore, wearable OEMs without own digital music streaming service could cooperate with a number of standalone apps. Some wearable OEMs (for example, Samsung) already offer apps that allow users to listen to their music subscriptions with standalone providers.⁴¹⁷

⁴¹⁶ Notifying Party's reply to RFI 36, question 2; <https://play.google.com/store/apps/details?id=smartwatchstudios.app.gears3navigation>.

⁴¹⁷ For instance, Samsung Music enables its users to sync the users' smartphones with their Spotify accounts. Notifying Party's reply to RFI 42, question 3.

- (597) **Google Translate** had an estimated share of [90-100]% worldwide and [80-90]% in the EEA in 2019 in the supply of digital translation apps on smart mobile devices. The Commission notes two aspects which put into context the relevance of the Google Translate app. First, as for Google Maps, Google licenses APIs to use Google Translate services in third-party apps. Second, the use case for the Google Translate app on wrist-worn wearable devices is quite limited. [Google's internal data]. [Google's internal data].⁴¹⁸
- (598) Based on the evidence and on the considerations in recitals (578) to (597), the Commission considers that the Transaction is not likely to grant the merged entity the ability to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Google apps.

9.4.4.2.2. As regards incentives

- (599) The Commission considers that Google would not have the incentive to engage in an input foreclosure strategy with regard to Google apps post-Transaction.
- (600) First, Fitbit only has a small market share in the growing smartwatches segment. It is highly unlikely that Google could move all, or even a significant portion of the users of third-party wrist-worn wearable devices to Fitbit devices, in particular as the availability of apps may not be a sufficiently important factor for customers of many wearable OEMs. In that case, Google would risk losing the data and revenues associated to the distribution of those apps without any gains as consumers would stick to the same wearables supplier.
- (601) Second, [Google's product strategy], Google benefits from licensees' use of its apps. This allows Google to earn revenues and collect data. In terms of revenues, Google mainly benefits from the distribution of its ads revenue-generating services and it also earns limited revenues through the distribution of apps and content through Google Play. In terms of data, Google generates information on users from their use of Google apps, which in turn it can monetise in its advertising business.
- (602) Third, the extent to which Google would have developed the Google apps for third-party wrist-worn wearable devices absent the Transaction remains unclear.
- (603) Google has explained its strategy with regard to the development of Google apps for third-party platforms as follows: [Strategy]. [Strategy]. [Strategy]. [Strategy]. [Strategy]. In principle, Google would have no objection to developing versions of its apps for any other smartwatch platform, provided the size of the opportunity justified the time and engineering effort that would be associated with developing and supporting versions of its app for an ecosystem running a different code base.⁴¹⁹ [Strategy].
- (604) The Commission considers that the example of the Apple Watch shows that once a wrist-worn wearable device has reached a critical size, Google is willing to develop Google apps integrations for such competing platforms. As can be seen from Google's internal documents, Google considers that [Reference to internal documents]. [Google's product strategy].

⁴¹⁸ Notifying Party's reply to RFI 39, question 13.

⁴¹⁹ In addition, [Google's product strategy]. [Google's product strategy].

(605) There is no evidence on the Commission’s file to suggest that Google’s incentives would change post-Transaction in this respect. Instead, based on Google observed strategy in the smart mobile device sphere, the Commission expects that Google will push its Google apps rather than foreclose them once competing wearable platforms have reached a sufficient size.

(606) Based on the evidence and on the considerations in recitals (599) to (605), the Commission considers that the Transaction is not likely to grant the merged entity the incentive to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Google apps.

9.4.4.2.3. As regards effects on competition in the wrist-worn wearables market

(607) Regardless of whether Google has either the ability or the incentive to foreclose competing downstream rivals with regard to the supply of Google apps, such strategy would be unlikely to have any significant detrimental effect impact on competition in the downstream market for wrist-worn wearables.

(608) The most popular smartwatches today do not run on Wear OS and hence do not currently have access to Google apps. As explained in recital (548), only about [0-5]% of all smartwatches worldwide integrated Wear OS in 2019 ([5-10]% in the EEA). The most popular wearable devices today do not rely on Google apps (for example, Samsung, Garmin), hence the vast majority of smartwatches would be unaffected by any attempt to withhold access to Google apps. The Apple Watch has only very recently gained access to few of Google apps, that is after the Apple Watch had already long become the most successful smartwatch.

(609) Even if Google apps become relatively more important in the next two to three years, for which there is no evidence on the Commission’s file, it is unlikely that their importance would increase to such an extent that a hypothetical strategy to degrade or block access to Google apps would foreclose wearable rivals.

9.4.4.2.4. Conclusion

(610) In light of the above considerations and based on the results of the market investigation, the Commission concludes that the Transaction is not likely to significantly impede effective competition in the market for wrist-worn wearable devices and possible segments, as a result of any input foreclosure strategies with regard to Google apps.

9.4.5. *Foreclosure from access to Google Play to the detriment of wrist-worn wearable suppliers (input foreclosure)*

(611) Another vertical relationship exists between Google’s supply of Android app stores (Google Play) and Fitbit’s activities in the downstream market for wrist-worn wearables. This is because wrist-worn wearable devices rely on the connection to a smartphone, which is administered by the wearable devices’ companion app, which is usually downloaded via an app store, such as Google Play.

(612) During the market investigation, the concern has been raised that Google could foreclose access to Google Play.⁴²⁰ Notably, respondents indicated that Google could

⁴²⁰ Replies to questionnaire QA on wearables, search and advertising, questions C.34-C.36; non-confidential submission of 13 March 2020, paragraphs 79-85 (anonymous).

restrict the distribution of wearable companion apps by (i) deteriorating rival wearables' companion apps' rating and/or positioning within the Play Store, (ii) delaying their approval in case of updates or new releases, or (iii) refusing access to the Play Store. The aim of such strategy would be to induce customers of competing wrist-worn wearables to switch to Fitbit by making it more difficult or impossible for the users to download companion apps for competing wearables.

- (613) Therefore, the assessment in this section consists in determining whether the Transaction would likely confer on the merged entity the ability and incentive to foreclose access to Google's Android app store (Google Play) and whether this would have a significant detrimental effect on competition in the downstream market for wrist-worn wearables market, thus causing harm to customers.⁴²¹⁴²²

9.4.5.1. The Notifying Party's view

9.4.5.1.1. As regards ability

- (614) The Notifying Party submits that Google could not use the Play Store to engage in anticompetitive foreclosure. Apple, the leading wearable competitor, does not use the Play Store as a distribution channel at all. Other rivals would also have numerous, similar means of disseminating their companion apps to users beyond the Play Store. A number of OEMs could preinstall their companion apps on their own smartphones or offer them in their own app stores (for example Samsung, Huawei, Xiaomi). Other rivals without their own smartphones and app stores could also reach users via alternative channels available on Android such as downloading the app directly from a website as an application package.⁴²³

9.4.5.1.2. As regards incentives

- (615) In the Form CO, in response to both a possible foreclosure of Google Play and leveraging of Android OS (see Section 9.5.2), the Notifying Party submits that Google has no incentive to exclude third-party wearable devices as it would make the Android ecosystem less attractive and would be inconsistent with Android's overall business model.⁴²⁴ It could deter users of non-Fitbit wearable devices from buying an Android smartphone, resulting in significant losses associated to the difference between Google's search and other revenues on Android smartphones and on iPhones as users, wishing to avoid the foreclosure, would face a choice between switching to a Fitbit device (keeping their Android smartphone) or to an iPhone. At the same time, Google would only stand to gain the limited portion of that OEM's users that opted to migrate to Fitbit devices, which would generate small gross profits given the low profit margin per Fitbit device. During the Phase I

⁴²¹ This is presented as an input foreclosure theory of harm where post-Transaction Google forecloses competing app developers downstream from using the Google Play Store as an input. The same arguments would apply if presented as a customer foreclosure theory of harm where post-Transaction Google denies competing app developers upstream the distribution of their apps on Fitbit devices by foreclosing them from the Google Play store.

⁴²² As the Commission already found in Section 9.4.3.2 that Google would not have the ability nor the incentive to foreclose access to Wear OS, this sections focusses on foreclosure from access to Google apps for third-party wrist-worn wearable devices, not running on Wear OS.

⁴²³ Form CO, paragraph 55.

⁴²⁴ Form CO, paragraphs 559-571.

investigation, Google submitted a vertical arithmetic analysis⁴²⁵ to quantify this trade off. In the Response to the Article 6(1)(c) Decision, Google replied to the Commission’s criticism on the model and submitted a revised analysis.⁴²⁶

(616) The Notifying Party emphasises that the Commission’s quantitative analysis does not take into account all relevant factors. In particular, a foreclosure strategy would also result in reputational damage to the Android ecosystem, a worsening of Google’s relationship with OEMs and ultimately less investments into the platform.

(617) In addition, the Notifying Party notes that Google has not employed a similar strategy in support of Google hardware products (for example Google Pixel smartphones and Pixel Buds earbuds) in the past, despite having a similar ability to do so.

9.4.5.1.3. As regards the possible effects on competition in the wrist-worn wearables market

(618) The Notifying Party argues that even if Google were to adopt a foreclosure strategy, such strategy would not, in any event, lead to significant anticompetitive effects given competitors’ alternative distribution channels for their companion apps.⁴²⁷

9.4.5.2. The Commission’s assessment

(619) For the reasons set out below, the Commission considers that Google will have the partial ability and possibly the incentive to foreclose competing wearable suppliers by degrading interoperability with Google’s Android app store. If Google engaged in such a foreclosure strategy, any anticompetitive effects of such a strategy would however not be significant.

9.4.5.2.1. As regards ability

(620) The Commission considers that the merged entity would have the partial ability to engage in a foreclosure strategy with regard to Google Play.

(621) Google Play is the Android app store offered by Google, which Google has offered since 2008. The Play Store is part of Google Mobile Services (“GMS”), the bundle of Google apps and services that Google licenses together.⁴²⁸

(622) Based on the information provided by the Notifying Party, which relies on the *Google Android* case and refers to the year 2016, Google had a market share in the supply of Android app stores of [90-100]% (by app downloads, worldwide, excluding China).

(623) In *Google Android*, the Commission found Google to be dominant in the supply of Android app stores in a worldwide market (excluding China) between 2011 and 2016.⁴²⁹ Besides Google’s market share, as quoted in recital (622), this conclusion

⁴²⁵ “An economic assessment of Google’s ability and incentives to degrade the interoperability between non-Fitbit wearables and Android mobile devices” (Vertical White Paper), 17 June 2020; “Incentives to degrade the Interoperability between non-Fitbit wearables and Android mobile devices” (Vertical EEA White Paper), 14 July 2020.

⁴²⁶ The Commission analyses the vertical arithmetic analysis in the context of a possible leveraging of Google’s Android OS in Section 9.5.2.

⁴²⁷ Form CO, paragraph 55.

⁴²⁸ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 132-133.

⁴²⁹ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 590-673.

was based on (i) the quantity and popularity of apps available on the Play Store, (ii) the automatic update functionalities of the Play Store, (iii) the fact that the only way for OEMs to obtain Google Play Services is to obtain the Play Store, (iv) the existence of barriers to entry and expansion, (v) the lack of countervailing buyer power, and (vi) the insufficient indirect constraint from app stores for non-licensable smart mobile OSs.

- (624) The Commission considers that the evidence in the Commission’s file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to Google’s current position in the market for Android app stores in a worldwide market excluding China than the view that the Commission has taken in *Google Android*. First, the Notifying Party has not submitted updated market shares that would suggest that Google’s market position in the supply of Android app stores would have decreased. Second, no evidence in the file suggests that the situation as regards barriers to entry, countervailing buyer power and the constraint from non-licensable smart mobile OSs has materially changed compared to the Commission’s findings in *Google Android*. Therefore, the Commission concludes that Google is still dominant in the supply of Android app stores in a worldwide market (excluding China), or at the very least, that it has a significant degree of market power in that market.
- (625) Several wearable OEMs indicated that Google would have the ability to restrict distribution of wearable companion apps on Android smartphones.⁴³⁰ In particular, the market investigation indicated three ways in which Google could restrict distribution, that is by (i) deteriorating rival wearables’ companion app’ rating and/or positioning within the Play Store, (ii) delaying their approval in case of updates or new releases, or (iii) refusing access to the Play Store.
- (626) Respondents to the market investigation explain that Google could implement such foreclosure strategy through changes to the approval mechanisms. For instance, one respondent indicated: “*Applications in Google Play need to be submitted for Google’s review and approval before making available for download in Google Play. The review and audit is done by Google itself. So Google has the ability to determine if there is a problem with the app and refuse to make available in Google Play, which may affect other wearable apps.*”⁴³¹ Other respondents agree that Google could make changes to the internal evaluation/authorization/verification processes.⁴³²
- (627) The Notifying Party has not disputed that such conduct would theoretically be possible.
- (628) Therefore, the Commission notes that Google has the discretion to change Google Play policies, including the approval mechanism, in order to implement such foreclosure strategies.
- (629) Respondents to the market investigation consider that wearable OEMs do not have effective counterstrategies. However, based on the Notifying Party’s submission, the Commission acknowledges that the Android platform offers multiple distribution

⁴³⁰ Replies to questionnaire QA on wearables, search and advertising, question C.34.

⁴³¹ Replies to questionnaire QA on wearables, search and advertising, question C.34.2.

⁴³² Replies to questionnaire QA on wearables, search and advertising, question C.34.2.

channels for Android smartphone OEMs (for example Samsung, Huawei, Xiaomi), to distribute their apps to users, which Android smartphone OEMs could make use of in case of a foreclosure strategy in relation to Google Play.

- (630) First, OEMs relying on Android OS can preinstall wearable companion apps on mobile devices and thus ensure the availability of those apps to users. For instance, Samsung preinstalls many of its own apps. Today, Samsung preinstalls its wearable companion app (Galaxy Wearable) on its A51, Note 10, S8, S9, S10 and S20 model mobile devices. Other Android mobile device OEMs similarly preinstall many of their apps on their devices. While Android smartphone OEMs are reluctant to preinstall too many apps (as they take up memory)⁴³³, in case of a foreclosure strategy, wearable companion app could be prioritised.
- (631) Second, companion apps also can be distributed through app stores other than Play, including first-party (namely, OEM) and third-party app stores. For instance, Samsung preinstalls its app store, called the Galaxy Store, on Samsung's Galaxy line of mobile devices.⁴³⁴ Xiaomi smartphone users can purchase apps on Xiaomi's own app store, called Xiaomi Market. As another example, Amazon has its own Android app store that can be installed on Android mobile devices and there are several other third-party app stores available for Android. When a user purchases a wrist-worn wearable device, the manufacturer can include instructions on where and how to download the companion app.
- (632) Even if certain Android OEMs do not preinstall their companion app or do not offer an alternative app store today, they could start using these strategies in case Google started implementing a foreclosure strategy. To reach all customers, smartphone OEMs that use Android OS could thus enter into agreements to distribute their companion apps on each other's devices (for example a user of a Samsung wearable would have access to the Samsung companion app on a Xiaomi smartphone and vice versa). Non-integrated Android smartphone OEMs (without wearables) would also be likely to participate in order to offer their users choice between different wearable devices and thus making their smartphone more attractive to users. Non-integrated wearable OEMs, i.e. wearable OEMs that do not own a smartphone OS (for example, Garmin, Polar etc.), could also try to enter into agreements with Android smartphone OEMs, however, it is uncertain whether Android smartphone OEMs that also sell wearables would be willing to distribute their rivals' companion apps. In any case, for both Android smartphone OEMs and non-vertically integrated wearable OEMs, such a strategy would cause some additional transaction costs resulting from the need to deal with several rather than one app store provider⁴³⁵, but there is no indication that such costs would be prohibitive.
- (633) In particular, the Commission considers that the case of wearable companion apps differs from the case of search and browser apps, as considered in the *Google Android* decision. Contrary to search and browser apps, for a wearable companion app, users are likely to make a bigger effort in looking for the companion app and

⁴³³ Replies to questionnaire QD on wearables, smartphones and apps, question C.12.1.1.

⁴³⁴ Contrary to press reports in September 2020, Samsung itself confirmed that "it has no plans to drop either Bixby or Galaxy Store from its devices, saying both services are an important part of the Galaxy ecosystem". Notifying Party's reply to RFI 33, question 1.

⁴³⁵ Replies to questionnaire QD on wearables, smartphones and apps, question C.12.2.1.

download it from other app stores than Google Play, given that the user bought the smartwatch and needs the app to make it work.

- (634) Finally, the Notifying Party submitted that wearable OEMs, in particular the non-integrated ones, could also distribute their companion apps by installation directly from a website, that is to say without the use of an app store (so-called "side-loading"). However, as set out in *Google Android*, the Commission considers that side-loading does not constitute a satisfactory distribution channel and is technically complex.⁴³⁶ The results of the market investigation confirmed that wearable OEMs consider it unlikely that users would be willing to use this method given the additional effort, technical complexity and potential risks (for example, in terms of viruses or technical compatibility).⁴³⁷
- (635) On that basis, the Commission considers that Google's ability to restrict the distribution of wearable companion apps on Android smartphones would only be partial.
- (636) In any case, the Commission notes that competition rules, in particular Article 102 TFEU and Article 54 of the EEA Agreement will continue to apply to the merged entity post-Transaction, regardless of the outcome of the present assessment under the Merger Regulation. As opposed to degradation in relation to Android OS discussed below, refusing access to Google Play would be easily detectable, except possibly for more limited foreclosure strategies (for example deteriorating rival wearables' companion app' rating and/or positioning within the Play Store or delaying their approval in case of updates or new releases).
- (637) Therefore, based on the evidence and on the considerations in recitals (620) to (636), the Commission considers that the Transaction would only grant the merged entity the partial ability to foreclose competitors in the downstream markets for wrist-worn wearables by restricting the distribution of wearable companion apps on Android smartphones. In particular, the merged entity could engage in more limited foreclosure strategies aimed at non-integrated wearable OEMs without alternative distribution channels.

9.4.5.2.2. As regards incentives

- (638) In principle, the same considerations apply for access to Google's Android app store as for a possible degradation with Android OS, as set out in Section 9.5.2.2.2, as the aim of the foreclosure strategy would be the same. However, there are a few considerations which are specific to Google Play, which make a foreclosure via Google Play unattractive.
- (639) First, the Commission considers that it is unlikely that Google would implement a foreclosure strategy via the Play Store as such strategy would likely be ineffective given that Google's ability to foreclose is only partial. In the first place, at least Android smartphone OEMs, which have their own wearable, could circumvent any kind of foreclosure strategy by preinstalling their companion apps and/or using their own app store. Therefore, the effect would be limited to non-integrated wearable OEMs. In the second place, more limited foreclosure strategies (for example (i)

⁴³⁶ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 627-642.

⁴³⁷ Replies to questionnaire QD on wearables, smartphones and apps, question C.12.3.1.

deteriorating rival wearables' companion app' rating and/or positioning within the Play Store, (ii) delaying their approval in case of updates or new releases) are unlikely to have a significant effect on user switching.

- (640) Second, in terms of reputation effects, the most effective foreclosure strategy (that is to say, refusal to access Google Play) is likely to be observable by authorities, app developers and users.
- (641) This is also reflected in several responses to the market investigation:⁴³⁸
- (a) “Doing so would significantly hurt the standing of the Play Store as an open place for everyone to distribute apps. This would be leading to a PR disaster and immediate demands from consumers for alternatives to the Play Store. In our opinion the damages of this would far outweigh the benefits.”
 - (b) “[W]e are hopeful that apps like [...] would continue to be carried in Play Store, and that governing bodies would prevent any type of approval delays or blocking and require Fitbit to continue to carry competitor apps. If not, this would likely weaken Google’s positioning of Fitbit given users history with certain apps.”
 - (c) “Many companion APPs work on multiple devices and are available on multiple APP stores. While there is an incentive to limit direct competitors, some APPs are in demand from consumers and Google would be interested in putting them on the App Store.”
- (642) Based on the evidence and on the considerations in recitals (638) to (641), the Commission considers that the Transaction is not likely to grant the merged entity the incentive to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Google Play.

9.4.5.2.3. As regards the possible effects on competition in the wrist-worn wearables market

- (643) Regardless of whether Google has either the ability or the incentive to foreclose competing downstream rivals with regard to the supply of Wear OS, such strategy would be unlikely to have any significant detrimental effect on competition.
- (644) The Commission considers that a foreclosure strategy in relation to Google Play would not have significant effects on competition as it would not significantly reduce the sales prospects of Fitbit’s wearable competitors.
- (645) Apple’s smartwatch is not Android-compatible and has a market share of [20-30]% by volume and [30-40]% by value in the supply of wrist-worn wearable devices in the EEA, with similar shares on a worldwide level. The sales prospects of Apple would not be affected by a degradation strategy of Google’s Android appstore.
- (646) Moreover, any merger-specific degradation strategy would have no impact on the wearable OEMs’ sales prospect with iPhone users. Apple has a volume share in the supply of smartphones of [20-30]% in the EEA and [10-20]% worldwide. The evidence on file⁴³⁹ also suggests that the share of Android-compatible wrist-worn wearable devices connecting to iPhones exceeds Apple’s smartphone market share

⁴³⁸ Replies to questionnaire QA on wearables, search and advertising, question C.35.1.

⁴³⁹ For more details, see paragraphs (692) to (695) in Section 9.5.2.2.1.1 on Android interoperability.

for some OEMs. Nevertheless, the share of Android-compatible wrist-worn wearable devices currently relying on access to Google Play remains significant and may significantly vary across wearable OEMs.

- (647) In addition, as explained in recital (630) to (633), the Commission notes that Android smartphone OEMs have effective counterstrategies and would hence also not be affected by a foreclosure strategy in relation to Google Play. Only if non-integrated wearable OEMs were not able to enter into agreements with Android smartphone OEMs (for example, to be included in their app stores), they would be affected by a foreclosure strategy in relation to Google Play. The largest competitor affected by such a strategy would be Garmin, which had a volume market share of [5-10]% and value market share of [10-20]% globally and of [10-20]% and [10-20]% in the EEA in 2019.

9.3.5.2.4. Conclusion

- (648) In light of the above considerations and based on the results of the market investigation, the Commission considers that the Transaction is not likely to significantly impede effective competition in the market for wrist-worn wearable devices and possible segments, as a result of any input foreclosure strategies with regard to Google Play.

9.4.6. *Foreclosure from access to Google Search to the detriment of wrist-worn wearable suppliers (input foreclosure)*

- (649) During the market investigation, the concern has been raised that Google could leverage its position in general search services into the market for wrist-worn wearables.⁴⁴⁰ Notably, respondents indicated that Google could restrict the distribution of competing wrist-worn wearable devices by preferencing Fitbit wrist-worn wearables devices in Google Search results to the detriment of Fitbit's competitors.

- (650) The Commission's assessment in this section consists in determining whether the Transaction would likely confer on the merged entity the ability and incentive to foreclose Google Search services to competing wrist-worn wearables manufacturers and whether this would have a significant detrimental effect on competition in the wrist-worn wearables market, thus causing harm to customers.

9.4.6.1. Notifying Party's views

- (651) The Notifying Party submits that it lacks both the ability and the incentive to discriminate in favour of Fitbit in Google Search results. Moreover, the Notifying Party submits that such a strategy would at most have a marginal impact.

9.4.6.1.1. As regards ability

- (652) In the Form CO, the Notifying Party submits that Google lacks the ability to foreclose competing wearable device manufacturers by discriminating in favour of Fitbit in Google Search results.⁴⁴¹

⁴⁴⁰ Replies to questionnaire QA on wearables, search and advertising, questions B.4; non-confidential submission of 13 March 2020, paragraphs 46-65 (anonymous).

⁴⁴¹ Form CO, paragraphs 613-620.

- (653) Google explains that the majority of wrist-worn wearable device sales are made offline. Regarding online sales, Google explains that online sellers of wrist-worn wearable devices do not depend on Google Search and that the majority of wrist-worn wearable device OEMs are household names that attract a large proportion of direct traffic to their web stores.
- (654) In addition, the Notifying Party submits that a large proportion of online sales are made on Amazon, which does not depend on Google for any meaningful volume of traffic.

9.4.6.1.2. As regards incentives

- (655) In the Form CO, the Notifying Party submits that interfering with the relevance of generic search results goes against Google's fundamental commercial incentives. Search advertising that is placed on general search results pages accounts for a large share of Google's revenues (83.9% of revenues in 2019).⁴⁴²
- (656) This revenue stream depends upon Google's ability to attract users to Google Search by competing with other general search services based on the "relevance of their results," as well as their comprehensiveness, speed and the attractiveness of their user interface.
- (657) The Notifying Party submits that interfering with Google's generic search algorithms to promote Fitbit products would reduce the relevance of its results, degrading its quality, causing users to switch to rivals and run counter to Google's overriding incentive to attract users to its general search service.
- (658) Google would not risk its single most important revenue stream to slightly increase the number of Fitbit devices sold. Such device sales would account for just a very small fraction of its revenues post-Transaction. Moreover, as discussed above, the Notifying Party explains that any such manipulation of its generic search results would be highly ineffective given wrist-worn wearable device OEMs' lack of reliance on Google Search results.
- (659) In addition, Google explains that it already offers a wide range of hardware products, including Pixel phones and Pixelbook laptops. [Internal data], Google does not favour any of its existing products in its generic search results pages.

9.4.6.1.3. As regards the possible effects on competition in the wrist-worn wearables market

- (660) In the Form CO, the Notifying Party submits that manipulation of its generic search results would be highly ineffective given wrist-worn wearable device OEMs' lack of reliance on Google Search results as discussed above.⁴⁴³

9.4.6.2. The Commission's assessment

- (661) For the reasons set out below, the Commission considers that Google would neither have the ability nor the incentives to discriminate in favour of Fitbit in Google Search results. The Commission also considers that, if Google engaged in such a strategy, any anti-competitive effects would not be significant.

⁴⁴² Form CO, paragraph 619.

⁴⁴³ Form CO, paragraph 619.

9.4.6.2.1. As regards ability

- (662) The Commission considers that, in spite of Google's dominance in the market for general search services, post-Transaction the merged entity would not have the ability to foreclose competing wearable device manufacturers by discriminating in favour of Fitbit in Google Search results.
- (663) For input foreclosure to be a concern, the vertically integrated firm resulting from the merger must have a significant degree of market power in the possible upstream market. As described in Section 9.1.4, with a market share of above 90% in almost all EEA countries in 2019, except for Czechia (84.4%), Google is dominant in the market for general search services.
- (664) However, input foreclosure may raise competition problems only if it concerns an important input for the possible downstream product. The Commission considers that, for the reasons described below, the share of wearable device purchases that are made based on Google Search organic results is small and thus that Google Search services are not an important input for the sale of wrist-worn wearables.
- (665) The Commission considers that the three major distribution channels for wearable devices are brick-and-mortar stores (physical stores), online sales via resellers' websites, and online sales via the OEM's own websites.
- (666) In the market investigation, the majority of wearable device OEMs explained that sales in brick-and-mortar stores were the most important distribution channel.⁴⁴⁴ In line with this, data submitted by the Notifying Party shows that [...]% of Apple Watches are purchased in physical stores, including Apple stores ([...]%) and mobile phone stores ([...]%), while just [...]% were purchased online.⁴⁴⁵ Similarly, [...]% of Wear OS devices were purchased in physical stores, compared to just [...]% online. Because there is no evidence that Google Search results are important for offline sales, the Commission considers that the effect of Google Search traffic on sales via both these distribution channels is small.
- (667) Wearable device OEMs listed sales via resellers' websites as the second most important distribution channel. The Commission considers that the effect of Google Search traffic on sales via this channel is also small. In particular, a large proportion of such sales are made on Amazon, which does not depend on Google for any meaningful volume of traffic. According to data submitted by the Notifying Party, of the worldwide desktop web traffic to Amazon.com and the top three Amazon domains in the EEA (for the UK, France and Germany) [60-70]% of this traffic is completely unrelated to search engines, and [50-60]% was direct traffic.⁴⁴⁶
- (668) Most wearable device OEMs explained that online sales via their own website account only for a small share of sales. The Commission considers that even for this distribution channel Google Search traffic is not very important. In 2019, [40-50]% of worldwide desktop web traffic to Fitbit plus the top ten other wrist-worn wearable device vendors by volume is completely unrelated to search engines.⁴⁴⁷ A further

⁴⁴⁴ Replies to questionnaire QA on wearables, search and advertising, question C.2.

⁴⁴⁵ Form CO, paragraph 616.

⁴⁴⁶ Form CO, paragraph 616.

⁴⁴⁷ Form CO, paragraph 616.

[30-40]% came from branded search engine traffic, where the user typed the name of the OEM into a search engine. This is similar to direct traffic in that the user was looking for the OEM's site, and would be resistant to search results manipulation. Together this non-search and branded search traffic accounted for over 80% of the traffic to the sites of the top ten wrist-worn wearable device vendors in 2019.

- (669) Based on the evidence and on the considerations in recitals (662) to (668), the Commission considers that the Transaction is not likely to grant the merged entity the ability to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Google Search.

9.4.6.2.2. As regards incentives

- (670) The Commission considers that post-Transaction Google would not have the incentive to discriminate in favour of Fitbit in Google Search results.
- (671) The merged entity faces a trade-off between the gains from expanding its share in the market for wrist-worn wearable devices and the costs associated with reduced revenues from Google Search that might be a consequence of interfering with Google's generic search algorithm.
- (672) On the one hand, by discriminating against Fitbit's competitors in Google Search results, Google is indeed likely to increase the sale of Fitbit wrist-worn wearable devices. However, due to the small relevance of Google Search for sales of wrist-worn devices discussed in detail above, the potential expansion of its market share in wrist-worn wearable devices as a result of any foreclosure strategy and the associated gains are likely to be very limited.
- (673) On the other hand, several factors indicate that Google would suffer substantial losses from discriminating Fitbit's competitors in Google Search results to favour Fitbit over its competitors. Since such a strategy would interfere with Google's search algorithm, it would put at risk Google's most important revenue stream.
- (674) The Commission considers it unlikely that Google would undermine its most important revenue stream to slightly increase the number of Fitbit devices sold.
- (675) Based on the evidence and on the considerations in recitals (670) to (674), the Commission considers that the Transaction is not likely to grant the merged entity the incentive to foreclose competitors in the downstream markets for wrist-worn wearables by restricting access to Google Search.

9.4.6.2.3. As regards the possible effects on competition in the wrist-worn wearables market

- (676) Regardless of whether the merged entity has either the ability or the incentive to denying access to Fitbit wearables to competing app developers, the Commission considers that such a strategy would not have any significant detrimental effect on competition in the possible downstream market for wrist-worn wearables.
- (677) Sales in physical stores and via online resellers are wearable OEMs' most important distribution channels. While one could argue that Google Search results also might have an impact on the general market efforts of wearable device OEMs, the Commission considers that the effect of Google Search on sales via this distribution channel is small.
- (678) Sales through wearable OEMs' own websites constitute the least important distribution channel. Data submitted by the Notifying Parties also suggests that sales

in wearable OEMs' own websites are not substantially reliant on Google Search traffic.

9.4.6.2.4. Conclusion

(679) In light of the above considerations and based on the results of the market investigation, the Commission considers that the Transaction is not likely to significantly impede effective competition in the market for wrist-worn wearable devices and possible segments, as a result of any possible input foreclosure strategies with regard to Google Search.

9.4.7. *Foreclosure from access to Fitbit app stores to the detriment of app developers (input foreclosure)*

(680) Fitbit supports certain third-party apps by distributing their wearable apps via the Fitbit App Gallery, which is Fitbit's app store accessible within the Fitbit companion app. As explained in Section 9.4.3, Google offers the following Google apps for use on or with Wear OS devices: Google Fit, Google Pay, Google Maps, Google Assistant (incl. access to Google Search), Google Play Music (and its successor YouTube Music), and Google Translate

(681) During the market investigation, the concern has been raised that, post-Transaction, Google could make the Google apps available on Fitbit devices while denying access to Fitbit wearables to third party apps that are competing with Google apps. Notably, respondents indicated that Google could restrict the distribution of apps on Fitbit devices by (i) deteriorating rival wearables' app ratings and/or positioning within the Fitbit App Gallery, (ii) delaying their approval in case of updates or new releases, or (iii) refusing access to the Fitbit App Gallery. The aim of such strategy would be to induce Fitbit device users to use Google apps instead.

(682) Therefore, the assessment in this section consists in determining whether the Transaction would likely confer on the merged entity the ability and incentive to foreclose access to the app store for Fitbit devices (Fitbit App Gallery), and whether this would have a significant detrimental effect on competition in the various concerned apps markets, thus causing harm to customers.⁴⁴⁸ The concerned markets, where Google offers competing apps, are the supply of (i) general search services, (ii) health and fitness apps, (iii) mobile payment services, (iv) navigation apps offering turn-by-turn navigation, (v) virtual assistants, (vi) digital music distribution services, and (vii) digital translation services (and possible segments of the listed markets). As many relevant arguments apply across these different markets, the assessment only distinguishes between these different markets where necessary.

⁴⁴⁸ This is presented as an input foreclosure theory of harm where post-Transaction Google forecloses competing app developers downstream from using the Google Play Store as an input. The same arguments would apply if presented as a customer foreclosure theory of harm where post-Transaction Google denies competing app developers upstream the distribution of their apps on Fitbit devices by foreclosing them from the Google Play store.

9.4.7.1. Notifying Party's views

9.4.7.1.1. As regards ability

(683) The Notifying Party explained that Google will not have the ability to adopt a strategy designed to foreclose rival app developers' access to Fitbit customers.⁴⁴⁹

9.4.7.1.2. As regards incentives

(684) The Notifying Party submits that Google has no incentive to exclude third-party apps from Fitbit devices as it would make these devices less attractive. Third-party apps and services would create a stronger ecosystem that, in turn, attracts users and keeps them loyal to the device.⁴⁵⁰

(685) Three examples would underline Google's lack of incentives to pursue such a strategy: (i) Today, Google provides third-party health and fitness apps with access to Wear OS wearable devices through Google Play, notwithstanding the fact that Google also operates a rival health and fitness app; (ii) Google has maintained access for third-party apps on its Pixel smartphones and Pixel Slate tablets. As smart mobile devices are more obvious access points to Google's core monetised services than wearable devices, Google had a stronger incentive to exclude rival services from its smartphones and tablets than it would have to exclude them from its wearable devices post-Transaction; and (iii) Fitbit [Strategy] so-called "second-party" apps⁴⁵¹ available on Fitbit devices.

9.4.7.1.3. As regards the possible effects on competition

(686) The Notifying Party argues that even if Google degraded or denied access to the Fitbit wearables, such strategy would not, in any event, lead to anticompetitive foreclosure given app developers' alternative distribution channels for their apps.⁴⁵² Besides rivals' wearable devices, app development typically cover a range of platforms, such as desktops, smartphones, smart speakers and smart home appliances. According to the Notifying Party, there are almost no undertakings committed to developing apps exclusively for smartwatches, let alone Fitbit smartwatches with their limited market share.⁴⁵³

(687) This could also be seen from the limited past relevance of the Fitbit App Gallery. The Fitbit App Gallery has seen limited traction and offers users only 500 different apps for download. No third-party app accounted for more than [...] installations/downloads worldwide in 2019. Only [...] second-party apps, which were adapted by Fitbit itself for use on its wearable devices, reached more than [...] installations/downloads worldwide in 2019.⁴⁵⁴

⁴⁴⁹ Form CO, paragraph 579.

⁴⁵⁰ Form CO, paragraph 584.

⁴⁵¹ [Fitbit's app strategy].

⁴⁵² Form CO, paragraphs 585-588.

⁴⁵³ In fact, most third-party apps available on Fitbit devices are simple utility apps (such as calculators, flashlights, calendars, to-do lists), which are created by individual hobbyists with a view to meeting practical needs rather than monetisation. Many third-party apps available on Fitbit are provided for free and Fitbit does not allow ads in the Fitbit App Gallery or in apps.

⁴⁵⁴ Namely, [Fitbit's second party app downloads].

9.4.7.2. The Commission's assessment

(688) For the reasons set out below, the Commission considers that Google would neither have the ability nor the incentives to deny access to Fitbit wearables to competing apps.⁴⁵⁵ The Commission also considers that, if Google engaged in such a foreclosure strategy, any anticompetitive effects of such a strategy would not be significant.

9.4.7.2.1. As regards ability

(689) The Commission considers that, in spite of Fitbit's dominance in the platform-specific market for app stores (for Fitbit devices), post-Transaction the merged entity would not have the ability to foreclose competing app developers by denying access to the Fitbit Gallery.

(690) For input foreclosure to be a concern, the vertically integrated firm resulting from the merger must have a significant degree of market power in the upstream market. Fitbit maintains the Fitbit App Gallery to distribute apps on its wearable OSs. Since the Fitbit App Gallery is the exclusive app store for Fitbit wearable devices, Fitbit has a 100% share of Fitbit wearable device app stores.⁴⁵⁶

(691) However, input foreclosure may raise competition problems only if it concerns an important input for the downstream product. The Commission considers that, under any reasonable market definitions for apps, the Fitbit App Gallery is not an important input for third-party app developers.

(a) In the potential market platform-specific markets, limited to apps/services for wrist-worn wearable devices, the Fitbit App Gallery would not be a relevant input. Fitbit has a modest market share in the wrist-worn wearables market and the importance of the Fitbit App Gallery is hence limited. App developers could continue to distribute their apps/services on non-Fitbit wrist-worn wearables devices.

(b) In the potential wider, platform-independent market for the mentioned apps/services, the importance of the Fitbit App Gallery as an input for app developers would be even smaller, in particular because apps are predominantly used on (handheld) smart mobile devices and not on wrist-worn wearable devices.

(692) Based on the evidence and on the considerations in recitals (689) to (691), the Commission considers that the Transaction is not likely to grant the merged entity the ability to foreclose competitors in the downstream markets for the supply of the relevant apps by restricting access to Fitbit's App Gallery.

9.4.7.2.2. As regards incentives

(693) The Commission considers that post-Transaction Google would not have the incentive to deny access to the Fitbit wearables to competing apps.

⁴⁵⁵ Although not raised as a concern, Google could alternatively increase the price charged by the Fitbit App Gallery for those apps which are subscription based. A similar analysis and therefore the same conclusions would apply.

⁴⁵⁶ Form CO, paragraphs 369-370.

- (694) The merged entity faces a trade-off between the gains from expanding its market share in the mentioned Google apps and the costs associated with reduced sales of Fitbit devices that might be a consequence of the limited choice of apps available on the devices.
- (695) On the one hand, by limiting access to competing apps to Fitbit devices, Google is indeed likely to increase the use of its apps by Fitbit users. However, the potential expansion of its market shares in Google apps and the associated gains are likely to be very limited.
- (696) First, the use of apps on wearable devices is limited as apps are still mostly used on (handheld) smart mobile devices. Second, as described in Section 9.1, since Fitbit's share in the market for wearables devices is small, the use of Google apps on Fitbit devices would account for only a small share of overall use of apps on wearable devices. Third, if competing apps are foreclosed, it is not clear that this will lead to an equivalent increase in the use of apps provided by Google. Instead, some users might decide to reduce or stop using certain types of apps altogether. Therefore, Google's potential gain may be even smaller.
- (697) On the other hand, several factors indicate that Google would suffer losses from denying access to Fitbit wearables to competing apps.
- (698) First, Fitbit faces strong competition in the market for wrist-worn wearable devices and holds a relatively low market share. Therefore, it is less likely that Google would limit access to competing apps, a strategy which would make Fitbit wearables relatively less attractive to customers. Instead, Google will likely want to further strengthen and differentiate Fitbit's position in the wrist-worn wearables market. This is particularly relevant as the wrist-worn wearables market is growing and relatively nascent (compared to the market for smart mobile devices). Consequently, there are many first-time buyers as well as other customer groups with limited brand loyalty. In addition, customers with a preference for Android smart mobile devices can choose between many different Android-compatible wrist-worn wearable devices.
- (699) Second, since any exclusion of competing apps from the Fitbit Gallery is likely to become publicly known and would represent a significant shift in Fitbit's business practice, it would incur reputational costs with app developers and with consumers.
- (700) While the Commission did not conduct a formal quantification, it considers that, in line with the discussion in Section 9.4.4, the loss of Fitbit device users and the potential reputation damage outweighs the potential benefits that might result from an increase in the use of Google's apps on Fitbit devices.
- (701) In addition, there is no evidence from Google's internal documents that would indicate that Google has any plans to favour its own over third-party apps. To the contrary, it seems that Google regards attracting third-party developers as important, in particular in the context of further developing the Wear OS ecosystem.⁴⁵⁷

⁴⁵⁷ See for example [Reference for internal documents].

- (702) The Commission’s assessment is also in line the results from the market investigation, in which only a minority of respondents explained that Google would have the incentive to deny access to the Fitbit wearables to competing apps.⁴⁵⁸
- (703) Based on the evidence and on the considerations in recitals (693) to (702), the Commission considers that the Transaction is not likely to grant the merged entity the incentive to foreclose competitors in the downstream markets for the supply of the relevant apps by restricting access to Fitbit’s App Gallery.

9.4.7.2.3. As regards the possible effects on competition

- (704) Regardless of whether the merged entity has either the ability or the incentive to denying access to Fitbit wearables to competing app developers, the Commission considers that such strategy would not have any significant detrimental effect on competition in the downstream market for apps for wearable devices.
- (705) A clear majority of respondents to the market investigation regards the Fitbit App Gallery an important distribution channel for third-party apps.⁴⁵⁹
- (706) In support of this view, Deezer, a market participant active in digital music distribution services, reports to have implemented a commercial partnership and deeper integration with Fitbit, allowing Fitbit users to directly interact with Deezer on the wearable. Without providing concrete figures, Deezer indicated that it is important for its services to be available on wearable devices, in particular in view of the expected growth of the wearables market.⁴⁶⁰ However, Deezer also explained that *“in terms of monthly active users using the Deezer services on Fitbit wearable devices, it is not significant so far compared to the total number of monthly active users of the Deezer services, regardless of the platform”*.⁴⁶¹
- (707) For the reasons set out below, the Commission considers that foreclosing competing app developers from the Fitbit App Gallery would only affect a small fraction of market output and would therefore not have any material impact on competition.
- (708) As described in Section 9.1.1 above, Fitbit has a share of only [0-5]% in the EEA smartwatch market. Fitbit devices therefore do not constitute a significant customer acquisition channel for app developers competing with Google’s products and services. This is even more so the case because most apps are not predominantly used on smartwatches but on (handheld) smart mobile devices.

9.4.7.2.4. Conclusion

- (709) In light of the above considerations and based on the results of the market investigation, the Commission considers that the Transaction is not likely to significantly impede effective competition in the markets for supply of (i) general search services, (ii) health and fitness apps, (iii) mobile payment services, (iv)

⁴⁵⁸ Replies to questionnaire QA on wearables, search and advertising, question C.37. Only 2 out of 25 respondents agreed that “Google will have the ability and incentive to deny access to the Fitbit App Gallery and hence Fitbit devices”. From the more detailed explanations of the responses it is clear that, while only few respondents explain that Google does have the incentive to deny access, more respondents believe that Google has the ability.

⁴⁵⁹ Replies to questionnaire QA on wearables, search and advertising, question C.38.

⁴⁶⁰ Non-confidential minutes of call of 19 March 2020 with Deezer.

⁴⁶¹ Replies to questionnaire QA on wearables, search and advertising, question C.38.1.

navigation apps offering turn-by-turn navigation; (v) virtual assistants, (vi) digital music distribution services and (vii) digital translation services (and possible segments of the listed markets), as a result of any input foreclosure strategies with regard to Fitbit's App Gallery (or any successor app store for Fitbit devices).

9.5. Conglomerate effects

9.5.1. Introduction

- (710) According to the Non-Horizontal Guidelines, in the majority of circumstances, conglomerate mergers will not lead to any competition problems.⁴⁶²
- (711) However, foreclosure effects may arise when the combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another closely related market by means of tying or bundling or other exclusionary practices. While tying and bundling have often no anticompetitive consequences, in certain circumstances such practices may lead to a reduction in actual or potential competitors' ability or incentive to compete. This may reduce the competitive pressure on the merged entity allowing it to increase prices.⁴⁶³
- (712) In assessing the likelihood of such a scenario, the Commission examines, first, whether the merged firm would have the ability to foreclose its rivals,⁴⁶⁴ second, whether it would have the economic incentive to do so⁴⁶⁵ and, third, whether a foreclosure strategy would have a significant detrimental effect on competition, thus causing harm to consumers.⁴⁶⁶ In practice, these factors are often examined together as they are closely intertwined.
- (713) In order to be able to foreclose competitors, the merged entity must have a significant degree of market power, which does not necessarily amount to dominance, in one of the markets concerned. The effects of bundling or tying can only be expected to be substantial when at least one of the merging parties' products is viewed by many customers as particularly important and there are few relevant alternatives for that product.⁴⁶⁷ Further, for foreclosure to be a potential concern, it must be the case that there is a large common pool of customers, which is more likely to be the case when the products are complementary.⁴⁶⁸ Finally, bundling is less likely to lead to foreclosure if rival firms are able to deploy effective and timely counter-strategies, such as single-product companies combining their offers.⁴⁶⁹
- (714) The incentive to foreclose rivals through bundling or tying depends on the degree to which this strategy is profitable.⁴⁷⁰ Bundling and tying may entail losses or foregone

⁴⁶² Non-Horizontal Guidelines, paragraph 92.

⁴⁶³ Non-Horizontal Guidelines, paragraphs 91 and 93.

⁴⁶⁴ Non-Horizontal Merger Guidelines, paragraphs 95 to 104.

⁴⁶⁵ Non-Horizontal Merger Guidelines, paragraphs 105 to 110.

⁴⁶⁶ Non-Horizontal Merger Guidelines, paragraphs 111 to 118.

⁴⁶⁷ Non-Horizontal Merger Guidelines, paragraph 99.

⁴⁶⁸ Non-Horizontal Merger Guidelines, paragraph 100.

⁴⁶⁹ Non-Horizontal Merger Guidelines, paragraph 103.

⁴⁷⁰ Non-Horizontal Merger Guidelines, paragraph 105.

revenues for the merged entity.⁴⁷¹ However, they may also allow the merged entity to increase profits by gaining market power in the tied goods market, protecting market power in the tying good market, or a combination of the two.⁴⁷²

(715) It is only when a sufficiently large fraction of market output is affected by foreclosure resulting from the concentration that the concentration may significantly impede effective competition. If there remain effective single-product players in either market, competition is unlikely to deteriorate following a conglomerate concentration.⁴⁷³ The effect on competition needs to be assessed in light of countervailing factors such as the presence of countervailing buyer power or the likelihood that entry would maintain effective competition in the upstream or downstream markets.⁴⁷⁴

9.5.2. *Leveraging of Google's position in the supply of licensable OSs for smart mobile devices into the wrist-worn wearables market*

(716) Google and Fitbit are active in closely related markets, that is to say, respectively, the market for licensable OS for smart mobile devices and the market for wrist-worn wearable devices. Wrist-worn wearable devices typically connect to smartphones⁴⁷⁵ via a Bluetooth connection and provided the wearables' companion app installed is on the smartphone. This enables the wrist-worn wearable device to, inter alia, interact with apps installed on the paired smartphone (for example, by displaying calls and SMS notifications on the wearable device), to download apps on the wrist-worn wearable device and to transfer data from the wearable device to one or multiple health and wellness apps on the smartphone. Therefore, technically, wrist-worn wearable devices depend on a connection to the smartphones' OS. Almost all wrist-worn wearable devices can connect to Android smartphones and users may choose to connect their wrist-worn wearable device to an Android smartphone, the main exception being the Apple Watch which is only compatible with iOS.

(717) During the market investigation, the concern was raised that Google could leverage its position in the market for licensable OSs for smart mobile devices to the market for wrist-worn wearables.⁴⁷⁶ Notably, respondents indicated that Google could degrade interoperability between the Android OS for smartphones and rival wrist-worn wearable devices by (i) degrading the relevant APIs that enable the Android OS to interact with wrist-worn wearable devices, and/or (ii) degrading the technical support for rival wearable suppliers. In particular, respondents to the market investigation expressed concerns that Google would start behaving like Apple post-

⁴⁷¹ Non-Horizontal Merger Guidelines, paragraph 106.

⁴⁷² Non-Horizontal Merger Guidelines, paragraph 108.

⁴⁷³ Non-Horizontal Merger Guidelines, paragraph 113.

⁴⁷⁴ Non-Horizontal Merger Guidelines, paragraph 114.

⁴⁷⁵ Wrist-worn wearable devices could potentially also connect to tablets, however, based on the results of the market investigation, this is not relevant in practice. Moreover, during the market investigation, a concern with regard to interoperability with Android was only raised in relation to smartphones and not in relation to tablets. Therefore, this section focusses on smartphones only.

⁴⁷⁶ Replies to questionnaire QA on wearables, search and advertising, questions C.24-C.26; non-confidential submission of 30 July 2020 (anonymous); non-confidential submission of 28 September 2020 (anonymous), page 12; non-confidential submission of 5 October 2020, slide 3 (anonymous).

Transaction, who, according to them, favours its own wrist-worn wearable device, the Apple Watch, in relation to the connection to Apple's iPhones.

- (718) The Commission considers that such practices would represent a technical tying strategy, by which Google would not allow the same degree of technical compatibility to competing wrist-worn wearable suppliers that it affords to Fitbit wrist-worn wearable devices. By doing so, Google would improve the overall performance of the merged entity's combined solution (Android OS with Fitbit device) compared to mix-and-match solutions involving only one of the products (Android OS with a rival wrist-worn wearable device).⁴⁷⁷⁴⁷⁸

⁴⁷⁷ A related concern that was brought up during the investigation is that post-Transaction Google will have the ability and incentive to foreclose rival wearable manufacturers by selling wearables at a below-cost price (Submission to the European Commission, "Google/Fitbit will monetize health data and harm consumers" signed by various authors, also available at https://cepr.org/sites/default/files/policy_insights/PolicyInsight107.pdf). According to the authors, Google might have an incentive to adopt such a strategy because it would be able to recoup the losses of selling devices below cost in multiple ways that are not replicable by others, in particular by monetizing the collected health and fitness data. The Commission considers it unlikely that Google might adopt such a strategy. While in internal documents indeed it is mentioned that [Google's strategy], there is no evidence that Google plans post-Transaction to lower prices below costs. Furthermore, internal documents show that in its deal valuation Google consistently assumes margins of between [...] % and [...] % for wearable devices post-Transaction, see for instance internal document [Reference to internal document].

Similarly, it has been argued that Google might foreclose wearable competitors by entering into agreements with insurers and health providers to give their customers incentives to use Fitbit in exchange for other benefits (for instance, conditioning benefits and premia to the insured adopting certain behaviours – already standard in health insurance markets). However, Fitbit as well as several other wearable device makers have similar agreements with insurers and/or health providers already today and there is no evidence that the conclusion of such agreements by Fitbit would become materially more likely as a consequence of the Transaction. The Commission therefore considers that this concern is not merger-specific.

Finally, for both concerns, the submission mentioned above makes reference to an economic model described in the paper "Data-Driven Mergers and Personalization" by Zhijun Chen, Chongwoo Choez, Jiajia Congx, and Noriaki Matsushima to support the possible negative effects of the Transaction. The Commission notes however that under the conditions assumed by the authors of the paper, that economic model concludes that consumer welfare increases after a merger between a hypothetical wearable supplier and a provider of digital health services.

⁴⁷⁸ Another related concern was brought up during the investigation that Google could leverage Fitbit's position in the market for wrist-worn wearable devices to the markets for licensable OSs for wrist-worn wearable and smart mobile devices (see for example non-confidential submission of 5 October 2020, slide 4 (anonymous)). Notably, it was indicated that Google could use Fitbit's know-how in the wrist-worn wearables market to improve Wear OS, thereby strengthening Google's position in the supply of licensable OSs for wrist-worn wearable devices. According to these respondents, both the sale of Fitbit and Wear OS devices could ultimately also strengthen Google's position in the market for licensable OSs for smart mobile devices as users of Fitbit and Wear OS smartwatches may be more likely to (continue to) use Android smartphones. However, the Commission has not identified any concerns in this regard. First, Fitbit has a limited market position in the supply of wrist-worn wearable devices, in particular in the growing smartwatches segment (globally, it had a volume market share of [5-10] % and value market share of [0-5] %, while, in the EEA, it had a volume market share of [5-10] % and value market share of [0-5] %). Second, Google already owns Wear OS pre-Transaction. Hence, any merger-specific increment would only stem from the possibility that Fitbit may contribute to improving Wear OS, which has not been successful in the past (see Section 9.4.3, only about [5-10] % of all smartwatches worldwide (excl. China) integrated Wear OS in 2019 ([5-10] % in the EEA)). Third, it remains purely speculative whether the merged entity will indeed be successful in improving the performance of Wear OS. Fourth, if so, this would be beneficial for competition as it would strengthen smaller competitors and market entrants, which have been relying on Wear OS in the past, but were not able to successfully establish themselves. Fifth, it remains purely speculative whether additional Fitbit and Wear OS sales would significantly improve Google's position in the supply of

(719) Therefore, in the following sections, the Commission will assess whether the Transaction would likely confer on the merged entity the ability and incentive to leverage Google's market position in the supply of licensable OSs for smart mobile devices into the market for wrist-worn wearables and whether this would be likely to have a significant detrimental effect on competition in the wrist-worn wearables market, thus causing harm to customers.⁴⁷⁹

9.5.2.1. The Notifying Party's view

(720) The Notifying Party submits that Google will not have the ability or the incentive to restrict or degrade access to Android smartphones post-Transaction to the detriment of wearable competitors. Moreover, the Notifying Party submits that a degradation strategy would at most have a marginal impact.

9.5.2.1.1. As regards ability

(721) In the Form CO and the Response to the Article 6(1)(c) Decision, the Notifying Party submits that Google lacks the ability to impose a degradation of the interoperability of rival wrist-worn wearable devices with Android mobile devices supplied by third-party OEMs.⁴⁸⁰ Google explains that the relevant APIs are made available to OEMs under a royalty-free open-source license (AOSP) which would allow Android smartphone OEMs to take, adapt, and use the Android source code as they wish. Therefore, Google would have no ability to restrict Android smartphone OEMs from circumventing such degradation as Android smartphone OEMs could modify the code. According to Google, this conclusion is not altered by the minimum compatibility standards that customised APIs of OEMs need to meet, as these standards are only aimed at ensuring that a consistent set of APIs are supported and beyond that third-party OEMs would have full discretion to modify or augment how the APIs are implemented on their mobile devices.

(722) Google submits that Google's own Pixel mobile devices, which had a volume market share of [0-5]% both globally and in the EEA in 2019, are the only segment that Google would have the ability to foreclose.

(723) Moreover, Google indicates that the relevant APIs, in particular the Bluetooth and Notification APIs, are used by many app developers and device manufacturers. If Google were to attempt to degrade these APIs, for instance by maintaining a proprietary API for use exclusively by Google's own wearable devices, it would hinder the connectivity of all kinds of apps and devices which rely on them as Google would not be able to specifically target rival wearable devices.

9.5.2.1.2. As regards incentives

(724) In the Form CO, in response to both a possible foreclosure of Google Play and leveraging of Android OS (see Section 9.4.5.1.1), the Notifying Party submits that Google has no incentive to exclude third-party wearable devices as it would make

licensable OS for smart mobile devices. Already today, many Android-compatible wrist-worn wearable devices (for example Garmin, Samsung, Xiaomi) exist that users can combine with their Android smartphone.

⁴⁷⁹ As the Commission already found in Section 9.4.3 that Google would not have the ability nor the incentive to foreclose access to Wear OS, this sections focusses on a degradation of interoperability between third-party wrist-worn wearable devices, not running on Wear OS, and Android smartphones.

⁴⁸⁰ Form CO, paragraphs 541-550.

the Android ecosystem less attractive and would be inconsistent with Android's overall business model.⁴⁸¹ It could deter users of non-Fitbit wearable devices from buying an Android smartphone, resulting in significant losses associated to the difference between Google's search and other revenues on Android smartphones and on iPhones as users, wishing to avoid the foreclosure, would face a choice between switching to a Fitbit device (keeping their Android smartphone) or to an iPhone. At the same time, Google would only stand to gain the limited portion of that OEM's users that opted to migrate to Fitbit devices, which would generate small gross profits given the low profit margin per Fitbit device. During the Phase I investigation, Google submitted a vertical arithmetic analysis⁴⁸² to quantify this trade off. In the Response to the Article 6(1)(c) Decision, Google replied to the Commission's criticism on the model and submitted a revised analysis.

- (725) The Notifying Party emphasises that the Commission's quantitative analysis does not take into account all relevant factors. In particular, a foreclosure strategy would also result in reputational damage to the Android ecosystem, a worsening of Google's relationship with OEMs and ultimately less investments into the platform.
- (726) In addition, the Notifying Party notes that Google has not employed a similar strategy in support of Google hardware products (for example Google Pixel smartphones and Pixel Buds earbuds) in the past, despite having a similar ability to do so.

9.5.2.1.3. As regards the possible effects on competition

- (727) The Notifying Party submits that a degradation strategy would at most have a marginal impact.⁴⁸³
- (728) First, the strategy would leave Apple, the world's leading wrist-worn wearable device supplier, entirely unaffected, as the Apple Watch interoperates exclusively with iPhones. It would also leave unaffected all wrist-worn wearable devices connecting to iPhones.
- (729) Second, the strategy would also not affect any wrist-worn wearable device OEMs that also distribute Android smartphones, such as Samsung, Xiaomi and Huawei, as they would be able to ensure that their smartphones interoperate with their own and third-party wearable devices.

9.5.2.2. The Commission's assessment

- (730) For the reasons set out below, the Commission considers that, post-Transaction, Google would have the ability and likely the incentive to foreclose competing wearable suppliers by degrading interoperability with the Android OS for smartphones. Moreover, the Commission considers that, if Google were to engage in such a foreclosure strategy, the effects of such a strategy would likely be significant.

9.5.2.2.1. As regards ability

- (731) The Commission considers that the merged entity would have the ability to engage in a foreclosure strategy with regard to the Android OS for the following reasons.

⁴⁸¹ Form CO, paragraphs 559-571.

⁴⁸² Vertical White Paper; Vertical EEA White Paper.

⁴⁸³ Form CO, paragraph 574.

First, there is a large pool of common customers of smartphones and wrist-worn wearable devices, and particularly of Android smartphones and Android-compatible wrist-worn wearable devices, excluding only users of Apple products, namely iPhone paired with Apple Watch or iPhone paired with a third-party wearable device. Second, Google controls Android and has a dominant market position in the supply of licensable OS for smart mobile devices. Third, while a degradation does not seem possible under the current Android business model, Google has control over Android and could change its business model. Fourth, Google has the technical ability to degrade interoperability with Android by degrading the relevant APIs that enable the Android OS to interact with wrist-worn wearable devices. Fifth, Google could prevent attempts of Android smartphone OEMs to circumvent a degradation.

9.5.2.2.1.1. Large pool of common customers

- (732) All customers who purchase wrist-worn wearable devices also purchase smartphones (and thus use the smartphone OS), including Android smartphones running on Android OS. The vast majority of wrist-worn wearable devices are interoperable with both Android and iOS, the two largest smartphone platforms. Apple is virtually unique among wrist-worn wearable OEMs in designing its smartwatch, Apple Watch, to function exclusively with its own smartphone OS (iOS).⁴⁸⁴ All other wearable OEMs can sell their wearable devices to users of both Android and iOS smartphones.
- (733) There is no direct customer relationship between the Android OS and users connecting their wrist-worn wearable device to smartphones running on iOS. On the one hand, the Apple Watch itself, which only connects to iOS, had a market share of [20-30]% by volume and [30-40]% by value in the supply of wrist-worn wearable devices in the EEA in 2019, with similar shares on a worldwide level. On the other hand, with regard to wrist-worn wearable devices which are compatible with both Android and iOS, the evidence on file suggests that relatively more users connect to an iPhone than Apple's volume share in the supply of smartphones would suggest ([20-30]% in the EEA and [10-20]% worldwide). Publicly available data on some (non-Fitbit) wearable OEMs suggests that the share of their devices paired with iPhones are also in excess of Apple's market share, but this may vary by OEM.⁴⁸⁵ Data submitted by Fitbit shows that [...] % of Fitbit users in the EEA and [...] % worldwide pair their Fitbit device with an iPhone, namely above Apple's volume share in the supply of smartphones, and similar data were submitted by some respondents to the Phase II market investigation. However, several other OEMs that replied to the market investigation, submitted that sales of wrist-worn wearable

⁴⁸⁴ The only other two non-Android-interoperable smartwatches the Notifying Party is aware of are the Garmin Approach X10 and Garmin Approach S10. These are models that belong to the Garmin golf tracker product line. Unusually, in these two models, Garmin stripped away all features unnecessary for golf, such as fitness tracking and smartphone interoperability. The S10 and X10 are therefore not just not interoperable with Android, they are not interoperable with any smartphone (including Apple's iPhone). They connect to Windows and Apple PCs via their USB charging cable for software updates through the Garmin Express desktop application. Form CO, footnote 741.

⁴⁸⁵ Form CO, Annexes to RFI 4, Annex 14.1.

devices to customers of Android smartphones clearly represent the vast majority of their sales of wrist-worn wearable devices.⁴⁸⁶

- (734) Overall, the share of Android-compatible wrist-worn wearable devices currently relying on interoperability with Android OS appears significant.
- (735) In light of the above, the Commission concludes that there is a large share of common users of smartphones and wrist-worn wearable devices, and particularly of Android smartphones and Android-compatible wrist-worn wearable devices.

9.5.2.2.1.2. *Google's control over Android*

- (736) Google acquired the original developer of Android, Android, Inc., in 2005. It released the first Android version in 2007, with the first commercial Android phones coming out in 2008/2009. Google also established the Open Handset Alliance⁴⁸⁷ to involve and gain the support of OEMs, mobile network operators and app developers.
- (737) Android is an OS based on the Linux kernel and built on the programming language Java, albeit with important modifications. Google makes the source code of Android available for free via the AOSP⁴⁸⁸ and under an open source licence. This means that anybody can access the AOSP source code and create modified versions (“Android forks”) of it.
- (738) However, at the same time, Google controls the development, release, licensing and modifications of Android. This was also confirmed in Google’s internal documents.⁴⁸⁹
- (739) First, Google has an important influence on the key steps of the development of Android. In the first place, Google does most of the development of the source code of the Android platform. In the second place, the governance model of Android is run by Google, which determines the roadmap, decides on features and new releases and tightly controls the compatibility of derivatives. Source code contributions by developers other than Google are verified and approved by people in the AOSP governance structure that are typically Google employees. A part of the development of the code is also done privately by Google. In the third place, Google unilaterally decides when the source code of the Android platform is made available.⁴⁹⁰
- (740) Second, Google controls the licensing of the Android trademarks and brand.⁴⁹¹
- (741) Third, Google also controls the implementation of Android on smart mobile devices through the Android compatibility tests. In order to build an Android compatible device, hardware manufacturers must comply with the Android Compatibility Definition Document (“CDD”) and pass the Compatibility Test Suite (“CTS”). The CDD enumerates the software and hardware requirements of a compatible Android device. The CTS is an automated testing tool that can be run on a target device or

⁴⁸⁶ Replies to questionnaire QD on wearables, smartphones and apps, questions 17-18.

⁴⁸⁷ <https://www.openhandsetalliance.com/>.

⁴⁸⁸ <https://source.android.com/>.

⁴⁸⁹ See for example [Reference to internal documents].

⁴⁹⁰ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 122-131.

⁴⁹¹ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 172-191.

simulator to determine compatibility. Both are available via the Android webpage and developed, amended and adopted by Google.⁴⁹²

- (742) Fourth, under the Android Compatibility Commitment (“ACC”), OEMs are required to observe compatibility on devices on which they preinstall GMS, a software product incorporating Google’s suite of mobile apps and APIs that help support functionality across compatible Android mobile devices. Failure to comply makes an OEM hence unable to install Google proprietary applications and services, including Google Play.⁴⁹³
- (743) Fifth, OS developers are not free to take and build on the latest Android release.⁴⁹⁴
- (744) Therefore, in summary, the Commission considers that Google exercises control over Android in relation to the elements described above.

9.5.2.2.1.3. *Google’s dominant position in the supply of licensable OSs for smart mobile devices*

- (745) Based on the information provided by the Notifying Party, which relies on the Commission’s decision in the *Google Android* case, Google had a market share in the supply of licensable smart mobile OSs of [90-100]% in 2016 (by volume, worldwide, excluding China).
- (746) In *Google Android*, the Commission found Google to be dominant in the supply of licensable OSs for smart mobile devices in a worldwide market (excluding China) between 2011 and 2016.⁴⁹⁵ Besides Google’s market share, as quoted in recital (745), this conclusion was based on (i) the existence of barriers to entry and expansion, (ii) the lack of countervailing buyer power, and (iii) the insufficient indirect constraint from non-licensable smart mobile OSs.
- (747) The Commission considers that the evidence in the Commission’s file does not provide any indication, which would suggest that it would be appropriate to take a different view in relation to Google’s current position in the market for the supply of licensable OSs for smart mobile devices in a worldwide market excluding China than the view that the Commission has taken in *Google Android*. First, the Notifying Party has not submitted updated market shares that would suggest that Google’s market position in the supply of licensable OS for smart mobile devices would have decreased. Second, no evidence in the file suggests that the situation as regards barriers to entry, countervailing buyer power and the constraint from non-licensable smart mobile OSs has materially changed compared to the Commission’s findings in *Google Android*.
- (748) Therefore, the Commission concludes that Google is dominant in the supply of licensable OSs for smart mobile devices in a worldwide market (excluding China), or at the very least, that it has a significant degree of market power in that market.

⁴⁹² Commission decision of 18 July 2018 in case AT.4009 – Google Android, recital 161.

⁴⁹³ Notifying Party’s reply to RFI 27, question 9.

⁴⁹⁴ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 574-583.

⁴⁹⁵ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 440-589.

9.5.2.2.1.4. *Technical ability to selectively degrade interoperability by changing Android business model*

- (749) As explained in recital (721) above, the Notifying Party argues that Google lacks the ability to impose a degradation of the interoperability of rival wrist-worn wearable devices with Android mobile devices supplied by third-party OEMs.
- (750) Based on the Notifying Party's submission and in line with the results of the market investigation, the Commission acknowledges that a degradation would not be conceivable under the current Android business model:
- (a) Under the Open Handset Alliance, it is foreseen that Android does not differentiate between the phone's core applications and third-party applications.
 - (b) The Android OS code is open source under the AOSP. None of the relevant APIs relied upon by wrist-worn wearable devices are proprietary.⁴⁹⁶
 - (c) The AOSP provides third-party OEMs with some discretion and control over the hardware and software implementation of their devices as well as some control over the apps and services that are preinstalled on those devices. In particular, OEMs of Android smartphones can access, modify, and use the Android source code.
 - (d) While Google defined a minimum baseline compatibility standard for Android (namely CDD and CTS) and requires OEMs to comply with this compatibility standard in order to have access to Google's apps and services (namely ACC), the compatibility standard only provide a minimum baseline and give mobile device OEMs discretion to customize and differentiate their devices.
 - (e) Google makes Android updates broadly available. In particular, through initiatives such as the Developer Preview and I/O developer conference, Google provides advance information and support on new versions of Android.
- (751) However, as explained in Section 9.5.2.2.1.2, Google controls the Android OS and has the discretion to change the Android business model. Therefore, while Google would likely not be able to degrade interoperability with Android OS under Android's current functioning, the Commission considers that Google would have the ability to change its Android strategy in order to implement a foreclosure strategy.
- (752) This is in line with the results of the market investigation. Several wearable OEMs indicated that Google would have the ability to degrade interoperability of competing wrist-worn wearable devices with Android OS and described the specific conduct in which Google could engage for this purpose.⁴⁹⁷ In particular, as explained in recital (717) above, the market investigation indicated two ways in which Google could degrade interoperability with Android, that is by (i) selectively degrading the APIs that enable the Android OS to interact with wrist-worn wearable devices,

⁴⁹⁶ However, Google's Fast Pair service, a service aimed to facilitate Bluetooth pairing, is currently offered based on GMSCore, [Strategy]. Notifying Party's reply to RFI 27, questions 1 and 8; Notifying Party's reply to RFI 32, question 5(d).

⁴⁹⁷ Replies to questionnaire QA on wearables, search and advertising, question C.24.

and/or (ii) degrading the related technical support provided to suppliers of rival wearable devices.

9.5.2.2.1.4.1. Android APIs

- (753) The first concern expressed by market participants is that Google could degrade the versions of Android offered to third party OEMs, by reserving certain functionalities only for its own wrist-worn wearable devices. In the first place, this could be achieved by Google by keeping the relevant APIs proprietary for use by Fitbit and only providing a degraded version as part of AOSP releases while adopting a firmer control on the device-specific implementation of the Android OS, for example by tightening the rules of the CDD, CTS and ACC, to avoid circumvention. In the second place, Google could continue to include current functionalities in AOSP, however, withhold any future developments from AOSP and implement such improvements in the proprietary layer for use by Fitbit.
- (754) As regards the first possible strategy set out above (providing degraded functionalities), respondents to the market investigation provided concrete examples of functionalities that Google could reserve for its own devices, which are on the basis of Apple's current practices in favour of its Apple Watch. One respondent indicated: *"Unlike Google's current practice, Apple discriminates in favour of Apple Watch and against third-party devices in terms of functionality and other ways. Examples of functionalities that Apple allows on Apple Watch but does not allow on third-party smartwatches include responding to text messages; pairing of Apple Watches for NFC functionalities; use of turn-by-turn navigation on digital maps; and the ability to trigger emergency notifications."*⁴⁹⁸
- (755) Several Android APIs play a role in this interoperability between wrist-worn wearables (and their Companion Apps) and Android mobile devices. Android offers a range of other APIs that a wearable OEM may utilise depending on the specific features of the wearable device. The results of the Phase II market investigation confirmed the list of APIs that are currently used by wrist-worn wearable OEMs: Bluetooth API (to facilitate wireless connections), Notification API (to enable notifications from apps and services on the mobile device to be "pushed" to the wrist-worn wearable), the CompanionDeviceManager API (a system level service for managing companion devices) as well as APIs to enable and/or access certain functionalities on the wrist-worn wearable device, that is APIs in relation to SMS, Phone calls, Contacts, Geolocation, Calendar, Camera control and Media control.⁴⁹⁹ Respondents have slightly different views regarding the importance of each of these functionalities.⁵⁰⁰ While some respondents indicate that all of the listed functionalities are important to provide a good user experience when connecting to Android smartphones, other emphasise the importance of Bluetooth, Notifications and the CompanionDeviceManager. One respondent explains that Bluetooth, CompanionDeviceManager and Geolocation are essential to establish a connection between the wrist-worn wearable device and the Android smartphone, while the other APIs are used to provide functionality for the device. This respondent explains

⁴⁹⁸ Replies to questionnaire QA on wearables, search and advertising, question C.24.1.

⁴⁹⁹ Replies to questionnaire QD on wearables, smartphones and apps, question C.5.

⁵⁰⁰ Replies to questionnaire QD on wearables, smartphones and apps, question C.5.2.

that, which functionalities are more important will ultimately depend on the individual user and will differ from one person to another. For example, for one user it may be most important to be able to control music playing on the wearable device, while for another it may be more important to be able to see smart notifications.⁵⁰¹ Finally, several respondents submit that, in addition, as smartphone and wrist-worn wearable device functionalities are added, additional APIs will be required for devices to interoperate. For these reasons, according to them, it would not be meaningful to identify only a few APIs that are considered most important at any point in time.

- (756) Google argues that it would not degrade interoperability as the relevant APIs are used by many app developers and device manufacturers. For instance, Bluetooth would be utilised to connect mobile devices to speakers, keyboards, and automobiles, among other commonly-used products. Similarly, the Notifications API would be used by other peripheral devices, including automobile displays, home computers, and televisions. A degradation of these APIs would also hamper connectivity of these other devices.
- (757) In the Response to the Article 6(1)(c) Decision, Google insists that it currently provides full access to its Bluetooth APIs.⁵⁰² The design of the API would not allow Google to detect whether Bluetooth is being used for a wrist-worn wearable device, a Bluetooth headphone, or any other type of device, which means Google has no way of selectively restricting access only to Fitbit wearable devices. The same would hold for other important APIs, such as the Notification API, which are used by many different devices.
- (758) Nevertheless, the Commission notes that, at the same time, Google confirms that [business intelligence]. For example, with regard to Bluetooth, Google confirms that [business intelligence]. [Business intelligence]. [Business intelligence]. According to Google, [business intelligence].⁵⁰³ [Business intelligence]. According to Google, [Business intelligence]. Google is not aware of [business intelligence].
- (759) In light of the above, the Commission considers that Google could find technical or contractual means to only implement a degradation vis-à-vis rival wrist-worn wearable devices. Similarly to Apple, Google could make access to Bluetooth Classic or other relevant APIs conditional on a device being certified and refuse such certification to competing wrist-worn wearable devices. This specific strategy was also confirmed by an Android smartphone OEM who indicated that, while it would be technically challenging, Google could find a way to specifically target rival wrist-worn wearable devices, while leaving the connectivity of other devices unaffected.⁵⁰⁴ In addition, the possibility of implementing a selective API

⁵⁰¹ One respondent mentioned another specific functionality, i.e. the Smart Lock functionality (Reply questionnaire QD on wearables, smartphones and apps, question C.5.2). However, this respondent did not substantiate the relevance of this functionality in further submissions and this functionality was not mentioned by any other respondents. Indeed, this functionality does not seem necessary to ensure interoperability. As explained by the Notifying Party, the Smart Lock functionality simply allows to extend the unlock duration for a device that is already unlocked (Notifying Party's reply to RFI 34, question 7).

⁵⁰² Response to the Article 6(1)(c) Decision, paragraph 172.

⁵⁰³ Notifying Party's reply to RFI 27, question 2.

⁵⁰⁴ Non-confidential minutes of call of 8 July 2020, paragraph 7.

degradation was also more generally confirmed by the results of the market investigation. A majority of respondents to the Phase II market investigation indicate that Google could selectively target an API degradation strategy to wrist-worn wearable devices⁵⁰⁵. For instance they explain:

- (a) “Bluetooth communication protocol allows smartphones to detect the exact device type that is being paired to the phone.”
- (b) “The Android system can detect which wearable is trying to connect by identifying the vendor ID and product ID of Bluetooth devices. These IDs are unique and registered to SIG (Bluetooth Special Interest Group). Therefore, if a wearable with a vendor ID from a Fitbit competitor tried to connect to an Android device, the device could identify it and apply only degraded APIs. If a Fitbit wearable with a Fitbit vendor ID tries to connect, the better API would be applied.”

(760) In this regard, the Commission notes that competition rules, in particular Article 102 TFEU and Article 54 of the EEA Agreement will continue to apply to the merged entity post-Transaction, regardless of the outcome of the present assessment under the Merger Regulation. Nevertheless, it remains questionable whether degradations to the Android OS would be easily detectable.

(761) As regards the second possible strategy set out above (withholding future developments), Google could continue to include current functionalities in AOSP, however, withhold any future developments from AOSP and implement such improvements in the proprietary layer for use by Fitbit. In this regard, one responded submitted: “[...], one of the most likely ways in which Google could use APIs to foreclose competition would be to develop different APIs for the same functionalities, with the APIs providing the best, or most seamless, experience being reserved for system APIs available only to Fitbit users. Google could justify the use of such system APIs on the basis that they provide a better, more “seamless” experience for Fitbit users. But the choice not to make a system API available to third parties would in fact create “seams” between an Android smartphone and third-party wearable devices as part of a foreclosure strategy to make third-party wearables less attractive”.⁵⁰⁶

(762) The Notifying Party does not deny this possibility.⁵⁰⁷ It merely notes that a strategy of offering enhanced interoperability for Fitbit would not amount to a degradation of interoperability for non-Fitbit wrist-worn wearables relative to the status quo. According to the Notifying Party, it cannot be objectionable for Google to make improvements that do not impair the experience of third-party wrist-worn wearables by labelling those changes as a “degradation”. Nevertheless, the Commission notes that such enhanced functionalities offered only to Fitbit could concern functionalities or improvements to current functionalities that, while not available today (and hence not essential), could become important (or even essential) in the future to ensure a smooth interconnection between Android smartphones and wrist-worn wearable devices.

⁵⁰⁵ Replies to questionnaire QD on wearables, smartphones and apps, question C.7.

⁵⁰⁶ Replies to questionnaire QD on wearables, smartphones and apps, question 7.1.

⁵⁰⁷ Notifying Party’s reply to RFI 32, question 6(a).

9.5.2.2.1.4.2. Technical support

- (763) The second concern expressed by market participants is that Google could degrade the technical support it offers to third-party wearable OEMs to ensure a smooth interaction between the Android OS for smartphones and third-party wrist-worn wearable devices. Again, examples of such strategy were provided by respondents based on Apple's current conduct. One respondent explained: *"In addition to the potential for limiting functionalities, the experience with Apple illustrates the incentive the transaction will create for Google to degrade support for competitors whenever Google releases an update to Android. Currently, whenever Apple introduces changes to Apple's iOS, these changes create issues or disable features for non-Apple Watch devices, creating significant financial and reputational issues for rivals. Technical issues and bugs not affecting the Apple Watch are either ignored or not prioritised by Apple for long periods of time (often many months). [...] In addition, post-transaction, Google could shorten its timetable for releasing new Android versions to the public, while working with Fitbit prior to the public release to minimize disruptions for Fitbit customers and maximizing disruptions for customers of competitor's devices."*⁵⁰⁸
- (764) However, the evidence on file does not suggest that Google could implement a significant degradation in relation to technical support compared to the situation pre-Transaction.
- (765) First, Google will be forced to continue to cooperate with Android smartphone OEMs in order to preserve the general quality of Android smartphones.
- (766) Second, with regard to non-integrated wearable OEMs, the information available indicates, that the majority of technical issues relate to the OEM-specific implementation of Android and, thus, are to be resolved by third-party wearable OEMs in cooperation with the smartphone OEM (rather than in cooperation with Google itself). This is supported by the following evidence:
- (767) In the first place, in the Response to the Article 6(1)(c) Decision, Google provided evidence to underline that technical support provided by Google is not an important input for rival wearable OEMs and, therefore, the withdrawal of support would not foreclose those players. More specifically, the information provided by the Notifying Party indicates that Google has been providing to wearable OEMs only limited control over the implementation of Android updates and has provided limited engineering support to wearable OEMs. In particular:
- (a) Android updates: Unlike Apple, Google cannot immediately push an update to users' smartphones (except for Pixel). Instead, it relies on smartphone OEMs to introduce any new version of Android on their respective devices. Those OEMs have an interest in minimising any interoperability issues resulting from the installation of new Android versions. In any event, smartphone OEMs do not adopt new versions of Android until several months (or years) after their announcement, during which time the new features of the Android version are publicly presented by Google, tested by OEMs, and previewed by developers.

⁵⁰⁸ Replies to questionnaire QA on wearables, search and advertising, question C.24.1.

- (b) Android Updates (timetable): Google relies on smartphone OEMs to push new Android versions to their users' smartphones. In order to ensure a uniform roll-out of each update and avoid "version fragmentation," Google must provide timely information and support to Android OEMs, which are also the largest wearable OEMs (for example, Samsung, BBK, and Xiaomi). Google cannot prevent those OEMs from using information and support received as Android smartphone partners also for the benefit of their wearable devices. Also, Google could not specifically exclude wearable OEMs from accessing advance information that it needs to provide to Android OEMs and app developers to ensure the success of each new Android version (particularly through public initiatives such as the Developer Preview and I/O developer conference).
- (c) Bugs: Again Google would not be able to engage in similar delaying tactics, because issues relating to Android interoperability are generally dealt with by smartphone OEMs.⁵⁰⁹
- (768) In summary, Google points out that (i) Android is designed to be used by third parties without receiving any technical support from Google; (ii) Google did not invest any significant resources in improving Android interoperability of third-party wearables before its planned acquisition of Fitbit; and (iii) even since 2019, Google's engagement in this area has been limited. In particular, [product strategy]; and (iv) more generally, limiting technical support for bugs would be an unreliable and ineffective mechanism for degrading third-party wrist-worn wearables.⁵¹⁰
- (769) In the second place, the limited relevance of technical support provided by Google is confirmed by Fitbit's experience.⁵¹¹ When it experiences technical issues, Fitbit reaches out to other third parties like Android smartphone OEMs and Google (for Android phones), Apple (for iOS phones), and at times the Bluetooth chip vendors to notify them of the issue and find a solution together. However, Fitbit's outreach to Google before 2019 has been limited to initial discussions with no concrete actions or outcomes on the part of the Google team being needed. In fact, most Bluetooth connectivity issues that Fitbit has experienced arose due to OEM implementations, and Fitbit typically works with the OEM in question to resolve them.
- (770) In the third place, this is also confirmed by the results of the Phase II market investigation. While responses to the question of how often wearable OEMs rely on Google's technical support and how important Google's technical support is compared to Android smartphone OEM's technical support vary, respondents to the market investigation have not provided meaningful examples that would illustrate the relevance of Google's technical support to wearable OEMs.⁵¹²
- (771) In particular, some respondents to the market investigation referred to Google's Fast Pair programme as an example in this respect. Google's Fast Pair program allows fast pairing with devices, utilising Bluetooth to discover nearby devices without using significant phone battery. Fitbit is one of a number of OEMs that has worked

⁵⁰⁹ Response to the Article 6(1)(c) Decision, paragraph 179.

⁵¹⁰ Response to the Article 6(1)(c) Decision, paragraph 182.

⁵¹¹ Response to the Article 6(1)(c) Decision, paragraph 181.

⁵¹² Replies to questionnaire QD on wearables, smartphones and apps, questions 10 and 11.

with Google to include the Fast Pair feature into its wearable devices.⁵¹³ In 2017, Google launched Fast Pair, a service aimed to facilitate Bluetooth pairing of devices, including third-party wearables, with Android smartphones with the smallest number of steps possible. [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy]. [Google’s product strategy].⁵¹⁴ Therefore, this project does not constitute an example of technical support provided by Google to wearable OEMs. Other examples provided by market participants do not relate to regular technical support.

9.5.2.2.1.4.3. Conclusion on technical ability to selectively degrade interoperability

(772) In light of the above, the Commission considers that Google would likely have the technical ability to degrade interoperability with Android by degrading the relevant APIs that enable the Android OS to interact with wrist-worn wearable devices. This could be achieved by Google either by keeping the relevant APIs proprietary for use by Fitbit and only providing a degraded version as part of AOSP releases, or by continuing to include current functionalities in AOSP while, however, withholding any future developments from AOSP. In contrast, based on the limited relevance of Google’s technical support provided to wearable OEMs in the past, the Commission considers that Google would not have the technical ability to degrade interoperability with Android by degrading the technical support for rival wearable OEMs.

9.5.2.2.1.5. Limited counterstrategies

(773) The Notifying Party submits that possible counterstrategies would exist in response to a possible degradation by Google of the Android APIs to the detriment of rival wearable OEMs.

(774) First, the Notifying Party argues that smartphone OEMs could access, modify, and use the Android source code. Google submits that Android smartphone OEMs frequently modify the “stock” Android OS on their devices. As a result, even if Google degraded the relevant APIs licensed under AOSP that enable connectivity between wrist-worn wearables and mobile devices, Google could not prevent wearable OEMs from circumventing such degradation. According to Google, any wearable OEM could do so at a relatively low cost, and larger smartphone OEMs could do so with relative ease. In the Response to the Article 6(1)(c) Decision, the Notifying Party insists that: (i) Android OEMs have access to the latest version of Android’s source code; (ii) Android OEMs are free to supplement the open source Android code with their own, including APIs and other functionality needed for wearable device compatibility; and (iii) modifying Android to restore or introduce features does not require a significant amount of resources.⁵¹⁵

(775) However, based on the results of the market investigation, the Commission considers that Android smartphone OEMs would likely not be able to circumvent a possible degradation by Google. While the evidence submitted by Google confirms that several Android OEMs are likely to have sufficient know-how to customise APIs, all respondents to the Phase II market investigation pointed out that Google

⁵¹³ Notifying Party’s reply to RFI 27, question 14.

⁵¹⁴ Response to the Article 6(1)(c) Decision, paragraph 181; Notifying Party’s reply to RFI 27, question 8.

⁵¹⁵ Response to the Article 6(1)(c) Decision, paragraph 174.

could defeat any attempt to circumvent the degradation by narrowing its compatibility standards.⁵¹⁶ In other words, even if smartphone OEMs were technically able to reverse an API degradation, Google could ultimately prevent OEMs from using the forked Android version as smartphone OEMs would stand to lose access to GMS, including Google’s suite of mobile apps.

(776) Moreover, even if Android OEMs could avoid a degradation strategy, not all wrist-worn wearable devices would necessarily benefit, as Android smartphone OEMs may focus their efforts on restoring interoperability for their own rather than third-party wrist-worn wearable devices. In fact, based on data submitted by the Notifying Party, only [30-40]% of users of wrist-worn wearable devices use a smartphone of the same OEM. For Android smartphone OEMs, this share is only significantly higher for Samsung, for whom [60-70]% of users of a Samsung wearable also have a Samsung smartphone.⁵¹⁷ Non-integrated wearable OEMs fully rely on Google’s AOSP releases as well as Android OEMs’ implementation thereof. In the Response to the Article 6(1)(c) Decision, Google claimed that the available circumvention strategies would fully restore functionality for all wearable (and other) devices, as restoring or replacing lost functionality would be done by restoring the same general-purpose APIs⁵¹⁸. However, this was not confirmed by the results of the Phase II market investigation. For instance one respondent explained: *“While we do not believe any effective counterstrategy exists, should an Android OEM endeavor to implement one, any smartphone OEM attempting such a strategy to counter an API-based degradation strategy would do so only with regard to their own wearable products, not products of third parties. Countering Google to provide interoperability for third-party wearable devices would only add expense with little potential upside for the manufacturer in question and a potential downside in the form of increased competition for that OEM’s wearable devices.”*⁵¹⁹

(777) Second, the Notifying Party submits that Google would lack ability to degrade interoperability in relation to prior Android releases. Therefore, a possible counterstrategy would consist in Android smartphone OEMs postponing Android updates.⁵²⁰ As submitted by the Notifying Party and illustrated in Table 29, [...] % of Android devices run on the latest Android version, released in September 2019. The largest share of devices ([...] %) runs on the previous Android version, released in August 2018. There is a significant share of devices running on each of the six previous versions released from 2015 to 2018, in total [...] %. There is a small share of devices running on several versions released from 2012 to 2014, in total [...] %.

⁵¹⁶ Replies to questionnaire QD on wearables, smartphones and apps, questions C.8.3-8.4 and C.9.

⁵¹⁷ The source of these data is the Statista Global Consumer Survey 2019, covering Austria, France, Germany, Italy, Netherlands, Poland, Spain, Sweden and the United Kingdom. This is the most responsive data set that the Parties have identified. Form CO, Annex 7.7.

⁵¹⁸ Response to the Article 6(1)(c) Decision, paragraph 176.

⁵¹⁹ Replies to questionnaire QD on wearables, smartphones and apps, question 8.6.

⁵²⁰ See also Response to the Article 6(1)(c) Decision, paragraph 175.

Table 29: Uptake of Android OS Versions (1 July 2020, worldwide excluding China)

Version	Release date	All Android	Samsung	Huawei	Xiaomi
Android 10	03.09.2019	[...]%	[...]%	[...]%	[...]%
Pie 9	06.08.2018	[...]%	[...]%	[...]%	[...]%
Oreo 8.1	05.12.2017	[...]%	[...]%	[...]%	[...]%
Oreo 8.0	21.08.2017	[...]%	[...]%	[...]%	[...]%
Nougat 7.1	04.10.2016	[...]%	[...]%	[...]%	[...]%
Nougat 7.0	22.08.2015	[...]%	[...]%	[...]%	[...]%
Marshmallow 6.0	05.10.2015	[...]%	[...]%	[...]%	[...]%
Lollipop 5.1	09.03.2015	[...]%	[...]%	[...]%	[...]%
Older versions	2012-2014	[...]%	[...]%	[...]%	[...]%

Source: Notifying Party's reply to RFI 27, question 5.

- (778) Nevertheless, the Commission considers that postponing Android updates would not be an effective counterstrategy for Android smartphone OEMs in the long term. The latest Android version is used on a non-negligible share of devices (as high as [...]% for [...]), while the majority of devices runs on Android versions released less than three years ago. If Android smartphone OEMs postponed Android updates even further, compared to their current strategy depicted in Table 29, this could affect their competitiveness in the supply of smartphones, at least in the long term (and at least, if new Android releases include significant new features). This was also confirmed by the results of the Phase II market investigation. None of the respondents considered the use of a previous Android version to be an effective counterstrategy to circumvent degradation.⁵²¹ Respondents confirm that this would reduce OEMs' smartphones' competitiveness in the long run and would hence not be a commercially attractive strategy. In addition, wearable OEMs pointed out that they cannot control which Android version Android smartphone OEMs would install on their devices, in particular the Android smartphone market would be rather fragmented and each Android smartphone OEM may choose a different strategy. Finally, respondents also noted that Google could decide to no longer support old versions of Android (for example via security patches) and/or not to accept old versions together with GMS.
- (779) In the Response to the Article 6(1)(c) Decision, Google points to the relative stability and maturity of the key technology needed for phone-wearable interoperability, whereas the most significant area of development in wrist-worn wearable connectivity is cellular connectivity, which allows OEMs to obviate the need for Android (or any other OS) interoperability entirely.⁵²² However, the Commission notes that the rapid evolution of the smartwatch market makes it likely that there will eventually be either further improvements to current functionalities and/or new functionalities that will become relevant.
- (780) In light of the above, the Commission considers that Android smartphone OEMs would have very limited counterstrategies available and that, in addition, non-integrated wearable OEMs would not even have control of Android smartphone OEMs' implementation of such limited counterstrategies. Even though it may be true that a full implementation of Google's degradation strategy may require several

⁵²¹ Replies to questionnaire QD on wearables, smartphones and apps, question 8.2.

⁵²² Response to the Article 6(1)(c) Decision, paragraph 175.

years, any available counterstrategies would likely not be sufficient to defeat it in the long term.

9.5.2.2.2. As regards incentives

- (781) For the reasons set out below, the Commission considers that Google would likely have the incentive to degrade interoperability of the Android smartphone OS with the devices of rival wearable OEMs.
- (782) There are a number of qualitative arguments that seem to support Google's claim that it would not have an incentive to degrade interoperability of rival wearable devices with the Android OS.⁵²³
- (783) First, as explained by the Notifying Party, Google's considerations for the introduction of the open Android business model remain relevant for Google today as well as post-Transaction.
- (a) Google submits that the leading mobile platform in the 2000s before Android, notably Symbian, failed because it was not successful in attracting app developers due to (i) a high cost of app development and (ii) a high cost of app distribution. Symbian imposed high development costs on app developers (including Google) because incompatible implementations of the Symbian OS by different OEMs forced app developers to write many versions of their apps. Symbian also imposed high app distribution costs because it lacked a unified app store, so developers (including Google) had to obtain distribution separately from each mobile carrier. Mobile carriers exercised control over which software and services users could access, offering exclusive, fee-based carrier-specific services and setting up their own highly restrictive application marketplaces.
 - (b) Google explains that Google invested in Android [Strategy]. [Strategy]. [Strategy].
 - (c) In order to create a competitive mobile platform to distribute its services to mobile users, Google introduced a business model that sought to (i) attract the participation of OEMs and carriers; (ii) encourage developers to write apps for Android OS by reducing development and distribution costs and (iii) allow Google to sustain continued investments in the platform.
- (784) Second, the Commission notes that Google continues to rely on smartphone device OEMs in order to distribute its services on Android smartphones. When Android launched, Google had no mobile devices of its own. In the meantime, Google launched Pixel smartphones, however, with limited success. Pixel smartphones had a market share of [0-5]% in volume terms, both globally and in the EEA, in 2019. In value terms, its market share is only marginally higher ([0-5]% globally and [0-5]% in the EEA).
- (785) Degrading the interoperability between third-party OEMs' mobile devices and rival wrist-worn wearables would be a fundamental change to the relationship between Google and Android smartphone OEMs that may have a negative impact on OEMs' commitment to the Android ecosystem.

⁵²³ Form CO, paragraph 531 and following.

- (786) This is different from Apple’s situation. Apple reduced app development and distribution costs for developers by implementing a closed, vertically-integrated platform. In particular, Apple is the exclusive supplier of iOS devices. Therefore, in contrast to Google, Apple does not rely on close co-operations with third-party smartphone OEMs.
- (787) Third, the Commission considers that, to the extent that Google would make any visible significant changes to interoperability for the purpose of foreclosing rival wearables, this would be publicly visible and scrutinized and it would incur reputational costs not only with OEMs and app developers (as mentioned above) but also with consumers.
- (788) Fourth, the Commission acknowledges that the lack of an incentive to implement a degradation strategy in favour of Google’s own hardware products is also consistent with Google’s past conduct in other hardware markets. For instance, Pixel phones are Google’s smartphone series and Pixel Buds are Google’s brand of wireless headphones that connect to mobile devices via Bluetooth. Based on the evidence on file and the results of the market investigation so far, Google does not degrade interoperability with regard to other hardware devices that interact with Android OS and compete with Google hardware products.⁵²⁴
- (789) Fifth, as also pointed out in the Response to the Article 6(1)(c) Decision, Google’s ordinary-course internal documents indeed attest [Google’s product strategy].⁵²⁵
- (790) Several other factors would indicate that Google may have an incentive to degrade interoperability of rival wearable devices with the Android OS.
- (791) First, Google would not necessarily incur reputational damage as a result of a degradation strategy. In particular, any subtle degradation to interoperability, implemented over time, would not be directly detectable by users or even rival wearable OEMs. In particular, users may blame any malfunctioning on their wearable device rather than their Android smartphone.
- (792) Second, the quantification submitted by the Notifying Party, based on a standard vertical arithmetic framework, does not convincingly show that a degradation strategy would be unprofitable for Google.
- (793) The vertical arithmetic analysis works as follows: The profitability of degrading the interoperability of Android mobile devices with rival wrist-worn wearables depends on the relative gains and losses resulting from user responses to a degradation. In

⁵²⁴ This is also consistent with Google’s approach following its acquisition of Nest and the changes made to the Works With Nest (“WWN”) program that enables connected home devices from third-party OEMs to interface with Nest devices. Despite still supporting existing WWN connections for existing Nest Accounts, since August 2019 Google no longer enables new connections using WWN. This program was substituted with programs that help ensure that Google users’ sensitive data is handled in privacy-protective ways. The revised programs however continue to allow third-party developers and OEMs who offer their own smart home devices and applications to integrate with Google’s Nest products under the condition that these partners ensure that their own offerings maintain sufficient privacy and data security standards before interoperating with Nest devices. Notifying Party’s reply to RFI 30, questions 4 and 5.

⁵²⁵ Response to the Article 6(1)(c) Decisions, paragraph 166.

order to avoid the degradation, users can either switch mobile platforms (to iOS) or switch their wrist-worn wearable (to Fitbit).⁵²⁶

- (794) The more users who switch to Fitbit in response to a degradation strategy, the more profitable the strategy; the more users who switch to iOS, the less profitable the strategy. This framework is used to derive a formula for a critical switching threshold (“CST”), represented as the relation between the number of affected Android users switching to iOS over the number of affected users switching to Fitbit, which is the point at which Google would be indifferent between pursuing and not pursuing the hypothetical degradation strategy. If diversion to iOS is above the critical threshold, the hypothetical degradation would be unprofitable; if diversion to iOS is below the critical threshold, the hypothetical degradation would be profitable.
- (795) The calculation of the CST relies on inputs on the gains and losses of such strategy:
- (a) Per-user gross profit on incremental Fitbit sales (gains): consisting of the Fitbit device profit, Fitbit services profit, Fitbit stickiness benefit, Fitbit device lifetime, Google discount rate and Fitbit smartwatch/fitness tracker product mix.
 - (b) Per-user losses from Android (costs): consisting of the incremental profit on Android versus iOS⁵²⁷, Google revenue yearly growth rate, Android user average lifetime, Google discount rate.
 - (c) Per-user losses from Pixel sales (costs): consisting of the Pixel device profit, Pixel incremental services profit, Pixel stickiness benefit, Pixel device lifetime, Google discount rate.
- (796) In Response to the Article 6(1)(c) Decision, the Notifying Party submitted a revised analysis that addressed some of the methodological flaws identified by the Commission which had led to an underestimation of the potential revenue gains on Fitbit devices and to an overestimation of the potential revenue losses on Android devices.⁵²⁸ The revised analysis corrects for the (i) the underestimation of Fitbit’s [demand expectations for certain type of] revenues⁵²⁹, and (ii) the overestimation of Android’s incremental profit loss over the average lifetime of an Android user⁵³⁰.
- (797) However, the Notifying Party’s revised analysis does not address the main methodological flaw in relation to the stickiness benefit that still leads to an underestimation of the CST, in other words increasing the likelihood that actual

⁵²⁶ The analysis submitted by the Notifying Party also considers two other scenarios, in which Google would only degrade Google’s Pixel smartphones or only non-Samsung Android smartphones. These scenarios would make a degradation strategy less profitable for Google as it would increase the weight associated to the losses from Pixel sales. However, the Commission cannot exclude that Google would have the ability to degrade all Android smartphones, therefore the Commission focusses on this scenario.

⁵²⁷ While Google licenses the Android OS together with Play and a suite of Google apps [licensing strategy]. In particular, in exchange for [licensing strategy]. [Licensing strategy]. In addition, [licensing strategy]. [Licensing strategy]. In addition, [licensing strategy], as Play is not available on iOS.

⁵²⁸ Response to the Article 6(1)(c) Decisions, paragraphs 198-201.

⁵²⁹ Fitbit internal documents, e.g. [Reference to internal documents]; [Reference to internal documents].

⁵³⁰ While the growth rate is applied to revenues on an annual basis, the churn rate is only used to determinate the average lifetime. However, the annual likelihood of churn should also be applied in each single year.

switching to iOS would lie above the CST.⁵³¹ In fact, the applied methodology underestimates the gains from users switching to Fitbit devices. For the period after the lifetime of the user's initial Fitbit purchase, the analysis applies a Fitbit stickiness benefit, in other words, the increased likelihood that the new Fitbit user purchases a second Fitbit device. This stickiness benefit is calculated as the probability that a user will purchase a Fitbit conditional on owning a Fitbit (that is to say, the likelihood of repeat purchase on the basis of prior ownership) relative to the unconditional probability of a Fitbit purchase (that is to say, the likelihood of purchase by the average consumer).⁵³² However, considering the context of the degradation and the users' initial choice to switch to Fitbit instead of accepting the degradation or switching to iOS, it is logical that the user will make the same decision going forward, in other words the user will repurchase a Fitbit with a much higher probability, likely close to 100%, as the Android compatible alternatives are subject to degradation. In addition, in the no-degradation scenario, a non-Fitbit user is less likely to switch to Fitbit than its market share suggests given that he/she would also have some stickiness to his/her current Android device OEM. Moreover, the calculation of Fitbit's profit gain contains a mistake. Irrespective of the correct calculation of the stickiness benefit, such benefit should be applied infinitely, whereas the submitted analysis only applies the stickiness benefit once.⁵³³

- (798) In any case, even taking the corrected results submitted by the Notifying Party (and not further correcting for the stickiness benefit), the actual switching rate could be below the CST. The analysis submitted by the Notifying Party indicates that a degradation would be unprofitable if at least [...]% of Android smartphone users who have a non-Fitbit wearable switched to iOS (with the other [...]% switching their wearable to Fitbit).⁵³⁴ This implies a CST of [...]. In other words, for about [...] users switching to Fitbit, it would be sufficient for only one user to switch to iOS in order for a degradation strategy to still be profitable.⁵³⁵
- (799) The Commission cannot exclude that actual switching to iOS would be below this level, for the following reasons.
- (800) First, Google's own data shows that Android users are expected to remain on Android for about [...] years on average, which shows a significant loyalty to the Android ecosystem.
- (801) Second, this is in line with the Commission's finding in its decision in the *Google Android* case that users have a significant degree of loyalty to Android. Besides churn data, this finding relied on survey data as well as statements from app developers, OEMs and MNOs.⁵³⁶ This finding was also confirmed by most of the

⁵³¹ Response to the Article 6(1)(c) Decisions, paragraphs 202-203.

⁵³² Vertical White Paper, Appendix A, paragraph 7.

⁵³³ Vertical White Paper, Appendix A, Table A-3. A similar mistake applies to the losses with Pixel devices, in this case underestimating the losses, but this would be of a lower magnitude.

⁵³⁴ Vertical EEA White Paper, paragraph 2.5

⁵³⁵ Based on the Commission's own computations, which correct for the stickiness benefit discussed in the previous paragraph, the percentage of switchers to iOS must even be about [...]% in order for a degradation strategy to be unprofitable. The Commission will not further discuss or present these results as even based on the uncorrected results, the Commission cannot exclude that actual switching would be below the CST.

⁵³⁶ Commission decision of 18 July 2018 in case AT.4009 – Google Android, recitals 536-544.

third-party studies submitted by Google, which showed very low switching rates from Android to iOS, in particular in the EEA.⁵³⁷

- (802) Third, in the context of a degradation strategy targeted at competing wrist-worn wearable suppliers, besides the loyalty to the Android ecosystem, users also have monetary incentives to remain with the Android smartphone. By switching to iOS and buying a new high-end smartphone, users would incur significantly higher costs than by simply switching to a Fitbit device. Moreover, as explained by market participants, Apple also discriminates against rival wearable devices. Therefore, in order to avoid interoperability issues, a user would not only have to buy an iOS smartphone (iPhone) but also an iOS smartwatch (Apple Watch), creating significant switching costs.
- (803) Fourth, users may attribute interoperability issues to their wearable devices rather than their smartphone. Fitbit itself confirmed that [customer responses].⁵³⁸
- (804) The Commission acknowledges that Google's incentive to pursue a degradation strategy also depends on the total potential gain, which in turn mainly depends on the number of users actually switching in response to a degradation strategy. The Notifying Party submits that, even if all Android users with a non-Fitbit wrist-worn wearable device switched to Fitbit, the incremental profits would at most be [...] % of the incremental value of Android users to Google.⁵³⁹ However, this result is also based on the incorrect calculations of the Fitbit gains (underestimated) and Android losses (overestimated).
- (805) Based on the results of the market investigation, the Commission considers that there may be further elements which could increase Google's incentive to degrade interoperability with Android that are not taken into account in the vertical arithmetic submitted by the Notifying Party (and are difficult to quantify):
- (a) Additional sales of Fitbit devices would allow Google to sell additional apps and services. [Financial modelling].⁵⁴⁰ [Google's product strategy]. [Financial modelling].⁵⁴¹ [Financial modelling]. [Financial modelling]. [Financial modelling].⁵⁴²⁵⁴³
 - (b) Additional sales of Fitbit devices would allow Google to collect additional data that it could use as asset, in particular in the various online advertising

⁵³⁷ Notifying Party's reply to RFI 32, question 3.

⁵³⁸ Notifying Party's reply to RFI 27, question 13.

⁵³⁹ Vertical EEA White Paper, paragraph 3.3.

⁵⁴⁰ See e.g. [Reference to internal documents].

⁵⁴¹ Notifying Party's reply to RFI 32, question 2.

⁵⁴² See e.g. [Reference to internal documents].

⁵⁴³ In addition, Google submits that even if [product strategy] were to be monetized in the future, this would not materially affect Google's incentives to degrade Android interoperability. This would be because those incentives would be driven not only by the additional [product strategy] on Fitbit devices, but also by the lost [product strategy] on Android smartphones of users switching to iOS due to the hypothetical degradation. Accounting for potential future monetization of [product strategy] may then decrease the profitability of the hypothetical degradation, as future monetization of [product strategy] on Android devices may be greater than monetization on wearables. The Commission notes, however, that the [product strategy] on Android smartphones will largely cannibalise Google's existing [product strategy] revenues, while its application on wearable devices will create additional [product strategy] and use cases, and hence new revenue streams.

markets (see Section 9.3.3) and in the digital healthcare sector (see Sections 9.3.5 and 9.4.2).⁵⁴⁴

- (c) Additional sales of Wear OS devices, if a degradation strategy would induce wearable OEMs and ultimately users to switch to Wear OS, would allow Google to benefit from the same advantages as from additional Fitbit sales, in particular additional sales of apps and collection of data⁵⁴⁵. In light of Wear OS' current shortcomings (for example [...]), such strategy may not be possible absent the Transaction but Google [product strategy].⁵⁴⁶ In addition, there would be more app developers interested in developing apps for Wear OS [product strategy]. This will increase the likelihood that wearable OEMs currently using their own wearable OS, such as Samsung⁵⁴⁷, would be willing to switch to Wear OS in response to a degradation strategy.

(806) In light of the above, the Commission considers that Google would likely have the incentive to implement strategies to degrade interoperability of rival wearable devices with the Android OS.

9.5.2.2.3. As regards the possible effects on competition in the wrist-worn wearables market

(807) The Commission considers that a degradation strategy by Google could have significant effects on competition by reducing the sales prospects of Fitbit's wearable competitors and leading to a reduction in their ability to compete.

(808) Respondents to the market investigation confirmed that wrist-worn wearable devices are heavily dependent on the connection to smartphones. A smooth connection between the respective OSs of the smartphone and the wearable device is essential for wearable devices' proper functioning as well as for a positive user experience.⁵⁴⁸ Interoperability was mentioned to be one of the main selling points of a wearable device. [Reference to internal documents]. [Reference to internal documents].⁵⁴⁹

(809) The following competitors would be the only wearable OEMs that would not be impacted by a degradation strategy by Google:

- (a) Apple and third-party wrist-worn wearable devices connected to an iPhone: Apple's smartwatch is not Android-compatible and has a market share of [20-30]% by volume and [30-40]% by value in the supply of wrist-worn wearable devices in the EEA, with similar shares on a worldwide level. The sales prospects of Apple would not be affected by a degradation strategy. As regards third-party wrist-worn wearable devices connected to an iPhone: any merger-specific degradation strategy would have no impact on their sales prospects. As explained in Section 9.5.2.2.1.1., Apple has a volume share in the supply of smartphones of [20-30]% in the EEA and [10-20]% worldwide. The evidence on file also suggests that the share of Android-compatible wrist-worn wearable

⁵⁴⁴ This may also involve a trade-off to the extent that Google collects more data on Android than on iOS users. [Strategy]. [Strategy]. Notifying Party's reply to RFI 27, question 11.

⁵⁴⁵ This is because the data of Wear OS users is often processed by Google's own health and fitness apps.

⁵⁴⁶ Form CO, paragraph 39 and Annex 7.10.

⁵⁴⁷ [Google's product strategy]. [Google's product strategy].

⁵⁴⁸ Replies to questionnaire QA on wearables, search and advertising, question C.24.

⁵⁴⁹ [Reference to internal documents].

devices connecting to iPhones exceeds Apple’s smartphone market share for some OEMs. Nevertheless, the share of Android-compatible wrist-worn wearable devices currently relying on interoperability with Android OS remains significant and may significantly vary across wearable OEMs. Moreover, while not merger-specific, Apple already degrades interoperability for third-party wrist-worn wearable devices.

- (b) Wear OS devices: As the Commission already found in Section 9.4.3 that Google would not have the ability nor the incentive to foreclose access to Wear OS, it can be assumed that a degradation of interoperability between third-party wrist-worn wearable devices and Android smartphones would not affect Wear OS devices. To the contrary, as explained in Section 9.4.3, Google has an incentive that users switch to Wear OS and a degradation strategy could have the aim for users to either switch to Fitbit or Wear OS devices.
- (810) All other competitors would likely be affected by a degradation strategy, including Garmin, Samsung, Huawei⁵⁵⁰, Huami (Amazfit) as well as brands that do not rely on Wear OS for all their wearable models (for example Mobvoi, Polar, Sunnto, Xiaomi) and many smaller competitors. Taken together, these competitors represent about 50% of the wrist-worn wearables market, both globally and in the EEA, albeit the Transaction does not affect their ability to sell wrist-worn wearable devices to iPhone users.
- (811) The impact on wearable OEMs’ sales prospect with Android users depends on the extent of Google’s degradation strategy. Google points out that Apple’s approach reveals that even Apple has an overall incentive to allow third-party wearable interoperability on its iPhones. According to Google, the availability of wearable options makes iPhones more attractive to users who are choosing a mobile device and have some preference for a wrist-worn wearable other than Apple’s.
- (812) Assuming that Google would implement a strategy of degrading the Android APIs that would be similar to that used by Apple (see recitals (717), (754), (758) and (763)), the effects of such a strategy could potentially be significant: Apple is only active in the smartwatches segment, in which it has become the clear market leader. In 2019, it had a market share of [30-40]% in volume terms and [40-50]% in value terms in the EEA and of [20-30]% in volume terms and [50-60]% in value terms globally. This is also reflected in respondents’ replies to the market investigation, which emphasise Apple’s strong market position and attribute the smooth interoperability with iPhones as one of the reasons for Apple Watch’s success:⁵⁵¹
- (a) “Apple Watch is the most popular form of wearable device, reportedly accounting for 50-60% of all such devices in the EEA. It uses a proprietary operating system.”
 - (b) “Apple has the largest market share world-wide in respect to smart watches.”

⁵⁵⁰ To the extent that Huawei will move to its own OS in the future (see Section 9.4.3), Huawei and other wrist-worn wearable devices connecting to an Huawei smartphone would no longer be impacted by a degradation strategy.

⁵⁵¹ Replies to questionnaire QA on wearables, search and advertising, questions B.4.1, C.8.1, C.15.1, C.19.2, C.24.1.

- (c) “Apple is the clear market leader in smartwatches controlling half of the market volume. Success is based on strong technology development and strong attractive Apple brand. Also Apple's ecosystem of products (smartphones, tablets, PCs etc.) provides user benefits when using ecosystem products. Therefore users of iPhones are likely to buy Apple Watches.”
 - (d) “Apple is the market leader when it comes to high-end fitness trackers, and although the Apple Watch is more expensive than other competing products, the strength of Apple’s brand and the functions offered by various versions.”
 - (e) “However, consumers who have experienced iOS (Apple) on a Smartphone tend to purchase an Apple watch.”
 - (f) “Apple’s Watch OS, due to the closed nature of Apple devices, and the user experience and reliability offered.”
 - (g) “Apple for all the above reasons and interoperability with iPhone.”
 - (h) “Apple’s behaviour has been that of a dominant player discriminating against their competitors who rely heavily on iPhones to work with their smartwatches and wearable bands. [...] All of these actions have allowed Apple to grow their market share in this market, while competitors are unable to provide the same customer experience as that of an Apple Watch paired with an iPhone. This has limited competitor's market shares by stifling its growth and allowed Apple to become dominant in the market for wearable bands and smartwatches.”
 - (i) “Apple is still the dominant smartwatch manufacturer and [...] there is a major gap between Apple and the fragmented rest of the market (Samsung, Huawei, Garmin, etc.). One of the key factors for Apple’s success is that it controls the full ecosystem. By controlling both the smartphone and the watch, Apple is able to offer the best user experience.” and “Apple focusses on its own wearable devices and does not invest in interoperability with third-party wearable devices”⁵⁵²
- (813) The Notifying Party argues that, despite Apple’s degradation strategy, Fitbit and its competitors still have significant sales to iPhone users. However, the Commission considers that Apple’s overall volume market share is not the correct benchmark as most wrist-worn wearable devices are connected to high-end mobile devices.⁵⁵³ Therefore, wearable OEMs’ sales prospects with iPhones are higher than its market share in the overall market would suggest. In light of Apple’s strong market position, it cannot be excluded that Apple’s degradation strategy has significantly reduced the sales prospects of Apple’s competitors.
- (814) In any case, Apple’s degradation strategy has imposed significant costs on wearable suppliers, which may have decreased (or may still be decreasing) their ability to compete. For instance, one respondent submitted:
- (a) Overall: “The lack of communication and testing of future iOS versions with Apple's competitors in wearables (including Fitbit) leads to substantial

⁵⁵² Non-confidential minutes of call of 13 May 2020, paragraphs 10 and 11.

⁵⁵³ Vertical White Paper, paragraph 92.

financial costs, in addition to significant support and engineering time required to address customer issues and to ensure that devices continue to function with new iOS releases.”⁵⁵⁴

- (b) Engineering costs: “This results in Apple wearable devices having a superior performance and user experience when paired with iPhones. For third parties to achieve the same experience, a significant amount of engineering effort needs to be put in to make the 3rd party devices competitive against Apple’s devices.”⁵⁵⁵
 - (c) Customer support costs and negative feedback and hence reduced sales prospects: “Consumers pairing their wearable devices with iPhones expect 3rd party devices to behave similar to Apple watch. If they cannot due to restrictions imposed by Apple, this results in excessive customer support requests, product returns, dissatisfied customers and competitive disadvantages for wearable device manufacturers”⁵⁵⁶
- (815) The fact that Apple’s degradation strategy has imposed significant costs on wearable OEMs was also confirmed by the information submitted by Fitbit. [Cost structure]. [Cost structure].⁵⁵⁷ [Cost structure].
- (816) In light of the above, the Commission considers that a degradation strategy by Google consisting of degrading the interoperability of the Android OS with rival wearable OEMs’ devices could lead, for a large portion of those rivals, to a reduction of their ability to compete against the merged entity and thereby have a significant detrimental effect on competition.

9.5.2.2.4. Commission’s conclusion as to possible conglomerate effects of the Transaction

- (817) In light of the above considerations and based on the results of the market investigation, the Commission maintains its concerns, as set out in the Article 6(1)(c) Decision, as to the compatibility of the Transaction with the internal market relating to Google’s leveraging of its dominant position in the supply of licensable OSs for smart mobile devices to the market for the supply of wrist-worn wearable devices (and possible sub-segments thereof).

9.6. Access to commercially sensitive information about third party apps

9.6.1. Introduction

- (818) Non-horizontal non-coordinated effects can also arise when the merged entity, by vertically integrating, gains access to commercially sensitive information regarding the upstream or downstream activities of rivals. For instance, by becoming the supplier of a downstream competitor, a company may obtain critical information, which allows it to price less aggressively in the downstream market to the detriment of consumers. It may also put competitors at a competitive disadvantage, thereby dissuading them to enter or expand in the market.⁵⁵⁸

⁵⁵⁴ Replies to questionnaire QA on wearables, search and advertising, question 24.1.

⁵⁵⁵ Replies to questionnaire QD on wearables, smartphones and apps, question 20.1.

⁵⁵⁶ Replies to questionnaire QD on wearables, smartphones and apps, questions 20.2 and 20.3.

⁵⁵⁷ Notifying Party’s reply to RFI 27, question 13.

⁵⁵⁸ Non-Horizontal Merger Guidelines, paragraph 78.

(819) Such possible theory of harm differs from the vertical non-coordinated effects described in paragraphs 29 to 77 of the Non-Horizontal Merger Guidelines in so far as it does not require the merged entity to directly foreclose access of its actual or potential rivals to supplies (input foreclosure) or markets (customer foreclosure). The qualifying element of the potentially anticompetitive conduct is in fact linked to the intelligence underlying that conduct, that is commercially sensitive information on the merged entity's rivals acquired through the vertical integration brought about by the merger. However, the conduct must also be liable to negatively affect competition, for instance by allowing the merged entity to price less aggressively to the detriment of consumers or by putting competitors at a competitive disadvantage.

9.6.2. *Access to commercially sensitive information through Fitbit*

(820) Fitbit allows its users to connect their Fitbit accounts with a number of third-party apps, in particular health and fitness apps (for example, Strava, MyFitnessPal etc.) and digital music distribution apps (for example, Deezer and Spotify etc.). If a Fitbit user has connected its Fitbit account to a third-party app account, Fitbit might then be able to gain access to additional information on the respective third-party apps.

(821) During the market investigation, a respondent active in the market for health and fitness apps raised the concern that, post-Transaction Google will obtain data that is sent to Fitbit by third-party apps. This would then put Google in a position to use this otherwise confidential business intelligence to the detriment of these third-party apps, for example, by advancing the development of Google-owned competing apps.⁵⁵⁹ A related concern expressed in the market investigation was that the Fitbit Companion App might collect information as to the presence of certain apps, including health and fitness apps and digital music distribution apps, on the mobile device of the Fitbit user.

(822) The Commission has therefore assessed whether, through the acquisition of Fitbit, Google could gain access to commercially sensitive data on its competitors and whether this could lead to any non-horizontal non-coordinated anticompetitive effects. The concerned markets, where Google offers competing apps, are the supply of (i) general search services, (ii) health and fitness apps, (iii) mobile payment services, (iv) navigation apps offering turn-by-turn navigation, (v) virtual assistants, (vi) digital music distribution services, and (vii) digital translation services. The assessment in the following sections is intended to apply to all of these markets (and their possible segments).

9.6.2.1. Notifying Party's views

(823) The Notifying Party submits that Google will neither have the ability nor the incentive to use commercially sensitive information post-Transaction to the detriment of third-party app developers. Moreover, the Notifying Party submits that such a strategy would have no impact.

9.6.2.1.1. As regards ability

(824) Regarding the connection of Fitbit accounts with third-party apps, the Notifying Party submits that Fitbit only receives the information from third-party apps that is

⁵⁵⁹ Replies to questionnaire QA on wearables, search and advertising, question B.4.1.

necessary to provide the relevant service. Fitbit therefore has very limited information on third-party apps.

- (825) Regarding information on the presence of other apps on the mobile device of the Fitbit user, the Notifying Party explains that this information does not have obvious commercial value as it is equally available to all smartphone app developers. In any event, for privacy protection reasons, Fitbit would not share this information with third parties.⁵⁶⁰
- (826) The Notifying Party therefore claims that the Transaction would not lead to a material increase in the information that Google has about its competitors. It would therefore also not increase Google's ability to use information about its competitors to their detriment.

9.6.2.1.2. As regards incentives

- (827) The Notifying Party argues that, since the information is not competitively valuable, post-Transaction Google would not have any incentive to use this information. The Notifying Party notes that Fitbit does not collect this data today even though it has access to it.

9.6.2.1.3. As regards the possible effects on competition

- (828) The Notifying Party argues that, even if Fitbit would collect such data, neither information sent to Fitbit by third-party apps nor information on the presence of other apps on a Fitbit user's mobile device could be used to the detriment of its competitors.

9.6.2.2. The Commission's assessment

- (829) During the market investigation, Strava, a respondent active in the market for health and fitness apps, raised the concern that *"by virtue of Google's control of Android and WearOS, Google has access to significant competitively sensitive data about our users, both generally speaking and in how they use our app. Through the acquisition of Fitbit, Google will further expand this data by virtue of Strava's existing integrations with Fitbit devices and the Strava app on certain Fitbit devices. Google will have the capability of combining this data with other data they collect about these same users from other aspects of their platform or owned apps. In other words, Google could have access to our otherwise confidential business intelligence while also competing directly with us. If Google were to use this data or related business intelligence to advance the development of their owned-applications (including Fitbit), it would put Strava at a competitive disadvantage."*⁵⁶¹
- (830) Nevertheless, for the reasons set out below, the Commission considers that Google would neither have the ability nor the incentives to use commercially sensitive information acquired through the Transaction to harm competing third-party apps. The Commission also considers that, if Google engaged in such a strategy, the effects on competition (if any) would be negligible.

⁵⁶⁰ Notifying Party's reply to RFI 39, question 2.

⁵⁶¹ Replies to questionnaire QA on wearables, search and advertising, question B.4.1.

9.6.2.2.1. Commercially sensitive information

- (831) In the present case, the Transaction would allow Google to gain access to certain information on its competitors. As explained above, Fitbit can access information about the presence of third-party apps on the mobile device of the Fitbit user. With respect to Fitbit users which have connected their account with third-party apps, the Commission considers that the information received by Fitbit from third-party apps is very limited. The most relevant information shared with Fitbit is the mere fact that the user has connected the Fitbit account to a third-party app account.
- (832) The information above would allow the merged entity to identify those Fitbit users which are (or are not) already customers of third-party apps that compete with Google-owned apps.
- (833) By combining this information, Google could thus derive a list of customers of apps that compete with Google-owned apps. Whilst the Non-Horizontal Merger Guidelines do not provide a definition of “commercially sensitive information”, customer lists are indicated as potentially constituting business secrets of an undertaking, i.e. information whose disclosure could result in a serious harm to an undertaking, in the Commission Notice on the rules for access to the Commission file.⁵⁶²
- (834) Therefore, the Commission considers that the Transaction could allow Google to gain access to commercially sensitive information on its rivals in the markets where it offers competing apps. Such information is in the following referred to as “Customer Information”.

9.6.2.2.2. As regards ability

- (835) The Commission considers that the merged entity would not be able to use Customer Information acquired through the Transaction to harm competing third-party apps.
- (836) The Commission notes that, while from a technical point of view the merged entity would be able to access Customer Information of competing apps, the data increment would be negligible and the information would have no commercial value for the following reasons.
- (837) Regarding information on the presence of other apps on the mobile device of the Fitbit user, the Commission considers that the Transaction would not lead to a material increase in Google’s Customer Information about its competitors.
- (838) First, for Android smartphones, Google already has access to information regarding installed third-party apps. For users that use Fitbit with an Android device, the Transaction would therefore not lead to an increment in information.⁵⁶³
- (839) Second, this data is not unique to Fitbit. For most versions of Android, any third-party app installed on an Android smartphone has access to the same data. For iOS,

⁵⁶² Commission Notice on the rules for access to the Commission file in cases pursuant to Articles 81 and 82 of the EC Treaty, Articles 53, 54 and 57 of the EEA Agreement and Council Regulation (EC) No 139/2004, OJ C 325, 22.12.2005, p. 7-15, paragraph 18.

⁵⁶³ In its reply question 4 of RFI 39, the Notifying Party explains that on iOS mobile devices, the Fitbit mobile app is aware of the presence of other apps on the same mobile device if that app sends a notification to the connected Fitbit wearable device through the iOS notification center. To enable this functionality, the user has to allow the mobile app to send notifications to the connected Fitbit wearable device.

any third-party app receiving notifications on an iOS smartphone would also have access to this data.⁵⁶⁴

- (840) Third, even if the data would be unique to Fitbit, it would only cover a very small part of the Android user base in view of Fitbit's low usage numbers. For iOS, the number would be even lower because for iOS devices, even within its small user base, Fitbit would be aware of the presence of potentially a very small number of apps since it only receives information on the apps that are sending notifications to Fitbit via the notifications centre.
- (841) The Commission considers that similar arguments apply regarding the Customer Information that is sent to Fitbit when users decide to connect their Fitbit accounts with third-party apps. The Customer Information received by Fitbit represents a negligible increment to the information that Google already has. In addition, similar information is available to other smartphone app developers.⁵⁶⁵

9.6.2.2.3. As regards incentives

- (842) The Commission considers that, because both the information that is sent to Fitbit by third-party apps as well as information on the presence of apps on the Fitbit user's mobile device has negligible competitive value, the merged entity would have no incentive to harm competing apps by using this information.

9.6.2.2.4. As regards the possible effects on competition

- (843) Regardless of whether the merged entity has either the ability or the incentive to Customer Information on competitors obtained through Fitbit or the Fitbit Companion App, the Commission considers that such a strategy would not have any material impact on competition.
- (844) Indeed, the Commission considers that neither the information that is sent to Fitbit when a user decides to connect a Fitbit account with a third-party app nor information on the presence of competing apps on a Fitbit user's mobile device collected by the Fitbit Companion App has any competitive value for the merged entity, mostly because the increment compared to the data Google already has is marginal. Moreover, as explained above, this information is widely accessible to third-party apps.

9.6.2.2.5. Conclusion

- (845) In light of the above considerations and based on the results of the market investigation, the Commission considers that the Transaction is not likely to significantly impede effective competition in the markets for the supply of (i) general search services, (ii) health and fitness apps, (iii) mobile payment services, (iv) navigation apps offering turn-by-turn navigation, (v) virtual assistants, (vi) digital music distribution services, and (vii) digital translation services (and possible segments thereof) as a result of any access by the merged entity to Customer Information.

⁵⁶⁴ Notifying Party's reply to RFI 39, question 3.

⁵⁶⁵ Notifying Party's reply to RFI 39, questions 5 and 6.

10. COMMITMENTS

10.1. Introduction

(846) In order to remove the competition concerns arising from the Transaction described in Section 9, the Notifying Party submitted commitments both in Phase I and in Phase II.

10.1.1. Phase I Commitments

(847) On 13 July 2020, the Notifying Party submitted commitments pursuant to Article 6(2) of the Merger Regulation (the "Initial Phase I Commitments").

(848) The Commission launched a market test of the Initial Phase I Commitments on 14 July 2020 ("the Phase I market test"), seeking responses from the Parties' customers and competitors on the affected markets. The Commission informed the Notifying Party of the results of the market test on 25 July 2020.

(849) In the Article 6(1)(c) Decision, the Commission concluded that the Initial Phase I Commitments were not sufficient to eliminate the Commission's serious doubts raised as to the compatibility of the Transaction with the internal market and with the functioning of the EEA Agreement in respect of the supply of online search advertising and sub-markets/segments thereof, and online display advertising and sub-markets/segments thereof, in all EEA countries. Moreover, in the Article 6(1)(c) Decision, the Commission also stated that it intended to further investigate the compatibility of the Transaction with the internal market in respect to (a) the supply of ad tech services in the EEA, (b) the supply of digital healthcare services in the EEA, and (c) the supply of wrist-worn wearable devices and possible sub-segments as a result of Google's leveraging of its dominant position in the supply of licensable OSs for smart mobile devices.

10.1.2. Phase II Commitments

(850) On 28 September 2020, the Notifying Party submitted revised commitments pursuant to Articles 8(2) and 10(2) of the Merger Regulation (the "Initial Phase II Commitments").

(851) The Commission launched a market test of the Initial Phase II Commitments on 29 September 2020 ("the Phase II market test"), seeking responses from the Parties' customers and competitors on the affected markets. The Commission informed the Notifying Party of the results of the market test on 9 October 2020.

(852) Based on the Commission's feedback, the Notifying Party submitted a revised final set of commitments on 4 November 2020 (the "Final Commitments").

10.2. Analytical framework

(853) Where the Commission considers that a concentration raises competition concerns parties may seek to modify the concentration in order to resolve such competition concerns and thereby gain clearance of their merger.⁵⁶⁶

(854) Under the Merger Regulation, the Commission only has the power to accept commitments that are deemed capable of rendering the concentration compatible

⁵⁶⁶ Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the "Remedies Notice"), OJ 2008/C 267/01, Paragraph 5.

with the internal market. Pursuant to Article 10(2) of the Merger Regulation, the Commission may accept commitments when they remove the serious doubts referred to in the Article 6(1)(c) Decision. The commitments must eliminate the competition concerns entirely and must be comprehensive and effective from all points of view.⁵⁶⁷ The commitments must also be proportionate to the competition concerns identified.⁵⁶⁸ Furthermore, the commitments must be capable of being implemented effectively within a short period of time as the conditions of competition on the market will not be maintained until the commitments have been fulfilled.⁵⁶⁹

- (855) In assessing whether the proposed commitments will likely eliminate the competition concerns identified, the Commission considers all relevant factors including inter alia the type, scale and scope of the proposed commitments, assessed by reference to the structure and particular characteristics of the market in which the competition concerns arise, including the position of the parties and other participants on the market.⁵⁷⁰
- (856) When assessing the commitments proposed by the merging parties, the Commission has the legal duty to ensure that such commitments are effective. In order for the commitments to remove the competition concerns entirely and be comprehensive and effective, there has to be an effective implementation and ability to monitor the commitments. Whereas divestitures once implemented do not require any further monitoring measures, other types of commitments require effective monitoring mechanisms in order to ensure that their effect is not reduced or even eliminated by the parties. Otherwise such commitments would have to be considered as mere declarations of intentions by the parties and would not amount to any binding obligations as, due to the lack of effective monitoring mechanisms, any breach of them could not result in the revocation of the decision in accordance with the provisions of the Merger Regulation.⁵⁷¹
- (857) Where the parties submit remedies proposals that are so extensive and complex that it is not possible for the Commission to determine with the requisite degree of certainty, at the time of its decision, that they will be fully implemented and that they are likely to maintain effective competition in the market, an authorisation decision cannot be granted. The Commission may reject such remedies in particular on the grounds that the implementation of the remedies cannot be effectively monitored and that the lack of effective monitoring diminishes, or even eliminates, the effect of the commitments proposed.⁵⁷²
- (858) It is against this background that the Commission reviews the proposed commitments in this case.

⁵⁶⁷ Remedies Notice, paragraph 9.

⁵⁶⁸ Merger Regulation, recital 30.

⁵⁶⁹ Remedies Notice, paragraph 9.

⁵⁷⁰ Remedies Notice, paragraph 12.

⁵⁷¹ Remedies Notice, paragraph 13.

⁵⁷² Remedies Notice, paragraph 14.

10.3. Review of the Initial Phase I Commitments

10.3.1. Description of the Initial Phase I Commitments

- (859) Under the Initial Phase I Commitments, Google committed, for 5 years following the Commission’s approval of the Transaction, not to use any Measured Body Data or Health and Fitness Activity Location Data for Google Ads, and to hold such Measured Body Data and Health and Fitness Activity Location Data separate, in an auditable manner, from any dataset within Google accessible for use by Google Ads.⁵⁷³
- (860) The Initial Phase I Commitments covered the following categories of data:
- (a) Measured Body Data: any data concerning identified or identifiable EEA Users⁵⁷⁴ sent to Google or Fitbit from a First-Party Wrist-Worn Wearable Device’s sensors (as well as processed sensor data and data derived from such sensor data or processed sensor data) that measures and tracks the user’s body functions, physical condition, fitness activities, nutrition or wellness, and similar functions;
 - (b) Health and Fitness Activity Location Data: any data (including derived data) concerning identified or identifiable EEA Users’ geolocation collected by a health and fitness activity tracking feature on Google or Fitbit Health and Fitness Apps (or any replacement or successor Google or Fitbit Health and Fitness Apps), where such geolocation data is collected and sent to Google or Fitbit from the First-Party Wrist-Worn Wearable Device.⁵⁷⁵
- (861) Annex 1 to the Initial Phase I Commitments lists the data types or categories that Google considers reflect the definitions in recital (860). Google committed to undertake periodically appropriate review of the categories in Annex 1 to modify the list and include other data types that reflect those in recital (860), under the supervision of the Monitoring Trustee referred to in recital (866).
- (862) From a technical point of view, the data separation will be achieved via:
- (a) a strictly permissioned virtual data storage environment within Google (which will hold Measured Body Data and Health and Fitness Activity Location Data for the whole duration of the Initial Phase I Commitments);

⁵⁷³ Throughout Section 10, capitalised terms are used to refer to terms that are defined in the Commitments.

⁵⁷⁴ EEA User is defined as “a user that has during the period of the [Data Silo Commitments] been (i) located in the EEA as determined by Google Account information or Fitbit Account information, as applicable, or (ii) located outside of the EEA according to Google Account information or Fitbit Account information, as applicable, but whose IP address associated with use of Google or Fitbit Health and Fitness Apps, as applicable, has been located in the EEA for more than 30 consecutive days”.

⁵⁷⁵ Health and Fitness Activity Location Data excludes “any data (including derived data) concerning identified or identifiable EEA Users’ geolocation collected by any apps or services other than Google or Fitbit Health and Fitness Apps (or any replacement or successor Google or Fitbit Health and Fitness Apps), including background geolocation data”.

- (b) strictly permissioned temporary logs (which would hold the Measured Body Data and Health and Fitness Activity Location Data for the purposes of specific and permitted processing activities).⁵⁷⁶
- (863) The technical means by which Google would achieve the data separation may change over time to reflect evolving technologies and standards. Any changes would be subject to supervision by the Monitoring Trustee
- (864) The Initial Phase I Commitments covered the following products and services:
 - (a) First-Party Wrist-Worn Wearable Device: any wrist-worn wearable device developed by Fitbit or Google, regardless of its branding, and available for purchase, that processes Measured Body Data and/or Health and Fitness Activity Location Data;
 - (b) Google Ads: any product or service (including algorithms) operated by Google at any time during the term of the Initial Phase I Commitments providing search advertising, display advertising, and advertising intermediation.
- (865) In order to allow access to the Measured Body Data and Health and Fitness Activity Location Data for any Google product or service other than Google Ads, Google would establish a Data Protection System, namely an auditable set of requirements supervised by the Monitoring Trustee to ensure that access to Measured Body Data and Health and Fitness Activity Location Data is permissioned in a manner that prevents its use for Google Ads. The Data Protection System would entail an Access Permissioning system, namely an auditable control of access rights for both individual level access and service level access (including algorithms).
- (866) Moreover, Google committed to appoint a Monitoring Trustee before the closing of the Transaction.

10.3.2. *The market test results of the Initial Phase I Commitments*

- (867) The Commission initiated a market test of the Initial Phase I Commitments on 14 July 2020 and received responses from customers and competitors active in the markets concerned.
- (868) The majority of the respondents expressed the view that the provisions of the Initial Phase I Commitments are sufficiently clear and capable of being implemented⁵⁷⁷ and that they are capable of being implemented effectively within a short period of time.⁵⁷⁸ In particular, the majority of respondents explained that the technical means to achieve the data separation envisaged in the Initial Phase I Commitments are appropriate and effective.⁵⁷⁹ Notably, the respondents submitted that an “*access controlled environment is a common and acceptable technical means to restricting*

⁵⁷⁶ This applies to the extent Measured Body Data and Health and Fitness Activity Location Data is sent to Google (i) as part of any migration from a Fitbit Account to a Google Account, or (ii) collected from future First-Party Wrist-Worn Wearable Devices using a Google Account. Google submits that, to the extent either Measured Body Data or Health and Fitness Activity Location Data is written to a Fitbit Account, and this data is not subsequently transferred to a Google Account, Fitbit is the sole legal data controller and this data will not be available to Google Ads.

⁵⁷⁷ Replies to questionnaire QC – market test of commitments, question H.1.

⁵⁷⁸ Replies to questionnaire QC – market test of commitments, question H.3.

⁵⁷⁹ Replies to questionnaire QC – market test of commitments, question D.2.

access to data".⁵⁸⁰ Likewise, the majority of the respondents considered that the principles of the Data Protection System set out in the Initial Phase I Commitments are appropriate and effective.⁵⁸¹ In this regards, a respondent explained that "*with substantial experience with the use of physical, technological, and administrative safeguards to control access, use and distribution of data*", the restricted "*data can be isolated from restricted uses at the time of closing of the transaction, and controls, audit logging, employee training and documentation of practices can be promptly established*".⁵⁸²

- (869) However, respondents identified a number of shortcomings of the Initial Phase I Commitments, affecting their ability to remove the serious doubts identified by the Commission. In this context, the majority of respondents considered that the Initial Phase I Commitments were not suitable to remove entirely the competition concerns identified by Commission in relation to the advertising sector.⁵⁸³
- (870) The shortcomings identified by the respondents are summarised in recitals (871) to (884).
- (871) First, as regards the scope of the data protected by the Initial Phase I Commitments, the overwhelming majority of respondents considered that the Initial Phase I Commitments do not cover all data types in respect to which the Transaction will grant Google greater ability to personalise the ads it serves and displays.⁵⁸⁴ In that respect, the majority of respondents expressed the view that the definitions included in the Initial Phase I Commitments are not appropriate.⁵⁸⁵
- (872) More precisely, as regards the source of the data:
- (a) First, respondents explained that the data protected by the commitments should cover any health and fitness data collected by Fitbit, not only via the sensors but also those manually inputted by the users in the Companion App to track over time, for example food, weight, sleep, water, or female health.
 - (b) Second, respondents submitted that the data protected by the commitments should cover not only that directly collected by the sensors, but also by the OS or apps on the wearable device, such as Google apps that might be pre-installed on a Fitbit wearable device and could collect and transmit geolocation data (for example Google Maps).
 - (c) Third, respondents indicated that the limitation to the data collected from First-Party Wrist-Worn Wearable Devices "available for purchase" is inappropriate, as it should cover also (i) wrist-worn wearable devices offered for free by insurers and employers and also discontinued wrist-worn wearable devices, which are not anymore available for purchase, and (ii) any other device from

⁵⁸⁰ Replies to questionnaire QC – market test of commitments, question D.2.

⁵⁸¹ Replies to questionnaire QC – market test of commitments, question E.1.

⁵⁸² Replies to questionnaire QC – market test of commitments, question H.3.

⁵⁸³ Replies to questionnaire QC – market test of commitments, question H.2. In the market test, several respondents reiterated the concerns they put forward in the market investigation, in particular in relation to interoperability with Android OS and the effects of the Transaction in the digital healthcare sector.

⁵⁸⁴ Replies to questionnaire QC – market test of commitments, question D.1.

⁵⁸⁵ Replies to questionnaire QC – market test of commitments, question C.1.

which Fitbit collects data, including smart scales and fitness trackers that are not wrist-worn, such as Fitbit one or Fitbit zip (clip-on activity and/or sleep trackers).

- (873) As regards the categories of data, respondents considered that Health and Fitness Activity Location Data should cover all geolocation data to which Google obtains access as a result of the Transaction given that Fitbit is likely able to collect geolocation data through its devices other than through “a health and fitness activity tracking feature on Google or Fitbit Health and Fitness Apps (or any replacement or successor Google or Fitbit Health and Fitness Apps)”.⁵⁸⁶ In particular:
- (a) Respondents considered that Measured Body Data should cover any personal data characterizing persons, including age, gender, weight, height, body composition, fitness level, VO2max, maximum heart rate, rest heart rate, daily activity, blood pressure, health status, preferred sports activities, sleep target, menstruation tracking.
 - (b) One respondent indicated that also payment data, employment data or data pertaining to the use of live coaching services offered by Fitbit should be covered by the Initial Phase I Commitments, as they can also enrich Google’s database for advertising purposes.
- (874) Moreover, respondents indicated that the data protected by the commitments should also cover any inference, modification or derivate of the data, such as anonymisation, pseudo-anonymisation, de-anonymisation or aggregation, and not only “identified or identifiable” data.⁵⁸⁷
- (875) Several respondents suggested that the approach taken with Annex I to the Initial Phase I Commitments should be reversed. Rather than listing the data categories, which are covered by the commitments, Annex 1 should list those data categories which are exempted from the commitments, whilst any other data collected by Fitbit should be precluded for use by Google Ads. Alternatively, Annex 1 should be updated to prevent *ex ante* any device from collecting data on any new body measurements (for example, temperature, electrocardiographic, as well as blood pressure).
- (876) Second, the majority of respondents considered that the definition of Google Ads does not encompass all the activities in the online advertising value chain where Google currently is, or would in the future be, active.⁵⁸⁸ In particular:
- (a) Respondents considered that the definition should clearly cover all of Google’s services directly or indirectly pertaining to the supply of online advertising services (including the display of ads on its own web properties, such as YouTube, as well as on the properties of its partners and other third parties, including mobile apps) and its entire ad tech ecosystem (including advertisers ad servers, publisher ad servers, demand-side platforms, supply-side platforms, any type of analytics services and analytics tools over the entire advertising

⁵⁸⁶ Replies to questionnaire QC – market test of commitments, question C.1.

⁵⁸⁷ Replies to questionnaire QC – market test of commitments, questions C.1 and D.1.

⁵⁸⁸ Replies to questionnaire QC – market test of commitments, question C.2. See also Replies to questionnaire QC – market test of commitments, question C.1.

value chain. This would include, in particular, covering Google Search and other products, such as Google Chrome or Google Maps, because of their close link and integration with Google’s advertising activities and the related interlinked user tracking processes. Furthermore, respondents consider that Google should also be explicitly prevented from using the Fitbit data to measure the effectiveness of its advertising services.⁵⁸⁹

- (b) Respondents also stressed the importance of having a future-proof definition of Google Ads, which accounts for changes in the prevailing status and the dynamic nature of online advertising, but also covers services that Google may develop in the future, including via acquisition, new business initiative, or organisational change, under any brand and name.
- (877) In this context, some respondents indicated that the design of the remedy should be reversed: the protected data should not be used for any purpose other than those indicated in a list of pre-defined permitted use cases.
- (878) Third, respondents expressed mixed views as to the suitability of the Access Permissioning for service level access to ensure that any current and future Google service, including algorithms, in the online advertising sector is effectively excluded from access to Measured Body Data and Health and Fitness Activity Location Data.⁵⁹⁰ In particular, some respondents pointed to the following issues to be considered when assessing the effectiveness of the remedies in connection to permitted service level access:
- (a) Algorithm: respondents stated that it is unclear in the Initial Phase I Commitments how Google plans to avoid contamination between algorithms that are allowed to access the relevant data and algorithms used for advertising purposes that should not access such data.
 - (b) Memory caching: respondents explained that “the Access Permissioning is only designed for the Access Restricted Data Store which is stored in Google’s backend storage layer. But the data could be cached in computer memory which is not persisted or stored, but is still accessible via API or various methods. Accordingly Google Ads could still access the Measured Body Data and Health and Fitness Activity Location Data via such caching memory”. In this context, it was indicated that a “thorough effective data separation shall cover the end-to-end dataflow, which would greatly help identify whether there is any undetected or non-auditable access to the data that are intended to be separated”.⁵⁹¹
- (879) A few respondents also raised questions with respect to the principles related to individual level access under the Initial Phase I Commitments. According to these respondents, the independence of staff with access to the data contained in the restricted data store should be ensured. The respondents questioned why any personnel connected with Google’s advertising activities should have access to the protected data for any reason.

⁵⁸⁹ Replies to questionnaire QC – market test of commitments, question H.2.

⁵⁹⁰ Replies to questionnaire QC – market test of commitments, question E.2.

⁵⁹¹ Replies to questionnaire QC – market test of commitments, question D.2.

- (880) Further, the respondents stressed that it should be clarified that the access of such staff should not lead to broad use of the accessed data by Google. This is because the definition of the permitted activities (“engineering, product, and other related business activities, such as product development or improvement, research, and other service provision, maintenance, or enhancement work”) is quite broad. In this respect, any commitments should clarify the limitations on the possibility of the individual (or services) having access to the protected data to copy, export, reproduce, or re-use the data.
- (881) Fourth, the overwhelming majority of the respondents stated that the 5 year duration of the Initial Phase I Commitments is not sufficient to address the competition concerns identified by Commission in relation to the advertising sector.⁵⁹² This view was linked to two factors: (i) the expectation that the wearable market will significantly grow, which in turn would mean that the related data may grow in importance and (ii) the expectation that Google will continue to hold a dominant position (or a significant degree of market power) in the affected markets in the online advertising sector. In this context, several respondents considered that the duration of the commitments should be indefinite, or at least as long as Google’s market position would not weaken, thus subject to a review clause to be invoked by Google in the event of sustained loss of its advertising dominance. A number of respondents suggested a duration of at least 10 years.
- (882) Respondents acknowledged the need to offer some degree of flexibility to allow for technological evolution, especially in connection to a longer duration of the commitments. However, a number of respondents expressed the view that, considering Google’s past behaviour, such flexibility should be limited to what is absolutely necessary. In this respect, respondents consider that any change to the systems put in place to implement the commitments should require prior approval of the Monitoring Trustee.
- (883) In relation to the provisions regarding monitoring set out in the Initial Phase I Commitments, the majority of the respondents expressed the view that such provisions are sufficient to ensure that the Initial Phase I Commitments are complied with.⁵⁹³ To further ensure effectiveness of those commitments:
- (a) One respondent explained that the commitments should require a forensic inventory of potentially every data flow in all Google services and whether, and if so how, those data may contribute to ads. The same respondent stated that the Monitoring Trustee should also be able to report any reasonable suspicion that Google has failed to comply with the commitments to the EDPB, in addition to the Commission. In the respondent’s view this would be in line with Articles 68 and 70 GDPR.
 - (b) Another respondent indicated that the audit logs should apply all systems and applications where the restricted data resides (for example, if the restricted data can be extracted from computers subject to these audit logs and placed into another computer, then that other computer should be subject to the same audit log requirements);

⁵⁹² Replies to questionnaire QC – market test of commitments, question G.1.

⁵⁹³ Replies to questionnaire QC – market test of commitments, question F.1.

- (c) Another respondent explained that it would be important for the Monitoring Trustee to access the details of how Google’s algorithms operate, as it is doubtful that such access is included in the “technical information reasonably necessary for fulfilling its duties”;
 - (d) Another respondent asked for the inclusion of an expedited dispute resolution system;
 - (e) Another respondent indicated that it would be important to define a rigorous set of metrics against which the audit process / system can be measured.
- (884) The overwhelming majority of the respondents also considered that the monitoring of the Initial Phase I Commitments will require specific expertise on data protection and privacy issues.⁵⁹⁴ Respondents highlighted that the Monitoring Trustee should also have a deep understanding of information technology systems, algorithms and the technical implementation of cyber security and expertise on data governance and data management.

10.3.3. *Assessment of the Initial Phase I Commitments*

- (885) The Commission assessed the appropriateness of the Initial Phase I Commitments in light of the principles underlying its commitments policy and the results of the Phase I market test.
- (886) The Commission concluded that the Initial Phase I Commitments fell short of providing a clear-cut solution to the identified competition concerns.
- (887) The Commission considered that even if, conceptually, a commitment envisaging the creation of a silo for storage of data subject to strict access rules might be suitable to solve the serious doubts identified by the Commission, the Initial Phase I Commitments showed some weaknesses that made them not sufficiently clear-cut to remove the identified competition concerns.⁵⁹⁵
- (888) In particular, the weaknesses of the Initial Phase I Commitments identified by the Commission were the following.
- (889) First, it was unclear whether the scope of the data protected by the Initial Phase I Commitments was sufficient to ensure the effectiveness of the intended separation. In particular, it appeared that several data types collected by Fitbit would not be protected. Therefore, it was unclear whether the Initial Phase I Commitments covered all data types in respect to which the Transaction would grant Google greater ability to personalise the ads it serves. This was in particular the case for the following reasons:
- (a) In relation to the source of the data, the Initial Phase I Commitments did not cover:
 - (1) data manually inserted by the users in the Companion App, for example food, weight, sleep, water, or female health;

⁵⁹⁴ Replies to questionnaire QC – market test of commitments, question F.2.

⁵⁹⁵ Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (“Remedies Notice”), OJ C 267 of 22.10.2008, p. 1-27, paragraph 81.

- (2) data collected from other devices of Fitbit, such as smart scales and fitness trackers that are not wrist-worn, like “Fitbit one” or “Fitbit zip”, which were previously marketed by Fitbit and may still be used by consumers and generate data valuable for advertising purposes.
 - (b) In relation to the categories of data, the Initial Phase I Commitments did not cover:
 - (1) all geolocation data to which Google obtains access as a result of the acquisition (not only the location collected via GPS). In this respect, whilst Google has submitted that, in the implementation of the Data Silo Commitments, all geolocation data sent to Google or Fitbit by a Fitbit or Google Health and Fitness apps (or any replacement) will be subject to data separation,⁵⁹⁶ nonetheless a question remains in relation to other Google apps that may be running (and post-Transaction be pre-installed) on the wearable devices, such as Google Maps, and could collect geolocation data from the wearable, thus circumventing the protection afforded by the Initial Phase I Commitments.
 - (2) data on the payments made via the devices and data pertaining to the use of live coaching services offered by Fitbit, which, based on the submissions of respondents to the market test, can also enrich Google’s database for advertising purposes.
 - (c) The Initial Phase I Commitments were not sufficiently clear as to whether they covered any inference, modification or derivate of the protected data, such as anonymisation, pseudo-anonymisation, de-anonymisation or aggregation of the protected data.
- (890) Second, as regards the scope of the forbidden data uses under the Initial Phase I Commitments, given the interconnected nature of Google services, which are mainly commercially exploited by advertising (the latter being over 80% of Google’s revenues⁵⁹⁷), it appeared that the definition of “Google Ads” was too narrow because it excluded other services which are nonetheless monetised via advertising, and left ample scope for circumvention. Indeed, it was unclear whether the definition of Google Ads covers all of Google’s services directly or indirectly relating to the supply of online advertising services and its entire ad tech ecosystem. In particular, it was unclear to what extent the Initial Phase I Commitments covered Google’s ad tech services, search activities and other products, such as Google Chrome or Google Maps, which also deliver ads.
- (891) Third, the details of the Data Protection System were insufficient for the Commission to be able to assess the effectiveness of the Initial Phase I Commitments. In particular, based on the view expressed by respondents to the market test, there appeared to be at least three fundamental issues in connection to the Access Permissioning system, which were not sufficiently regulated by the Initial Phase I Commitments and could possibly give rise to inadvertent breaches:

⁵⁹⁶ Reply to RFI 26, question 6.

⁵⁹⁷ See documents submitted in reply to RFI 13, point 8.

- (a) The potential contamination of algorithms directly or indirectly used for advertising purposes (for example algorithms used to assess the profitability of a web page where ads would be displayed) with the insights gained by algorithms that are allowed to access the protected data and trained using such protected data (for example algorithms used to determine the most relevant search results for a user).
 - (b) The potential inadvertent access of the protected data, which could be cached in memory of terminals used to access the protected data, in breach of the Access Permissioning system. This appears to be possible in particular if edge machine learning or edge computing is not used for accessing the protected data.
 - (c) As regards the individual-level access, the description of the permitted access use cases appeared to be too broad, in particular having regard of (i) the lack of any clarification in the Initial Phase I Commitments as to the independence requirements for staff with access to the protected data and (ii) the fact that it was not specified that the protected data cannot be copied, exported, reproduced, or re-used by the staff for purposes other than the admitted use cases.
- (892) Fourth, the duration of 5 years for the Initial Phase I Commitments appeared to be too short to capture all possible significant developments in the commercial exploitation of the concerned data the effects of which could only manifest themselves in the years to come, in particular having regard to (i) the high barriers to entry and expansion which characterise the online advertising markets, on the basis of which it is unlikely that Google’s market position could be challenged before the expiry of the 5-year duration and (ii) the expected growth of the wearable devices markets which may further increase the value of the data collected from wearables for advertising purposes.
- (893) Finally, regarding monitoring, the Commission considered that, given the highly technical nature of the Initial Phase I Commitments, it was unclear whether the generic reference to the fact that the Monitoring Trustee shall appoint “a technical expert” was sufficient to ensure an appropriate and effective monitoring of the Initial Phase I Commitments. In this respect, the Commission noted that respondents to the market test pointed to the need for the Monitoring Trustee to have specific expertise on cybersecurity, data governance, information technology systems (including algorithms), along with data protection and privacy issues.
- (894) Furthermore, the technical details to ensure that the data separation and the Access Permissioning system under the Initial Phase I Commitments did not appear to be sufficiently detailed to ensure an audit against precise criteria by the Monitoring Trustee.
- (895) In light of recitals (885) to (894), the Commission concluded that the Initial Phase I Commitments were not sufficient to eliminate the Commission's serious doubts as to the compatibility of the Transaction with the internal market and with the functioning of the EEA Agreement as well as to their ability to exclude all other possible competition concerns likely resulting from the Transaction.

10.4. The Initial Phase II Commitments

10.4.1. Description of the Initial Phase II Commitments

- (896) The Initial Phase II Commitments consist in a package of three commitments, namely:
- (a) A commitment not to use any measured body data or health and fitness activity location data for advertising purposes and to maintain data separation (the “Ads Commitment”);
 - (b) A commitment to maintain access for third parties, subject to user consent and without charge for access, to a series of measured body data (the “Web API Access Commitment”); and
 - (c) A commitment to continue to license free, public APIs allowing interoperability between third-party wearable devices and the Android operating system on smartphones, offering at least the functionalities of the APIs that exist as of the date of the adoption of the Commission’s authorisation decision (“Effective Date”) (the “Android APIs Commitment”).

10.4.1.1. The Ads Commitment

- (897) The Ads Commitment is a revised version of the Initial Phase I Commitments. In particular, the Notifying Party submitted a series of amendments aimed at addressing some of the concerns that emerged in the Phase I market test:
- (a) With regard to the devices covered by the commitments, Fitbit’s clips and scales and in general any device developed or currently in development by Fitbit that processes measured body data and/or health and fitness activity location data (whether or not wrist-worn devices) are included in the Ads Commitment. It is further clarified that all consumers devices are included, irrespective of their availability for purchase (namely also both legacy devices and devices employers or insurers may provide to end-users for free, with the sole exception of clinical devices);
 - (b) The definition of Measured Body Data has been expanded to include also processed and derived data as well as measured body data manually inputted into Google or Fitbit Health and Fitness Apps and to explicitly include any Measured Body Data generated through the use of Fitbit Coach service;
 - (c) The definition of Google Ads has been amended to expressly include advertising measurement and to clarify that the Ads Commitment applies to Google Ads wherever they are shown, including on all of Google’s owned and operated properties such as Search, YouTube, Maps, and so on. Furthermore, a list of Google’s ad products has been included.
 - (d) With respect to data written on Fitbit account and not transferred to a Google account, Google has committed to maintain the existing separation and not to make them available to Google Ads;
 - (e) The Access Permissioning system is reinforced via the addition of an obligation to compile both Individual and Service Level Access Documentation, namely a record of Google’s approval process for applying Access Permissioning to Google individuals and services, which will include at least the criteria set out in the annexes to the Ads Commitment (notably identity of the individual/service receiving access, reason for access, date,

etc.). Google also commits to maintain a Service Level Access Map, a document recording all of the Google Services with service level access and the storage locations in Google (for example, a Temporary Log) in which those services store the relevant data they may have accessed.

- (f) A specific annex details the minimum data and information points that the Monitoring Trustee will audit on a regular basis to monitor the performance of the Ads Commitment;
- (g) The duration is extended to 10 years.

10.4.1.2. The Web API Access Commitment

- (898) By the Web API Access Commitment, Google commits, for 5 years following approval of the Transaction, to maintaining access for API Users, subject to user consent and without charge for access, to Supported Measured Body Data, subject to:
- (a) API Users' continued compliance with the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via a Relevant Google API). Google can terminate access for violation of these terms.
 - (b) API Users' continued compliance with the Privacy and Security Requirements. Google can terminate access for violation of these requirements or temporarily suspend access where Google has a reasonable belief of violations of such requirements.
- (899) The access to the Supported Measured Body Data may be provided through: (i) the existing Fitbit Web API (conditioned on the user whose Supported Measured Body Data are being accessed using a Fitbit Account); or (ii) a Relevant Google API (conditioned on the user whose Supported Measured Body Data are being accessed using a Google Account).
- (900) Under the Web API Access Commitment, the most relevant definitions are the following:
- (a) **API User** is any third-party that requests access to the Fitbit Web API or the Relevant Google API, meets the Privacy and Security Requirements, and agrees to the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via a Relevant Google API).
 - (b) **Supported Measured Body Data** are the types of Measured Body Data that Fitbit makes available to third-parties through APIs under the Fitbit Platform or is planning to make available at the Effective Date⁵⁹⁸ to the extent Google

⁵⁹⁸ The reference to the Effective Date in the definition of Supported Measured Body Data serves to make clear what data constitutes Supported Measured Body Data as of the Effective Date. The Web API Commitment is designed such that the scope of what constitutes "Supported Measured Body Data" will increase over time. The reference "as of the Effective Date" is meant to define what is in scope as of the Effective Date versus following the Effective Date, when more data come in scope. The reference therefore makes clear what specific subset of Measured Body Data existing at that date constitutes Supported Measured Body Data. Notifying Party's reply to RFI 46, question 1.

continues to generate such types of data from First-Party Wrist-Worn Wearable Devices⁵⁹⁹ or Google or Fitbit Health and Fitness Apps.

10.4.1.3. The Android APIs Commitment

- (901) By the Android APIs Commitment, Google commits, for 10 years following the approval of the Transaction, to: (i) continue to license free, public Wearable APIs (see recital (902)) to Android OEMs offering core functionalities that Wrist-Worn Wearable Devices may use to interoperate with an Android Smartphone; (ii) make those APIs available without differentiating their availability or functionality depending on whether they are accessed by a First-Party Wrist-Worn Wearable Device or Companion App or a Third-Party Wrist-Worn Wearable Device or Companion App; (iii) not to degrade those APIs so as to reduce their functionality to Third-Party Wrist-Worn Wearable Devices relative to First-Party Wrist-Worn Wearable Devices; and (iv) continue to make publicly available, for free, Developer Documentation relating to those APIs. These different elements of the Android APIs Commitment are described in more detail below.
- (902) “Wearable APIs” refer to the free, public APIs offering at least the following functionalities that exist in AOSP as of the Effective Date:
- (a) Connect to the Android Smartphone via Bluetooth (or any equivalent successor technology) and transfer data between the Wrist-Worn Wearable Device and the Android Smartphone;
 - (b) Scan for any nearby Wrist-Worn Wearable Devices, or make the Android Smartphone visible to those devices;
 - (c) Display notifications, including phone calls, SMS messages, and calendar events, from the Android Smartphone on the connected Wrist-Worn Wearable Device;
 - (d) Read and reply to SMS text messages sent to the paired Android Smartphone;
 - (e) Display controls for answering or declining phone calls on the paired Android Smartphone;
 - (f) Display calendar events on the paired Android smartphone;
 - (g) Access and control the camera on the paired Android Smartphone;
 - (h) Access a geolocation sensor (for example, GPS) on the paired Android Smartphone that is capable of providing geolocation coordinates;
 - (i) Control media playback on the paired Android smartphone; and
 - (j) View and sync contacts stored on the paired Android smartphone.
- (903) The Wearable APIs definition is intended to cover the core functionalities that Wrist-Worn Wearable Devices (or, as appropriate, associated Companion App) may use to interoperate with an Android Smartphone. The definition is not linked to specific existing APIs but rather to their functionality. The Android API Commitment also aims to ensure that the functionality offered by these Wearable

⁵⁹⁹ This definition, and therefore the commitment, cover data generated by all wrist-worn wearable devices that are “provided to customers for everyday use”, including those provided by employers and insurance companies (see the parties’ replies to RFI 44 and RFI 45).

APIs (including as they are updated and improved) is the same for Third-Party Wrist-Worn Wearable Devices as First-Party Wrist-Worn Wearable Devices.

- (904) Google commits to making the Wearable APIs available under the same license terms and conditions that apply to all other public APIs that Google makes available as part of AOSP and without differentiating their availability or functionality depending on whether they are accessed by a First-Party Wrist-Worn Wearable Device or Companion App or a Third-Party Wrist-Worn Wearable Device or Companion App.
- (905) Google commits not to degrade the Wearable APIs so as to reduce their functionality to Third-Party Wrist-Worn Wearable Devices relative to First-Party Wrist-Worn Wearable Devices. However, Google will be permitted to change or replace any Wearable API provided that any such change or replacement does not impede the level of interoperability that a Third-Party Wrist-Worn Wearable Device can achieve with an Android Smartphone relative to a First-Party Wrist-Worn Wearable Device. This is intended to account for the possibility that the precise APIs may change over time, provided that they continue to offer the same level of interoperability as prior versions.
- (906) Google commits to continuing to make publicly available, for free, Developer Documentation for each of the Wearable APIs and to updating that Developer Documentation in an equivalent fashion as it does for other public APIs that Google makes available as part of AOSP.
- (907) Google shall be permitted under the commitments referred to in recitals (904) to (906) to:
 - (a) Make available, exclusively for development and testing purposes, new versions of AOSP (which may include new versions of the Wearable APIs) internally within Google, or to certain third parties, prior to the public, open-source release of the new AOSP version.
 - (b) Develop features associated with first-party Google products, apps, or services, including for use solely on a First-Party Wrist-Worn Wearable Device, provided that the implementation of such first-party features shall not impede in any way the functioning of the Wearable APIs for Third-Party Wrist-Worn Wearable Devices. For the avoidance of doubt, any third party shall likewise remain free to develop and make available features associated with their own first-party products, apps, or services, including for use solely on their own First-Party Wrist-Worn Wearable Devices in a proprietary software layer.

10.4.1.4. Monitoring Trustee and Dispute Resolution

- (908) With regard to the Monitoring Trustee and in general to the provisions on the monitoring of the Initial Phase II Commitments –applicable to the entire package comprising the three commitments– some changes are introduced with respect to the provisions already included in the Initial Phase I Commitments, also in response to the market feedback in the Phase I market test:
 - (a) It is expressly stated that the Monitoring Trustee shall possess experience, competence, and qualifications in relation to cybersecurity, data governance, information technology systems (including algorithms), data protection, APIs, and/or privacy;

- (b) The Monitoring Trustee will periodically perform an auditing on the minimum data and information points reported in an annex to the Ads Commitments;
- (c) A Fast Track Dispute Resolution is included, in case qualified third parties claim that Google (i) has either denied or revoked its access in violation of its obligations arising from the Web API Access Commitments or (ii) has failed to comply with its obligations arising from the Android API Commitments.

10.4.2. Results of the market test of the Initial Phase II Commitments

(909) The Commission initiated a market test of the Initial Phase II Commitments on 29 September 2020 and received responses from customers and competitors active in the markets concerned as well as from other stakeholders.

10.4.2.1. The Ads Commitment

(910) The Phase II market test overall triggered positive comments on the Ads Commitment, with some observations aimed at improving the definitions and the overall functioning of the Ads Commitment.

(911) The majority of the respondents to the market test submitted that the definitions included in the Initial Phase II Commitments – and in particular the definitions related to data separation as amended compared to the Initial Phase I Commitment – appear appropriate.⁶⁰⁰ However, some respondents submitted that further revisions would be necessary:

- (a) The definition of Measured Body Data and Health and Fitness Activity Location Data and the list in the relevant annex should include all present and future health and fitness activity data captured by all types of devices and means covered by the Commitments, not an indicative list;
- (b) The definition of wearable devices should encompass all wearable devices that can collect and process health data, as already today there are wearable devices, which are not “wrist-worn”, that process health data, such as connected rings;
- (c) The scope of the remedy would be limited to the users located in the EEA. Therefore, unless similar remedies would be imposed in other jurisdictions, Google could still access data from non-EEA customers.⁶⁰¹

(912) The majority of respondents also submitted that the Ads Commitment cover all data types in respect to which the Transaction will significantly increase Google’s ability to personalise the ads it serves and displays, as compared to the data already available to Google.⁶⁰² However, some respondents submitted that:

- (a) The Ads commitment should cover any and all types of data (that is to say, not only health and fitness data). Any type of data collected via Fitbit (such as account, payment and login information), both currently and in future, may give Google an increased ability to personalise the ads it serves and displays, thus making it more difficult for rivals to match Google’s services than absent

⁶⁰⁰ Replies to questionnaire QH – Phase II market test, questions 3 and 4.

⁶⁰¹ Replies to questionnaire QH – Phase II market test, questions 3.1 and 4.1.

⁶⁰² Replies to questionnaire QH – Phase II market test, question 5.

the Transaction. This data would then need to be included in the Access Restricted Data Store;

- (b) Any location data collected by the Google or Fitbit Health and Fitness Apps should be included in the category of protected information, whether this information is gathered through the wearable or not;
 - (c) Although it was agreed that identified/identifiable data present the highest value, even de-identified and aggregated data could be valuable and could be used by Google to strengthen its position in advertising. Having privileged access to Fitbit data, even at an aggregated level, would give Google an advantage over its competitors;
 - (d) The issue of potential contamination of algorithms directly or indirectly used for advertising purposes with the insights gained by algorithms that are allowed to access the protected data and trained using such protected data was again raised.⁶⁰³
- (913) The majority of the respondents also submitted that the principles of the Data Protection System set out in the Ads Commitment are appropriate and effective.⁶⁰⁴ It was however observed that the case where Fitbit makes use of Google as a data processor following the closing of the Transaction does not seem to be covered by the Data Protection System. Moreover, the Commitments appear to allow Google employees to access the data covered by the Commitments for many reasons and the Commission should close down any potential loopholes. The Commitments would not include security measures to protect the dataset from inadvertent or unwanted access, or mechanisms to report potential data breaches. It was further submitted that the list of minimum audit points should be enlarged in scope from addressing only organisational measures to also include technical measures. Another respondent submitted that the Ads Commitment does not clarify how Google would ensure the independence of staff with access to the data contained in the data store.⁶⁰⁵
- (914) With respect to the duration of the Ads Commitment, the majority of the respondents submitted that the 10-year duration could be sufficient to address the competition concerns identified by the Commission.⁶⁰⁶ However, a series of respondents asked for a longer duration, or even for an indefinite one. It was observed, in particular that the commitment should last as long as the market conditions are the same as today. It has been argued also that the Monitoring Trustee should have a role in the termination of the Ads Commitment, to verify the effective modification of the underlying market conditions.⁶⁰⁷
- (915) Overall, the slight majority of the respondents to the market test submitted that the Ads Commitment is suitable to remove entirely the competition concerns identified

⁶⁰³ Replies to questionnaire QH – Phase II market test, questions 3.1, 4.1 and 5.1.

⁶⁰⁴ Replies to questionnaire QH – Phase II market test, question 6.

⁶⁰⁵ Replies to questionnaire QH – Phase II market test, question 6.1.

⁶⁰⁶ Replies to questionnaire QH – Phase II market test, question 13.1.

⁶⁰⁷ Replies to questionnaire QH – Phase II market test, question 13.1.1.

by the Commission.⁶⁰⁸ The negative replies were mainly connected with the shortcomings identified in recitals (910) to (914).

10.4.2.2. The Web API Access Commitment

- (916) The Phase II market test overall elicited positive comments on the Web API Access Commitments subject to the suggestions for improvements set out below.
- (917) None of the respondents to the market test expressed a negative view on a security check requested by Google, in order to avoid data leaks and misuse, but some pointed out that compliance with Privacy and Security requirements should not be implemented in a disproportionate manner (for example, resulting into an undue restriction of access, as a consequence of minor infractions of the Privacy and Security requirements).⁶⁰⁹
- (918) Some respondents expressed concerns in relation to possible arbitrary (or strategic) amendments made by Google to the terms and conditions that third parties need to fulfil in order to access the Web API. In particular, it was suggested that future changes to the terms need to be subject to review by the Monitoring Trustee *ex ante* and not *ex post*.⁶¹⁰
- (919) According to one respondent, for the Web API Commitment to be effective, Fitbit's Terms of Service should be consistent with the spirit of the commitment at all times, and thus not only the updates (given that Google is not under any obligation to make such updates). Several respondents consider that Fitbit's current Terms of Service limit what an API user can do with the user data.⁶¹¹ In particular, they refer to the possible restriction of the access to data only for the purpose of developing applications dedicated to or complementing the Fitbit platform. The restriction in question would not allow access to user data in order to create services competing with Fitbit services. Furthermore, several respondents indicated that the current Terms & Conditions limit any innovation of third parties which is not related to the Fitbit ecosystem and does not improve the Fitbit platform.⁶¹²
- (920) Respondents argued that the scope of the data covered by the Web API commitment is insufficient and that the list of data metrics to which Fitbit gives access today should be updated over time. Several respondents considered that access should be given to all data that Fitbit collects, including metadata, as Google will have access to all data. According to one respondent "*an effective Web API Access remedy would be capable of addressing the foreclosure concerns in relation to the Fitbit data if it were based on a principle of symmetry of access for Google and third-*

⁶⁰⁸ Replies to questionnaire QH – Phase II market test, question 14.1.

⁶⁰⁹ Replies to questionnaire QH – Phase II market test, questions 5.1, 7.1, and 9.1.

⁶¹⁰ Replies to questionnaire QH – Phase II market test, questions 5.1, 7.1 and 8.1.

⁶¹¹ Clause 2a of Fitbit's current Terms & Conditions: "The Fitbit Developer Tools and the Fitbit Web API are provided to you in order to enable you to develop Applications designed to interact with and enhance, extend, and improve the Fitbit Platform, for research purposes, or for data backup purposes. You shall not use the Fitbit Developer Tools or Fitbit Web API in order to design or develop anything other than an Application for use with the Fitbit Platform and the Fitbit Products, and the Fitbit Developer Tools and Fitbit Web API shall not be used to create services that replace or provide similar functionality to the Fitbit Platform or Fitbit Products".

⁶¹² Replies to questionnaire QH – Phase II market test, question 7.1 and 8.1.

parties”.⁶¹³ The respondent also considers that the Web API Commitment should be recast so as to have the Web API Access data held in a silo structure similar to that proposed in the Ads Commitment. Unlike the Ads Commitment, the function of this silo would be to ensure that Google and relevant third-parties enjoy access to data on the same terms.⁶¹⁴

- (921) According to this respondent, the Commitment needs to be improved because the Transaction could lead to foreclosure on the nascent markets involving digital healthcare which will increasingly rely on wearables data.⁶¹⁵ While the respondent does not submit that Fitbit’s data is unique, it considers that the size of the Fitbit dataset (30 million users globally) provides significant opportunities for Google in the digital healthcare space, once Fitbit data is combined with Google’s existing troves of consumer data.⁶¹⁶ The respondent submits that Google already has the ability, via its dominant smartphone assets (for example, Android operating systems and Android app stores) to foreclose competition in digital health by foreclosing third-party wearable devices or by foreclosing these third-party wearables’ ability to share data for digital health uses with players active in the market for digital healthcare.⁶¹⁷ The Transaction confers upon Google a merger-specific incentive to foreclose access to data to its rivals in the downstream market. According to the respondent, there is also an additional risk that Google would demand data access from Third Party Wearable devices as a condition of interoperability.⁶¹⁸
- (922) The respondent submits that “it is clearly insufficient for the Web API Access remedy to merely preserve the static status quo of what data Fitbit shares today. This would fail to recognise that Google will want to use Fitbit data in other ways, including to improve its offerings in digital healthcare”.⁶¹⁹ The respondent considers that a Web API Commitment that merely preserves the level of third-party access to wearable data that Fitbit provides today is insufficient because it does not take account of (i) the nascent status of digital healthcare applications and (ii) how the proposed merger provides Google with greater access to Fitbit data and thus with an incentive to use its existing dominance in key smartphone products in ways that can have adverse effects on competition in nascent and important sectors such as digital health.⁶²⁰
- (923) The results of the Phase II market test also indicated that the commitment is limited to EEA users’ data whereas API users in the EEA can benefit from non-EEA users’ data.⁶²¹ According to one respondent: “*Digital health markets and innovation in these markets is global, thus restricting the access remedy to the EEA users only will harm innovators’ ability to use the Supported Measured Body Data [...] to develop*

⁶¹³ Replies to questionnaire QH – Phase II market test, question 7.1.

⁶¹⁴ Non-confidential submission of 28 September 2020 (anonymous).

⁶¹⁵ Non-confidential submission of 28 September 2020 (anonymous).

⁶¹⁶ Non-confidential submission of 15 October 2020 (anonymous).

⁶¹⁷ Non-confidential submission of 28 September 2020 (anonymous).

⁶¹⁸ Non-confidential submission of September 2020 (anonymous).

⁶¹⁹ Non-confidential submission of 28 September 2020 (anonymous).

⁶²⁰ Non-confidential submission of 28 September 2020 (anonymous).

⁶²¹ Replies to questionnaire QH – Phase II market test, question 3.1.

new products and services in competition with Google and thus harm EEA consumers”.⁶²²

- (924) The majority of the respondents to the market test submitted that the definitions included in the Initial Phase II Commitments, in particular in relation to the Web API Commitment, appear appropriate.⁶²³ However, some respondents submitted that some of the definitions (regarding for example EEA User, scope of covered data) unduly narrow the scope of the Web API Commitment and expressed the view that they should be revised in line with the comments set out in this section.⁶²⁴
- (925) The market test provided mixed views as to whether the duration of 5 years is sufficient. While some respondents expressed the view that the five year duration could be sufficient to address the competition concerns identified by the Commission, others considered that a longer duration aligned with the duration proposed for the Ads Commitment is justified. It has also been argued that a five year duration is too short in view of the longer investment cycles.⁶²⁵
- (926) Some respondents raised a concern that the commitment is only targeted at beneficiaries in the health and wellness sector, while other players are not protected by the commitments (for example Deezer).⁶²⁶
- (927) Overall, the results were mixed as to whether the Web API Commitment is suitable to remove entirely the competition concerns identified by the Commission.⁶²⁷ The negative replies were mainly connected with the shortcomings identified in the previous Recitals of this section.

10.4.2.3. The Android APIs Commitment

- (928) The Phase II market test overall elicited positive comments on the Android APIs Commitment, however, with many observations aimed at clarifying, improving and extending the scope of the commitment.
- (929) A majority of respondents confirmed that the list of core functionalities is appropriate, in other words, that it includes all the necessary functionalities to ensure that Third-Party Wrist-Worn Wearable Devices are able to interoperate with Android Smartphones in order to effectively compete in the market for wrist-worn

⁶²² Replies to questionnaire QH – Phase II market test, question 3.1.

⁶²³ Replies to questionnaire QH – Phase II market test, questions 3 and 4.

⁶²⁴ Replies to questionnaire QH – Phase II market test, question 3.1. In a separate submission, dated 30 November 2020, BEUC indicates that the definitions of “Wrist-Worn Wearable Device” and “Measured Body Data” would seem to limit third-party’s ability to access health data to Fitbit’s devices bought by consumers only, thus precluding third-party access to data generated by Fitbit devices used in medical trials, or provided by employers and insurance companies. In this respect, the Commission notes, and the parties have confirmed (see replies to RFI 44 and RFI 45), that the notion of devices “*provided to customers for everyday use*” covers also devices provided by employers and insurance companies. As to data generated by devices not intended for everyday use, the Commission observes that extending the Web API Access Commitment to devices used in clinical trials (i) would provide third parties with access to data that today are not accessible, (ii) would interfere with data usage by scientific researchers that are not part to this proceedings, nor have any form of market power that would justify such an extension, and (iii) would likely run counter to the users’ expectations that their personal data would not be shared out of the perimeter of the scientific study.

⁶²⁵ Replies to questionnaire QH – Phase II market test, question 13.2.

⁶²⁶ Replies to questionnaire QH – Phase II market test, question 7.1.

⁶²⁷ Replies to questionnaire QH – Phase II market test, question 14.2.

wearable devices.⁶²⁸ Only a few respondents made small suggestions as to how the list of core functionalities could be improved and extended to cover other functionalities needed to ensure interoperability. In addition, several respondents pointed out that that it should be clarified that improvements to the list of core functionalities are also covered.

(930) A majority of respondents confirmed that the principles of the Android APIs Commitment are capable of ensuring that Third-Party Wrist-Worn Wearable Devices are able to interoperate with Android Smartphones in order to effectively compete in the market for wrist-worn wearable devices.⁶²⁹ Nevertheless, several respondents pointed to shortcomings of the Android APIs Commitment in terms of its limited scope and lack of future-proofness:

- (a) Several respondents criticised that the Android APIs Commitment is limited to an exhaustive list of core functionalities that are important today, explaining that the list could soon become outdated due to technological innovation, especially in light of the 10-year duration of the Android APIs Commitment. However, respondents rather than indicating which functionalities could become relevant in the future, respondents asked for all APIs to be included in the Android APIs Commitment.
- (b) Several respondents criticised that the Android APIs Commitment is limited to APIs in open source AOSP and does not include proprietary GMS APIs. In particular, respondents feared that Google could circumvent the Android APIs Commitment by moving APIs from AOSP to GMS.
- (c) Several respondents criticised that new versions of AOSP could be made available upfront within the merged entity for development and testing purposes, which would put competing wearable OEMs at a competitive disadvantage.
- (d) Several respondents criticised the provision allowing the merged entity to develop features associated with first-party Google products, apps, or services, including for use solely on a First-Party Wrist-Worn Wearable Devices.
- (e) A few respondents emphasised that the Android APIs Commitment only includes a non-discrimination principle with regard to APIs but not with regard to the related permissioning system, which may lead to display of error or warning messages on users' smartphones in case a third-party wearable device connects.
- (f) One respondent criticized that the Android APIs Commitment does not include a general obligation not to discriminate in relation to interoperability to avoid the possibility for Google to circumvent the purpose of the Android APIs Commitment.

(931) Several respondents also pointed out that circumvention by Google would be possible via the Play Store, in particular by making access to the Play Store by

⁶²⁸ Replies to questionnaire QH – Phase II market test, question 10; non-confidential submission of 9 October 2020 (anonymous).

⁶²⁹ Replies to questionnaire QH – Phase II market test, question 11; non-confidential submission of 9 October 2020 (anonymous).

competing wearable OEMs conditional on (i) the wearable OEMs not offering functionalities covered by the Wearable APIs or other features to customers; and/or (ii) the wearable OEMs accepting burdensome data sharing obligations (vis-à-vis Google) or data sharing restrictions (vis-à-vis third parties or for own use), which would limit wearable OEMs' ability to use the generated data to develop their consumer offering and/or to become active in the digital healthcare markets.

- (932) The majority of the respondents to the market test submitted that the definitions included in the Initial Phase II Commitments, in particular in relation the Android APIs Commitment, appear appropriate.⁶³⁰ However, a series of respondents requested a number of clarifications, for instance to ensure that all relevant competing wearable OEMs would benefit from the Android APIs Commitment and that Google could not circumvent.
- (933) With respect to the duration of the Android APIs Commitment, the majority of the respondents submitted that the 10-year duration could be sufficient to address the competition concerns identified by the Commission.⁶³¹ However, a number of respondents asked for a longer duration. It was noted in particular that the commitment should last as long as the market conditions are the same as today.⁶³²
- (934) Overall, there were mixed views as to whether the Android APIs Commitment is suitable to remove entirely the competition concerns identified by the Commission.⁶³³ The negative replies were mainly connected with the shortcomings identified in the previous recitals of this section. In addition, some respondents mentioned shortcomings which are unrelated to the specific competition concerns regarding the degradation of interoperability with the Android OS that the Android APIs Commitment is meant to address and/or are not even merger-specific (as further explained in Section 10.5.3 below). In relation to these shortcomings, the respondents essentially submitted the following demands:
- (a) Non-discrimination with regard to the provision of technical support by Google;
 - (b) Non-discrimination with regard to access to Wear OS; and
 - (c) Non-discrimination with regard to access to GMS, including access to Google apps on third-party wrist-worn wearable devices.

10.4.2.4. Monitoring and dispute resolution

- (935) The majority of the respondents to the market test submitted that the provisions regarding monitoring are sufficient to ensure that the Initial Phase II Commitments are complied with.⁶³⁴ Some respondents suggested certain refinements in order to render more effective the monitoring mechanism. It was in particular submitted that the Monitoring Trustee should have a proactive role in the updating of the Measured Body Data list and should be informed in advance of any planned changes and be

⁶³⁰ Replies to questionnaire QH – Phase II market test, questions 3 and 4; non-confidential submission of 9 October 2020 (anonymous).

⁶³¹ Replies to questionnaire QH – Phase II market test, question 13.3.

⁶³² Replies to questionnaire QH – Phase II market test, question 13.3.1.

⁶³³ Replies to questionnaire QH – Phase II market test, question 14.3.

⁶³⁴ Replies to questionnaire QH – Phase II market test, question 12.

given the opportunity to review these changes and, where it finds concerns, to raise these with the Commission before any changes take effect. Another respondent suggested the adoption of an automated user alert system when the Data Silo is accessed by an unauthorised individual or service, which in turn triggers further audits by the Monitoring Trustee. The importance of the technical expertise of the Monitoring Trustee was also highlighted. It was also submitted that in case of alleged non-compliance with the commitments the European Data Protection Board should be also notified, considering the pan-EU relevance of the case.⁶³⁵

- (936) Regarding the dispute resolution mechanism, the majority of the respondents to the market test submitted that it will allow third parties to enforce the Commitments.⁶³⁶ Only a limited number of respondents provided a negative view on the mechanism, indicating, for example, that the mechanism was too slow and burdensome even in its expedited form.⁶³⁷
- (937) The majority of respondents to the market test also submitted that the provisions of the Initial Phase II Commitments (including its Annexes) are sufficiently clear and capable of being implemented effectively within a short period of time.⁶³⁸

10.4.3. *Assessment of the Initial Phase II Commitments*

- (938) The Commission assessed the appropriateness of the Initial Phase II Commitments in light of the principles underlying its commitments policy and the results of the Phase II market test.
- (939) The Commission concluded that despite introducing certain improvements compared to the Initial Phase I Commitments with respect to the Ads Commitment and notwithstanding the addition of two new important commitments regarding the Web APIs and the Android APIs, the Initial Phase II Commitments continued to fall short of completely removing the Commission's competition concerns.
- (940) The Commission identified the following shortcomings in the Initial Phase II Commitments. As regards the Ads Commitment, although the amendments with respect to the Initial Phase I Commitments represented a significant improvement, in particular as regard the clarity of certain definitions, the scope and the monitoring of the respect of the Ads Commitment, the Commission still considered that further refinements were needed in order to fully remove the concerns expressed on the functioning of the Ads Commitment, notably in terms of future-proofing, duration and monitoring of relevant technical aspects. More specifically, the duration of the Initial Phase I Commitments regarding Ads still appeared to be too short to eliminate the Commission's concerns about all possible significant developments in the commercial exploitation of the concerned data the effects of which could only manifest themselves in the years to come.
- (941) As regards the Web API Commitment, while it is in principle appropriate to address the identified competitive concerns, the Commission considered that further improvements in the duration, geographic scope, it being future-proof in how any

⁶³⁵ Replies to questionnaire QH – Phase II market test, question 12.1.

⁶³⁶ Replies to questionnaire QH – Phase II market test, question 17.

⁶³⁷ Replies to questionnaire QH – Phase II market test, question 17.1.

⁶³⁸ Replies to questionnaire QH – Phase II market test, questions 15 and 16.

future changes to the terms and conditions would be in line with its spirit were needed to fully remove the concerns as to the functioning of the Web API Commitment.

- (942) As regards the Android APIs Commitment, while it is in principle appropriate to address the identified competitive concerns, the Commission considered that further improvements were needed to fully remove any concerns on its scope, it being sufficiently future-proof and risk of circumvention.
- (943) In light of recitals (940) to (942), the Commission concluded that similarly to the Initial Phase I Commitments, the Initial Phase II Commitments fell short of removing the competition concerns likely resulting from the Transaction as set out in the Article 6(1)(c) Decision and as confirmed above.

10.5. Final Commitments

10.5.1. Description of the Final Commitments

10.5.1.1. The Ads Commitment

- (944) With respect to the Initial Phase II Commitments, the Notifying Party has introduced a series of refinements mainly aimed at further clarifying the scope of the Commitment and at limiting the risk of circumvention or misinterpretation of the same Commitment. The main substantial changes are:
- (a) the introduction of an obligation for Google to present each EEA User with the choice to grant or deny use of any Measured Body Data by any Google services⁶³⁹ other than Google Ads;
 - (b) the introduction of the possibility by the Commission to extend the duration of the Ads Commitment for another 10-year period, following an assessment to be carried out during the final year of the initial 10-year period;
 - (c) the possibility for the Monitoring Trustee to assess the technical means through which Google generates access logs and synthesizes such logs and access information into the auditable logs that are provided for review.

10.5.1.2. The Web API Access Commitment

- (945) Following the feedback provided in the Phase II market test, the Notifying Party has introduced a number of modifications in order to address the concerns raised by the respondents. In particular, the improvements to the Web API Access Commitment consisted of an extended duration (from 5 to 10 years), of a broader geographic application (so as to include the data of non-EEA users) and introduced an Update Mechanism, to ensure that the Web API remain a relevant source of data also in the future.
- (946) Therefore, by the final Web API Access Commitment Google commits, for 10 years following approval of the Transaction, to maintaining access for API Users, subject to user consent consistent with applicable laws and without charge for access, to Supported Measured Body Data, subject to:

⁶³⁹ Defined as any Google Service (such as Google Search, Google Maps, Google Assistant, and YouTube) with some technical and reasonable exceptions directly connected to the functioning of the system.

- (a) API Users' continued compliance with the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via a Relevant Google API).
 - (b) API Users' continued compliance with the Privacy and Security Requirements. Google can terminate access for violation of these requirements where Google has established such a violation or temporarily suspend access where Google has a reasonable belief of violations of such requirements.
- (947) Under the Final Commitments, in relevant part, the following definitions apply:
- (a) **API User** is any third-party with a software application distributed or made available to EEA Users that requests access to the Fitbit Web API or the Relevant Google API, meets the Privacy and Security Requirements, and agrees to the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via a Relevant Google API).
 - (b) **Supported Measured Body Data** are, as of the Effective Date, Measured Body Data collected from any global Google or Fitbit user (and not just from EEA Users) and made available to third-parties through the Fitbit Web API under the Fitbit Platform Terms of Service. The Supported Measured Body Data excludes:
 - (1) Data collected solely for the purpose of product testing or development for Google Services or Fitbit Services (including as part of healthcare partner collaborations or early access end user testing), health-related research efforts (such as clinical research studies), or to test compliance with this Commitment;
 - (2) Data subject to applicable health or privacy laws and regulations that Google or Fitbit may not lawfully make available to third-parties under such applicable laws;
 - (3) Data exclusively made available to users as part of a paid service (such as Fitbit Premium);
 - (4) Data collected separately by Verily, Calico or other separately operated Alphabet companies as part of their separate business and product activities; or
 - (5) Data collected from Google Services or Fitbit Services offered solely outside of the EEA.
- (948) The access to the Supported Measured Body Data may be provided through: (i) the existing Fitbit Web API (conditioned on the user whose Supported Measured Body Data are being accessed using a Fitbit Account); or (ii) the Relevant Google API (conditioned on the user whose Supported Measured Body Data are being accessed using a Google Account).
- (949) Under the Update Mechanism, following the Effective Date, Measured Body Data either (i) of a type listed in Annex 4 to the Commitments as of the Effective Date; or (ii) of a type newly made available after the Effective Date to users in a Google or Fitbit Health and Fitness App, will come to constitute Supported Measured Body Data if: (i) such data meets the conditions of Supported Measured Body Data set out

in point (b); and (ii) an Equivalent Data Type is made available to developers without charge through publicly documented APIs by at least three of the five benchmark OEMs. The Benchmark OEMs are the 5 largest suppliers of consumer wrist-worn wearable devices that process data types that qualify as Measured Body Data and/or Health and Fitness Activity Location Data if processed by Google or Fitbit as measured in the Industry Report, excluding Fitbit, Google, and any Wrist-Worn Wearable Device OEMs using Wear OS and that provide developers with access to their health and wellness data solely through the Fitbit Web API or the Relevant Google API. The industry report for the purpose of the Web API Commitment is the most current IDC Worldwide Quarterly Wearable Device Tracker or an equivalent industry report and the Benchmark OEMs are identified on the basis of global market shares (excluding China).⁶⁴⁰

- (950) On a quarterly basis following the Effective Date, Google will report to the Monitoring Trustee if a new data type meets the requirements in the preceding sentence. Such a data type will qualify as Supported Measured Body Data no later than one calendar year from the date of such reporting to the Monitoring Trustee, unless the data type met the requirements of the Update Mechanism within the first calendar year following the Effective Date, in which case that data type will qualify as Supported Measured Body Data two calendar years from the Effective Date. Annex 6 to the Commitments will be updated on a semi-annual basis or at the request of the Monitoring Trustee to include any additional types of Supported Measured Body Data that arose during that period.
- (951) In addition, in order to address the concerns raised to the respondents to the market test, that Google could change terms and conditions for access to the Web API in order to make compliance by third parties (and thus access) more difficult, Google has submitted a specific commitment. In fact, in case of amendments to the Fitbit Platform Terms of Service or to Google's Terms of Service, Google will notify the Monitoring Trustee of such changes ten days prior to their becoming effective, unless the change is urgent in which case Google will notify the Monitoring Trustee as soon as reasonably practicable and no later than five days after such terms become effective.

10.5.1.3. The Android APIs Commitment

- (952) Following the feedback provided in the Phase II market test, the Notifying Party has introduced a number of modifications in order to address the concerns raised by the respondents.
- (953) By the final Android APIs Commitment, Google commits, for 10 years following the approval of the Transaction: (i) to make the Core Interoperability APIs (see recital (954)) available, without charge for access, under the same license terms and conditions that apply to all other Android APIs that Google makes available as part of AOSP and on a non-discriminatory basis (i.e. without differentiating their availability or functionality depending on whether they are accessed by a First-Party Wrist-Worn Wearable Device or Companion App or a Third-Party Wrist-Worn Wearable Device or Companion App); (ii) not to degrade the Core Interoperability

⁶⁴⁰ The five Benchmark OEMs in October 2020 were Apple, Xiaomi, Huawei, Samsung, and Garmin. See Form RM, paragraph 27.

APIs by reducing their functionality to Third-Party Wrist-Worn Wearable Devices relative to First-Party Wrist-Worn Wearable Devices; (iii) not to discriminate against Wrist-Worn Wearable Device OEMs by withholding, denying, or delaying their access to functionalities of Android APIs that Google makes generally available to other Android Smartphone App Developers for use with an Android App, and not to discriminate between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in relation to changing, replacing, or retiring Android APIs, or in terms of the access it provides to Developer Previews and Developer Documentation.

- (954) “Core Interoperability APIs” are defined as Android APIs licensed as part of AOSP offering at least the functionality of Android APIs that currently exist in AOSP, including any improvements of those functionalities as a result of updates or bug fixes, that, when properly implemented by an Android OEM on an Android Smartphone, and with appropriate user consent provide the means for a Third-Party Wrist-Worn Wearable Device (or, as appropriate, associated Companion App) to perform a number of functionalities. Compared to Section 10.4.1.3, the list of those functionalities has been extended by adding the terms marked in bold below:
- (a) Connect to the Android Smartphone via Bluetooth (or **any successor technology**), **maintain such a connection**, and transfer data between the Wrist-Worn Wearable Device and the Android Smartphone;
 - (b) Scan for any nearby Wrist-Worn Wearable Devices **and**/or make the Android Smartphone visible to those devices;
 - (c) Display **and act upon** notifications (including phone calls, **text** messages, and calendar events) from the Android Smartphone on the connected Wrist-Worn Wearable Device;
 - (d) Read, **initiate** and reply to a **text** message sent to the paired Android Smartphone;
 - (e) Display controls for **initiating**, answering or declining phone calls on the paired Android Smartphone;
 - (f) Display, **initiate, and edit** calendar events on the paired Android Smartphone;
 - (g) Access and control the camera on the paired Android Smartphone;
 - (h) Access a geolocation sensor (e.g., GPS) on the paired Android Smartphone that is capable of providing geolocation coordinates;
 - (i) Control media playback on the paired Android smartphone; and
 - (j) View and sync contacts stored on the paired Android smartphone.
- (955) Android APIs are defined as the APIs, including any improvements or bug fixes, that Google licenses to Android OEMs without charge for access, either as part of AOSP or GMS, for use by Android Smartphone App Developers with an Android App.
- (956) The non-discrimination relative to other Android Smartphone App Developers extends the scope of the Android APIs Commitments beyond the list of current APIs needed for interoperability with Android Smartphones, that is the Core Interoperability APIs. It covers both AOSP and GMS APIs and it covers all of the

APIs that Google makes generally available to other Android Smartphone App Developers for use with an Android App, whether in GMS or AOSP.

- (957) Google also commits not to circumvent these requirements by discriminating between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in terms of warnings, error messages, or permission requests displayed in Android Apps, or through conditions imposed on access to the Google Play Store by Wrist-Worn Wearable Device OEMs' Companion Apps for example, regarding the use of data gathered by the Wrist-Worn Wearable Device OEM or the use of Android APIs by the Third-Party Wrist-Worn Wearable Device).

10.5.1.4. Monitoring Trustee and dispute resolution

- (958) The Final Commitments have introduced some additional provision on the duties of the Monitoring Trustee, mainly aimed at aligning the text with the standard duties of monitoring trustees in similar cases.
- (959) Furthermore, the Final Commitments include the possibility for the Monitoring Trustee to assess the technical means through which data separation is granted (see above Section 10.5.1) and to verify the updating of the Measured Body Data list not only on a semi-annual basis, but at such other times as it may reasonably request.
- (960) Other functions of the Monitoring Trustee are added in relation to the amended version of the Web API Commitment as indicated in Section 10.5.1.2. In particular, these include the role of the Monitoring Trustee as regards any amendments of the Terms of Services to access Fitbit's Web API and its role as regards terminating or suspending access to Fitbit's Web API in case of non-compliance with Google's Privacy and Security requirements. In addition, the Monitoring Trustee will oversee the implementation of the Update Mechanism with regard to new data types to be made available if the conditions set out in the commitments are fulfilled.
- (961) Based on the results of the market test, no improvements were required to the dispute resolution mechanism.

10.5.2. *Assessment of the Final Commitments*

- (962) The Commission recalls that in order to be considered acceptable, the proposed commitments must be capable of rendering a concentration compatible with the internal market as they prevent a significant impediment to effective competition in all relevant markets in which competition concerns were identified. In this case, the commitments needed to eliminate the Commission's serious doubts as to the compatibility of the Transaction in respect of the supply of online search advertising and sub-markets/segments thereof, and online display advertising, and sub-markets/segments thereof, in all EEA countries and in the UK. In addition, the Commission required that the commitments would exclude all other possible competition concerns likely resulting from the Transaction as identified by the Commission, namely with respect to: (i) supply of online search and display advertising services, including intermediation services, (ii) the digital healthcare markets, and (iii) interoperability with Android OS.
- (963) In accordance with the principles of the Merger Regulation on the acceptability of commitments, the Commission has assessed whether the Final Commitments are suitable and sufficient to eliminate the competition concerns; and capable of being implemented effectively within a short period of time.

10.5.2.1. The Ads Commitment

- (964) As regards the revised Ads Commitment, the Commission considers that the improvements made under the Final Commitments fully address the Commission's concerns with regard to the Ads Commitment under the Initial Phase I Commitments and the Initial Phase II Commitments.
- (965) The Commission recalls that already during the Phase I investigation it was considered that a commitment envisaging the creation of a silo for storage of data subject to strict access rules would be generally suitable to solve the competition concerns identified by the Commission (Section 10.3.3). The amendments and improvements of the Ads Commitment included in the Final Commitments appear able to address the shortcomings identified in the course of the market investigation.
- (966) In this respect, the Commission notes that the result of the Phase II market test on the Ads Commitment are generally positive and that the majority of the respondents submitted that, in particular as a result of the amendments and clarifications introduced with respect to the Initial Phase I Commitments in terms of scope, definitions and monitoring, the Ads Commitments were adequate to address the competition concerns emerged in the market for online advertising:
- (a) Fitbit's clips and scales and in general any consumers device developed or currently in development by Fitbit that processes measured body data and/or health and fitness activity location data (whether or not wrist-worn devices) are now included in the Ads Commitment. In essence, all categories of devices in use or in development by Fitbit are included within the scope of the Ads Commitment.
 - (b) Processed and derived data, manually inputted data, as well as Data generated through the use of Fitbit Coach service are now included. As for aggregated data, that some participants requested to be expressly included in the commitments, the Commission notes that the data separation prevents any access by Google Ads to the relevant data. This implies that Google Ads cannot access aggregated data either, as to be able to aggregate Measured Body Data and generate any insights from it, Google Ads would need to have access to such data. In any case, any theoretical improvement in the quality of Google ads with respect to specific individuals on the basis of insights drawn from aggregated data would have a limited competitive impact, also considering that aggregated health data could be generally available via the several competitors active in the smartwatches and fit tracker markets, with market shares superior to that of Fitbit.
 - (c) The definition of Google Ads has been further amended to include all forms of online advertising shown on whatever Google service and product;
 - (d) Data Separation is granted also for data retained on the user's Fitbit account;
 - (e) The Ads Commitment now includes the obligation to compile specific and detailed access documentation in relation to individuals and services that will have access to the relevant data, in order to facilitate the monitoring of Google's compliance with the related obligations. Minimum data and information points subject to periodic audits are also introduced. The improvements appear able to limit the risk of circumvention and of misuse of the relevant data and in case give the Monitoring Trustee an increased ability to deter violations and to address them.

- (967) The improvements introduced with the Final Commitments further address the remaining issues that emerged in the course of the Phase II market test:
- (a) A series of provisions and definitions are further amended to clarify the scope of application and to avoid future circumvention:
 - (1) That Data Separation for data on Fitbit Account will be granted irrespective of the role of Google as data controller;
 - (2) That any use of the relevant data in or for Google Ads would be forbidden;
 - (3) That the Final Commitments apply to Fitbit and any future successor entities and for any future Google service providing any form of online advertising (search advertising, display advertising and advertising intermediation);
 - (4) The interpretation of key definitions is aligned with that of the same definitions in the applicable data protection laws;
 - (5) That the transmission by Google of the relevant data to a third party for the purpose of receiving such data back to use in or for Google Ads would be in breach of the Ads Commitment.
 - (b) The role of the Monitoring Trustee in the verification of the compliance of the Ads Commitment is reinforced via the addition, to the analysis of the reports on the data separation activity, also of the assessment of the adequacy of the technical means through which data separation is obtained. This new ability should substantially limit the risk of undetected circumvention and violation of the Ads Commitment, by way of hidden technical features. In this respect, it is worth recalling that already in the Initial Phase II Commitments, the obligation to select a Monitoring Trustee with adequate technical abilities in the relevant fields of expertise was added;
 - (c) The proactive role of the Monitoring Trustee is further reinforced by the addition of the possibility to verify the updating of the Measured Body Data list any times as the Monitoring Trustee may reasonably request, so as to grant that data separation is timely applied to all future relevant data;
 - (d) The possibility by the Commission to extend the duration of the Ads Commitment for another 10-year period, following an assessment to be carried out during the final year of the initial 10-year period, addresses some observations received in the course of the Phase II market test on the limited duration of the Ads Commitment. Should the market conditions not evolve towards a more competitive scenario in the online advertising markets and taking into account all other relevant factors, the Commission would be able to extend the Ads Commitment as to further protect the competitive conditions. In this respect, the Commission considers that a possible total duration of 20 years for the Ads Commitment is adequate, considering past Commission practice, in particular in fast-evolving sectors as the IT and communications one, where rapid and continuous innovation is key. An indefinite duration, as requested by few participants to the market test, would on the other hand be disproportionate.
- (968) The Commission does not consider that the scope of the Ads Commitment should be enlarged to include data other than health and fitness data as requested by some

participants to the market investigation – in particular, payment data and account data were mentioned. In this respect, data other than health and fitness data are already largely available to Google for millions of users thanks to the multiple activities carried out by the different Google services and entities. The added value brought about by the Transaction – with the exception of the specific data involved, namely health and fitness data – appears extremely limited, considering the limited number of Fitbit users⁶⁴¹, compared to the other Google services users in general. Moreover, it appears that rivals can also have access to these types of data, including from significantly larger user bases than Fitbit.

- (969) Similarly, the Commission does not consider that that scope of the Ads Commitment should be broader, with respect to location data, as also submitted by some respondents to the market investigation. In particular, it has been submitted that not only any geolocation data collected, in the relevant devices, by a health and fitness activity tracking feature and then sent to Google or Fitbit, should be included in the scope of the Ads Commitment, but that in general any geolocation data that might be collected, from the devices, by apps other than Google or Fitbit Health and Fitness apps should be captured. In this respect, the Commission first notes that currently, the only geolocation data Fitbit collects is GPS-derived activity-linked location data.⁶⁴² Therefore, the definition of Health and Fitness Activity Location Data already covers the entire increment of geolocation data to which Google will obtain access as a result of the Transaction. As for future possible geolocation data that might be collected from the devices via other apps (namely not health and fitness apps, but generic apps accessed via the devices, such as Google Search), it is worth noting that Google could launch apps (and actually will probably launch apps) on wearable devices irrespective of the Transaction and therefore could have access to those geolocation data on all devices. Moreover, compared with the amount of geolocation data collected by Google with those same apps on smartphones⁶⁴³ – that could provide the same if not better geolocation data – Fitbit’s location dataset would be extremely limited.
- (970) As for the list of data types in the relevant annex, it appears to include all present health and fitness activity data captured by the devices covered by the Commitments. Although the Commission considers important that the list is as complete as possible, the list should not be considered exhaustive or closed to any modification, as it would be impossible to exactly foresee the technology development in this sector and the categories of data that could be relevant in the future. In any case, the updating mechanism, under the supervision of the Monitoring Trustee, would grant that all relevant data would be timely included in the list. For the same reasons, the Commission does not consider that the list should follow a “reverse” approach, namely include all data categories which are exempted from the Commitments.
- (971) With regard to the limitation of the Ads Commitment to EEA users, the Commission considers that this is proportionate and adequate to protect the competitive

⁶⁴¹ With particular reference to payment data, Google has submitted that only about [...] EEA users have Fitbit Pay activated on their devices as of June 2020.

⁶⁴² Google’s response to the comments on Google’s commitments, 9 September 2020, paragraph 24.

⁶⁴³ Google receives location data from the smartphone itself at the time of the user’s interaction with it.

conditions in the EEA, in particular considering that advertising markets have generally national dimensions or are limited to linguistic areas in the EEA.

- (972) Finally, some participants raised the issue of algorithm contamination, that is the potential contamination of algorithms used for advertising purposes with the insights gained by (non advertising) algorithms that are allowed to access the protected data and trained using such protected data. This would represent an indirect impact of Fitbit users' data on the quality of Google's advertising offering. In this respect, the Commission considers that the potential impact of this algorithm contamination would be extremely limited. According to data and explanations provided by the Notifying Party, [Advertising strategy]. [Advertising strategy]. The Ads Commitment prevents that Fitbit users' health and fitness data are used as "Ads signals" and they could only be "organic signals". According to some conservative estimates based on average weights of those signals, Fitbit users' data could therefore potentially indirectly impact less than [...] % of the overall outcome of the ads targeting on Google services (in that example, YouTube).⁶⁴⁴ The Notifying Party has further explained that preventing this extremely marginal potential impact would be extremely burdensome and prone to error. The Commission therefore considers that a specific commitment in this respect would be disproportionate. In any case, the Final Commitments include a specific obligation for Google to present each EEA User with the choice to grant or deny use of any Measured Body Data by any Google services other than Google Ads (with some technical and reasonable exceptions connected to the functioning of the system), so that this marginal impact could be further limited by the necessity of the explicit consent of the users.
- (973) In conclusion, for the reasons set out in recitals (964) to (973), the Commission considers that the final version of the Ads Commitment improves the initial version of the commitment and addresses the competition concerns that emerged during the market investigation.

10.5.2.2. The Web API Access Commitment

- (974) The Commission considers that the final version of the Web API Access Commitment effectively addresses the concerns raised by the respondents to the Phase II market investigation. In particular, the main concern was that the Web API, as a source of health and fitness data, would no longer be available, should Google decide to discontinue access by third parties after the Transaction.
- (975) In that respect, the Commission observes that the final version of the Web API Access Commitment does not merely ensure that API Users have access to the data that Fitbit releases to third parties today but goes further. Based on the Notifying Party's submission, Fitbit last made an addition to the Web API was in Q1 of 2017.⁶⁴⁵ The Update Mechanism ensures that Fitbit will make data types available when 3 out of 5 Benchmark OEMs identified on the basis of an industry reports and based on their global market shares (excluding China) make such data types available to third parties. In fact, due to the Update Mechanism, the commitment is also future-proof and guarantees that additional data are added to the pool of data accessible by third parties over time. As a consequence, the Commission considers

⁶⁴⁴ Google's response to the comments on Google's commitments, 9 September 2020, paragraph 58.

⁶⁴⁵ Google's submission of 27 October 2020.

that the data released through the Web API would always be relevant, in line with the latest market developments from both a qualitative and quantitative standpoint and it will provide a meaningful input to third parties that use them to develop innovative solutions in digital healthcare. The Commission thus considers that the Update Mechanism ensures that post-Transaction the merged entity will continue to provide access to users' data and replicate what Fitbit could reasonably be expected to have done standalone, that is to say, adapt to the strategy of competing wearable OEMs in terms of data types that they make available to third parties.

- (976) In the Commission's view, a Commitment based on symmetrical access would not be proportionate because it would not merely preserve the status quo absent the Transaction but would impose on the merged entity an obligation to share data that Fitbit is currently not sharing with third parties via the Web API, putting third parties using the Web API in a better position they are currently in today or would be in absent the Transaction. The Commitment is not static and includes the Update Mechanism on the basis of which the data types made available by competing wearable OEMs will also be made available to third parties. This will ensure that players active in the downstream market for the provision of digital healthcare services will continue to have the same access as they would absent the Transaction thus ensuring that they will be able to continue to develop digital healthcare solutions. With regard to the concern expressed by one respondent that Google's incentives will change such that it would leverage its strong position in smartphone assets, Google Play or other APIs in order to prevent wearable OEMs from sharing data with Google's competitors in the downstream market for digital healthcare, the Commission considers that the Android APIs Commitment excludes the possibility that Google would engage in this type of conduct. The Android APIs Commitment ensures that interoperability and access to APIs cannot be made conditional on any corresponding exclusive sharing of data only with Google but not with competitors in the digital healthcare area.
- (977) As regards the terms and conditions under which data is made available to API Users, third-party access to the Fitbit Web API is conditional upon API Users' continued compliance with (i) the relevant terms of services (adopted by Google of Fitbit) and (ii) API Users' continued compliance with the Privacy and Security Requirements. Google will monitor such compliance and is entitled to suspend or terminate access for violation of these requirements. However, in such cases, Google will have to notify the termination or suspension to the Monitoring Trustee within 14 days and indicate the reason for the termination or suspension.
- (978) As to the possible amendments introduced in terms and conditions, the Final Commitment stipulates that the Monitoring Trustee will be notified of any changes *ex ante* (10 days prior to their becoming effective), with some exceptions in urgent cases in which case Google will notify the Monitoring Trustee as soon as reasonably practicable and no later than 5 days after such terms become effective. Therefore, the Monitoring Trustee will have a mechanism to be timely involved and examine *ex ante* planned changes to Terms and Conditions and that such changes are consistent with the spirit of the Web API Commitment throughout the duration of the commitment. The Commission considers that the exception is justified under circumstances where the changes in the Terms of Service are urgent and cannot be postponed in order to observe the notification period to the Monitoring Trustee. The Monitoring Trustee will in any event be notified of such changes within a limited period of time after they have become effective.

- (979) Some respondents to the market test expressed the view that irrespective of any future updates which Fitbit is not obliged to carry out, Fitbit's current Terms of Service restrict the way API Users can use the data. The Commission nevertheless notes that the current Fitbit Terms of Service existed before the Transaction. Furthermore, based on the Notifying Party's submission, the Commission notes that Fitbit does not receive information on the use cases for which a developer requests access to Fitbit users' data via the standard Fitbit Web API. As such, it does not assess on a case-by-case basis whether to approve or deny access to the standard Fitbit Web API for a particular third party and does not keep a central file or register where such instances would be recorded. To the best of Fitbit's recollection, however, there have been no instances in which a third party was denied access to the standard Fitbit Web API.⁶⁴⁶ Furthermore, with regard to the second sentence of clause 2a of the Fitbit's Terms of Service, based on the Notifying Party's submission, the Commission considers that this clause is intended to prevent a situation where a developer would obtain data through the Fitbit Web API in order to emulate the Fitbit mobile app and to create "clones" of Fitbit's products contrary to customers' interests. The Commission notes that the purpose of the clause is not to prevent apps that have their own legitimate purpose from accessing the Fitbit Web API, even if such apps compete with Fitbit's own offering, for example by displaying health and wellness data to their users. This is further demonstrated by the example of the Strava app which competes with the functionality offered by the Fitbit mobile app but is among the top Fitbit Web API users.⁶⁴⁷
- (980) The Commission considers, in line with the results of the Phase II market test, that the requirement for compliance with the Privacy and Security conditions is standard and justified. In order to prevent the merged entity from arbitrarily terminating access to the Web API, under the Final Web API Commitment, Google will notify the Monitoring of the termination or suspension within 14 days and indicate the reason for the termination or suspension.
- (981) With respect to the geographic scope of application, the Final Commitments provides for access not only to the health and fitness data of EEA users, but also of non-EEA users. This commitment applies to API Users with a software application distributed or made available to EEA Users. The Commission considers that such improvement takes into account that useful business insights may be obtained not only by processing the data of users located in the EEA, but also from the data of users living in similar conditions in other geographic areas. The extension of the commitment to non-EEA users, in the Commission's opinion, is necessary and proportionate in ensuring a level playing field between Google and other players active in digital healthcare, particularly if, as it appears likely, the sector develops into a global market.
- (982) In relation to the duration of the Web API Access Commitment, the final version of the Web API Access Commitment extends the operation of Google's obligation from 5 to 10 years. The Commission considers, in this respect, that such longer duration is necessary and proportionate in order to avoid that the development and growth of digital healthcare solutions is hindered. In fact, the Commission notes that

⁶⁴⁶ Notifying Party's reply to RFI 35 of 6 October 2020, question 1 b.

⁶⁴⁷ Notifying Party's reply to RFI 35 of 6 October 2020, question 1 c.

a number of players, varying in size and resources, are currently active in digital healthcare. Larger and more structured businesses/undertakings may already be able to operate autonomously (also in terms of user data needed to develop their solutions) or achieve that point in the next 5 years. The Commission, however, considers that start-ups and small-medium enterprises which currently rely on access to the Web API may need a longer period in order to secure their own supply of user data. For that reason, the Commission considers that a duration of the Web API Access Commitment of 10 years is best suited to ensuring that all players active in the sector have enough time to develop their business propositions.

- (983) Finally, the Commission considers that the requests of third parties, which do not provide any health-related services to users, to be granted access to users' data, are not justified in view of the competitive concerns identified in this Decision in relation to digital health and any future developments in this area.
- (984) In conclusion, for the reasons set out in recitals (974) to (983), the Commission considers that the final version of the Web API Access Commitment improves the Initial Phase II Commitments and addresses the competition concerns emerged during the Phase II market investigation.

10.5.2.3. The Android APIs Commitment

- (985) The Commission considers that the final version of the Android APIs Commitment effectively addresses the concerns raised by the respondents to the Phase II market investigation that Google could have the ability and incentive to degrade interoperability between third-party wrist-worn wearable devices and Android OS by selectively degrading Android APIs vis-à-vis Fitbit's competitors. The final Android APIs Commitment, which is significantly more comprehensive than the one included in the Initial Phase II Commitments, also addresses the relevant shortcomings identified by the respondents to the Phase II market test.
- (986) First, the Commission observes that the list of core functionalities has been extended to accommodate market participants' additional relevant suggestions. In particular, the Commission notes that the additions to the list, as presented in Section 10.5.1.3 above, reflect in large parts the changes that were presented by one respondent, who submitted a mark-up of the initial list.⁶⁴⁸ Some respondents reported the lack of certain functionalities that are in fact covered by the list.⁶⁴⁹ For instance, respondents named several specific use cases for the Bluetooth functionality which all fall under the listed general Bluetooth functionality. Indeed, the ability to transfer data over Bluetooth covers: (i) a Third-Party Wrist-Worn Wearable Device's access to a paired smartphone's network connectivity via its mobile Companion App and the Bluetooth connection between the smartphone and the wrist-worn wearable, (ii) the ability to share customised watch faces or send diagnostic information to an engineer, and (iii) the ability to use Bluetooth to transmit data as part of setting up and managing a Wrist-Worn Wearable Device OEM's payment⁶⁵⁰ service. Respondents also requested specific use cases for the notification functionality,

⁶⁴⁸ Non-confidential submission of 9 October 2020 (anonymous).

⁶⁴⁹ Form RM, paragraph 16.

⁶⁵⁰ This is simply a function of Bluetooth being the means by which the smartwatch and the paired smartphone exchange data; there is nothing specific in the Android Bluetooth API linked to payments services specifically (nor are there any payments APIs as such in AOSP).

which, however, cannot be enabled via AOSP alone. For instance, the notification functionality, included in the list of core functionalities in the Android APIs Commitment, provides the necessary information for a Wrist-Worn Wearable Device OEM to show a notification and the associated reply functionality on a paired smartwatch wearable. However, it does not enable the reply functionality as such. Rather, this feature must be implemented by the messaging app developer in the corresponding mobile app (for example, Facebook would need to implement that feature in the WhatsApp mobile app). Google provides open-source APIs in AOSP that allow an app developer to implement this functionality in their Android mobile app. Otherwise, respondents did not identify any currently used functionalities that would be missing from the list. Therefore, the Commission considers that the list of Core Interoperability APIs is sufficiently complete in light of the competition concerns identified.

- (987) Second, it has now been clarified that the Android APIs Commitment shall also cover any improvements, including as a result of updates or bug fixes, to both Android APIs and Core Interoperability APIs. This was already clear from the Initial Phase II Commitments, which referred to functionalities rather than specific APIs to ensure that this provision would be effective on a forward-looking basis. In addition, Google committed already under the Initial Phase II Commitments to make the relevant APIs available without differentiating their availability or functionality depending on whether they are accessed by a First-Party Wrist-Worn Wearable Device or Companion App or a Third-Party Wrist-Worn Wearable Device or Companion App and not to degrade them so as to reduce their functionality to Third-Party Wrist-Worn Wearable Devices relative to First-Party Wrist-Worn Wearable Device. Therefore, in order to comply with those commitments, improvements in relation to the list of functionalities had to be made available also under the Initial Phase II Commitments. In addition, the Form RM, submitted together with the Initial Phase II Commitments, clearly referred to improvements being covered. However, this was not understood by respondents who expressed concerns in the Phase II market test as there was no clear reference to improvements in the commitment text. The Commission notes that this potential ambiguity has been resolved, as both the final Android APIs Commitment as well as the Form RM explicitly state that improvements to the listed functionalities are covered. By way of illustration, the Google Fast Pair service (mentioned in recital (771)), [Google's product strategy], relies on (and can be considered as an improvement of) functionality falling within the definition of Core Interoperability APIs (that is to say, the ability to discover and pair with a Bluetooth device) and is therefore covered by the commitment, even though it is not yet part of AOSP.
- (988) Third, in order to address the concern expressed by some respondents that an exhaustive list of core functionalities lacks future-proofness, even if complete by the standards applicable at the time of this Decision, the Notifying Party complemented the Android APIs Commitment by a commitment not to discriminate against Wrist-Worn Wearable Device OEMs (i) by withholding, denying, or delaying access by Wrist-Worn Wearable Device OEMs to functionalities of Android APIs (AOSP or GMS) that Google makes generally available, without charge for access, to other Android Smartphone App Developers for use with an Android app; (ii) in relation to changing, replacing, or retiring these Android APIs (compared to other Android Smartphone App Developers); (iii) in relation to access to Developer Previews (compared to other Android Smartphone App Developers); and (iv) in relation to

access to Developer Documentation (compared to other Android Smartphone App Developers).

- (989) The Commission notes that this addition covers all of the APIs that Google makes generally available to other Android Smartphone App Developers for use with an Android App, whether in GMS or AOSP. This ensures that all relevant APIs are covered, without being necessary to try to define which APIs will become relevant in the future. Wrist-Worn Wearable Device OEMs will get access to any future APIs that Google will make generally available to other Android Smartphone App Developers for use with an Android App. The Commission considers that the non-discrimination relative to other Android Smartphone App Developers, which would for instance include companion apps of other connected devices (which likely use similar functionalities), provides an appropriate benchmark to ensure that Wrist-Worn Wearable Device OEMs will continue to have access to all relevant APIs. To the best of Google's knowledge, there are no Android APIs that are relied upon exclusively by Wrist-Worn Wearable Device OEMs, and this was not contradicted by the results of the market investigation. It follows that Google could not degrade Android APIs for Wrist-Worn Wearable Device OEMs without collaterally harming the other Android Smartphone App Developers that rely on those same APIs.
- (990) In this regard, the Commission also notes that the condition in the definition of Android APIs that these correspond to those that are made available without charge for access, merely reflects Google's current practice, namely that Google does not charge Android Smartphone App Developers a fee for access to any Android APIs.⁶⁵¹ As confirmed by the Notifying Party, the wording is merely descriptive and is not designed to limit which APIs would be covered by the Android APIs Commitment. In other words, in the hypothesis that Google were to charge a fee for access to a given Android API (which was never contemplated), the inclusion of the words "without charge for access" is not intended to remove that API from the ambit of the Android APIs Commitment. The relevant criterion for determining whether an Android API falls within the ambit of the commitments is whether or not this API is made generally available to Android Smartphone App Developers for use with an Android App, as is clear from the other references in the Android APIs Commitment.⁶⁵²
- (991) Fourth, the provision on non-discrimination relative to app developers covers both AOSP and GMS APIs, thereby addressing the possible concern that Google might "duplicate" APIs in GMS and innovate those APIs instead of AOSP APIs, as feared by some respondents to the market test.

⁶⁵¹ As explained in the Form RM, Google does not charge Android Smartphone App Developers a fee for access to any Android APIs, though Google charges for access to certain proprietary Google services that are made available to Android Smartphone App Developers through Android APIs or use above certain thresholds. For example, Google provides Firebase Cloud Messaging and In App Messaging without charge, but also makes available paid tiers of various Firebase services for apps that process a large volume of data or API calls through their use of Firebase. Google Analytics is another example of a free service that features a paid tier for users with requirements above a certain usage volume. Based on the evidence on file, these paid services have not been identified as relevant to ensure interoperability. In any case, the Notifying Party confirms that under the Android APIs Commitment, Google cannot discriminate against Wrist-Worn Wearable Device OEMs in terms of their access to functionalities of Android APIs that Google makes generally available to other developers. Notifying Party's reply to RFI 43, question 2.

⁶⁵² Notifying Party's reply to RFI 43, question 2.

- (992) In the first place, the new provision, which covers Android APIs in both AOSP and GMS that are made available without charge for access to other Android Smartphone App Developers, adds another protection such that Google could not use GMS in order to withhold certain Core Interoperability APIs from Wrist-Worn Wearable Device OEMs.
- (993) In the second place, the Commission notes that the Notifying Party confirmed that, in any case, it is already clear from the provisions in relation to the Core Interoperability APIs that Google would have to keep the Core Interoperability APIs, including any improvements related to these functionalities, which are based on open-source, non-proprietary, public AOSP APIs at the time of this Decision, in open-source code in the future. Therefore, it would not be possible to duplicate these functionalities in GMS, while leaving the AOSP equivalents unchanged. Concretely, Google confirmed that “[t]he possibility that Google might duplicate the Wearable APIs [i.e. the Core Interoperability APIs in the Final Commitments] in GMS in order to deprecate the AOSP versions is moot because paragraph 8 of the Commitments [i.e. paragraph 10 in the Final Commitments] makes clear that any improvements to the Wearable APIs’ functionality in respect of First-Party Wrist-Worn Wearable Devices will be made available, without differentiation, to Third-Party Wrist-Worn Wearable Devices, and the Wearable APIs will be licensed under the same terms as other AOSP APIs. In other words, Google will maintain the Wearable APIs’ functionality in AOSP. There can therefore be no concern of ‘moving future development to a closed source app’ with respect to the functionalities listed in paragraph 7 of the Commitments [i.e. the functionalities referred to in the definition of Core Interoperability APIs in the Final Commitments]”.⁶⁵³ Therefore, the provisions in relation to the Core Interoperability APIs confirm that the functionality afforded by those APIs (and any improvements to such functionalities) will continue to be licensed on AOSP terms, and not migrated to GMS or another Google proprietary software layer.
- (994) In the third place, the Core Interoperability APIs cover a set of core functionalities that have been consistently implemented in and distributed through AOSP. This is because they do not rely on proprietary Google technologies, and it is in Google’s interest, as steward of the Android ecosystem, that these functionalities are available to all third parties in AOSP.⁶⁵⁴ Indeed, the Commission identified a single Core Interoperability API available in AOSP that offers a similar functionality to an API available in GMS, namely a location functionality. The GMS Location API reports the user’s location based on a proprietary analysis of various signals, [Google’s product strategy]. This API was included in GMS because it relies on Google technology and servers. AOSP also includes a location API, which provides the user’s geolocation based on GPS. [Google’s product strategy].⁶⁵⁵ The Commission notes that this is the only Core Interoperability API for which the distinction between AOSP and GMS may be relevant in that the question could arise whether Google must continue to develop the location functionality in AOSP or GMS. Google submits that it would include any improvements or bug fixes to the Android location API in AOSP but that it would not be precluded from continuing to offer

⁶⁵³ Notifying Party’s reply to RFI 34, question 8.

⁶⁵⁴ Notifying Party’s reply to RFI 34, question 8.

⁶⁵⁵ Notifying Party’s reply to RFI 38, question 2.

(and improve) its own proprietary Fused Location Provider API in GMS, as it does today. While the evidence on file does not suggest that the current GMS version of the location service is necessary to ensure interoperability, it is true that there is some uncertainty about the future development of location APIs in AOSP or GMS. However, the new provision in the Final Commitments fully addresses this concern, as Wrist-Worn Wearable Device OEMs will also have access to GMS APIs to the extent that they are made available to other Android Smartphone App Developers.

- (995) Fifth, under the provision on non-discrimination, Developer Previews and the Developer Documentation will also be made available simultaneously to Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers. The reference to Developer Previews, a process by which Google makes forthcoming Android software available to Android Smartphone App Developers to facilitate their development of apps for an upcoming Android release, has been added after the market test to ensure that Wrist-Worn Wearable Device OEMs would not be disadvantaged in their product development compared to other Android Smartphone App Developers.
- (996) Sixth, in relation to the possibility for Google to make available new Android APIs internally within the merged entity, a definition of “API Development and Testing” has now been added to the list of definitions in order to define its scope. API Development and Testing is defined as the process by which Google develops and tests new versions of Android APIs, prior to their simultaneous release to Android Smartphone App Developers, with the clarification that, for the avoidance of doubt, this may include Google’s use of a lead device to develop and test new software.⁶⁵⁶ This provision will enable Google to continue providing test code to internal and selected external teams as part of its development of new Android software or maintenance releases, prior to their general release. This may include testing by internal Google employees whose work also covers Pixel smartphones and/or First-Party Wrist-Worn Wearable Devices, as well as certain third-parties. In fact, Google has conducted such testing with a range of different parties in the past.⁶⁵⁷ This early access helps identify and address bugs and other errors prior to the public release of Android software, which would harm both Google and third parties. It also allows Android OEMs and Android Smartphone App Developers to find value in using a given API. In fact, Google has previously abandoned API launches because the testing suggested that the API provided insufficient benefit to users even though, technically speaking, the API worked.⁶⁵⁸
- (997) However, upon public release, the Android APIs will be available at the same time to all third parties wishing to access that software and Wrist-Worn Wearable Device OEMs cannot be disadvantaged relative to other Android Smartphone App Developers. For the avoidance of doubt, the Commission notes that the access for third parties is limited to those third parties which are involved in the API Development and Testing process. Under the Android APIs Commitment, Google cannot use this provision to provide access to a wide range of Android Smartphone App Developers, while selectively excluding Wrist-Worn Wearable Device OEMs.

⁶⁵⁶ The extent and duration of any such testing varies. It can take several weeks or months although complex projects can take somewhat longer. Notifying Party’s reply to RFI 46, question 6.

⁶⁵⁷ Notifying Party’s reply to RFI 46.

⁶⁵⁸ Notifying Party’s reply to RFI 46.

- (998) Seventh, the Android APIs Commitment also makes clear that Google can develop features associated with first-party Google products, apps, or services, for use solely with a First-Party Wrist-Worn Wearable Device, or as part of a partnership with a third party, provided that the implementation of such features shall not impede in any way the functioning of Android APIs for Third-Party Wrist-Worn Wearable Devices. This provision is intended to make clear that Google, like any other Wrist-Worn Wearable Device OEM, may develop proprietary features for its own Wrist-Worn Wearable Devices, provided it does so in compliance with the Android APIs Commitment. For example, Google could offer a Google Assistant integration to users of its First-Party Wrist-Worn Wearable Devices. Such proprietary features are typically implemented in Google's proprietary GMS software layer on Android Smartphones, but are not offered to other Android Smartphone App Developers since the feature is device-specific, for example Google Assistant on Fitbit devices. However, the same Android APIs that Google uses to implement such proprietary integrations on top of Android are covered by the Android APIs Commitment, guaranteeing that rivals can also develop competing integrations (for example with a competing virtual assistant) that interoperate with Android via the same Android APIs.
- (999) Eighth, Google added a commitment not to circumvent the Android API Commitment: (i) by discriminating between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in terms of warnings, error messages, or permission requests displayed in Android apps, or (ii) through conditions imposed on Companion Apps' access to the Play Store (for example, regarding the use of data gathered by the Wrist-Worn Wearable Device OEM or the use of Android APIs by the Third-Party Wrist-Worn Wearable Device).
- (1000) The first provision is directly related to the competition concern identified by the Commission in relation to interoperability with Android OS. According to the Notifying Party, however, the display of warnings, error messages, or permission requests typically depends on each Android OEMs' implementation of the software on their smartphones, and in particular on what permissions and approvals are pre-granted (or not) by those OEMs. In such cases, Google would not be held liable under the Android APIs Commitment. Nevertheless, this provision ensures that Google could not use this route in cases where it has control over the display of warnings, error messages or permission requests.
- (1001) The second provision is not directly related to a competition concern in relation to interoperability with Android OS. Indeed, a concern in relation to the failure by Google to give access to Google Play has been dismissed (see Section 9.4.5). Nevertheless, in light of the replies to the Phase II market test, the Commission considers that Google could potentially use the Play Store to circumvent the Android APIs Commitment by implementing restrictions vis-à-vis Wrist-Worn Wearable Device OEMs. While these restrictions would not necessarily make Wrist-Worn Wearable Device OEMs switch their distribution channel, they could still potentially be harmful to them in a way that could affect the effectiveness of the Android APIs Commitment. In particular, Google could require wearable OEMs, as a condition to access Google Play, not to offer certain features, so as to preserve a competitive advantage to Fitbit. Another concern expressed in the market investigation was that Google may ask wearable OEMs, as a condition to access Google Play to share their data with Google or whether to share it with third parties or not, in order to preserve

a competitive advantage in the wrist-worn wearable and digital healthcare markets. This concern is now explicitly excluded.

- (1002) Finally, Google has improved several definitions to ensure they are clear, future-proof and that all relevant third-party wrist-worn wearable devices benefit from the Android APIs Commitment.
- (a) The definition of “AOSP” has been improved to clarify that it also covers any successor open-source smartphone operating system.⁶⁵⁹
 - (b) The definition of “First-Party Wrist-Worn Wearable Device” has been improved to reflect that it covers any consumer wrist-worn wearable device developed **or manufactured** by Fitbit or Google, regardless of its branding, that **collects or** processes Measured Body Data and/or Health and Fitness Activity Location Data.⁶⁶⁰ To clarify the reference to consumer devices, it has been explained that the definition does not capture devices that are not sold or otherwise provided to customers for everyday use. Accordingly, the definition of First-Party Wrist-Worn Wearable Devices does not cover “clinical” devices, such as the Verily Study Watch (which Verily developed pre-Transaction), that are designed as a tool for use in clinical trials or other clinical applications and not available for sale to consumers (see footnote 624).⁶⁶¹
 - (c) The definition of “Third-Party Wrist-Worn Wearable Device” has been improved to avoid any discretion on the part of Google as to whether a device qualifies as Android compatible device. Instead of compatible devices, the definition now refers to a Wrist-Worn Wearable Device that is **designed by the third party to pair** with an Android Smartphone and/or Google Smartphone and that is **developed or manufactured** by a Wrist-Worn Wearable Device OEM.
- (1003) In relation to the duration, the Android API Commitment continues to apply for 10 years. The Commission considers, in this respect, that this duration is appropriate. The Commission notes, first, that the market test only revealed limited (and not sufficiently substantiated) concerns that the 10 year duration is proportionate in light of the concerns identified and it is a rather long period in light of the fast moving nature of the markets concerned.
- (1004) As described in Section 10.4.2.3, the remaining shortcomings mentioned by respondents are either unrelated to the Android interoperability competition concern and/or are not even merger-specific. Accordingly, the Commission considers that these alleged shortcomings did not warrant further changes in the Android APIs Commitment. This applies to the following concerns expressed by some respondents:

⁶⁵⁹ GMS is defined as a concept, namely “Google’s proprietary software layer as licensed to OEMs for preinstallation on a compatible Android Smartphone”. As such, the concept set out in the GMS definition already captures any successors of the GMS “product” as it exists today. Notifying Party’s reply to RFI 46, question 4.

⁶⁶⁰ In any case, as a matter of data protection law, collection is a subset of processing. See Article 4(2) of the GDPR (definition of “processing”). Notifying Party’s reply to RFI 46, question 5.

⁶⁶¹ Notifying Party’s reply to RFI 44.

- (a) Non-discrimination with regard to the provision of technical support: This concern has been assessed and dismissed by the Commission in Section 9.5.2.2.1.4.2, since, in essence, Google has not played any important role in the provision of technical support to wearable OEMs in the past.
 - (b) Non-discrimination with regard to access to Wear OS: This concern has been assessed and dismissed by the Commission in Section 9.4.3 where the Commission concluded that Google would not have the ability nor the incentive to foreclose access from Wear OS.
 - (c) Non-discrimination with regard to access to GMS, including access to Google apps integrations on third-party wrist-worn wearable devices: This concern has been assessed and dismissed by the Commission in Section 9.4.4. The Commission notes that Google apps are not available on Third-Party Wrist-Worn Wearable Devices today, as Google has mainly developed Wear OS integrations (and more recently integrations for the Apple Watch).⁶⁶²
- (1005) In conclusion, for the reasons set out in recitals (985) to (1004), the Commission considers that the final version of the Android APIs Commitment entails significant improvements compared to the Initial Phase II Commitments and addresses the competition concerns which emerged during the market investigation.

10.5.2.4. Monitoring Trustee and Dispute Resolution

- (1006) The Commission considers that the provisions set out in the commitments (see Section 9.11.1.4) as regards the role of the Monitoring Trustee and the Dispute Resolution are sufficient to address the concerns identified in the results to the market test and will thus ensure the effective implementation and compliance with the Ads Commitment, Web API Commitment and the Android API Commitment.
- (1007) As regards the Ads Commitment, the improvements already described in Section 10.5.2.1 relating in particular to the possibility for the Monitoring Trustee to assess the adequacy of the technical means through which data separation is obtained, would further reinforce its role and abilities in monitoring the effective implementation of the Commitments.
- (1008) As regards the Web API Commitment, the Commission considers that the specific improvements relating to the role of the Monitoring Trustee ensure the effective implementation of the Commitments. In particular, as explained in Section 10.5.1.2, the Monitoring Trustee will be ex ante notified of any changes to the Terms of Service, will be notified of termination or suspension for non-compliance with the Privacy and Security requirements and the reasons for it and will play a role in the implementation of the Update Mechanism thus ensuring that the Commitment is future proof.
- (1009) No specific improvement was needed as regards the Android APIs Commitment.

⁶⁶² Nevertheless, the Commission notes that GMS apps are covered to the extent that GMS APIs exist that allow the use of a Google app in a third-party app. For instance, Google Maps as app on Third-Party Wrist-Worn Wearable Devices is not covered by the Android APIs Commitment. Nevertheless, the Android APIs Commitment covers Google Maps APIs for use of Google Maps in companion app or for notifications on wearable devices (see Section 9.4.4). The Google Maps APIs are publicly offered in GMS. Therefore, to the extent that these APIs remain available to Android Smartphone App Developers (other than wearable OEMs), they are covered by the commitments and will remain available to wearable OEMs as well.

10.5.3. Conclusion

(1010) The Commission therefore concludes that the Final Commitments are capable of eliminating the Commission's competition concerns and are capable of being implemented effectively within a short period of time. Moreover, they are proportionate to the competition concerns identified by the Commission.

11. CONCLUSION ON THE COMPATIBILITY OF THE TRANSACTION WITH THE INTERNAL MARKET

(1011) In light of the above, the Commission considers that the Final Commitments eliminate the Commission's serious doubts as to the compatibility of the Transaction in respect of the supply of online search advertising and sub-markets/segments thereof, and online display advertising, and sub-markets/segments thereof, in all EEA countries and in the UK. In addition, the Final Commitments remove all other possible competition concerns likely resulting from the Transaction in different EEA countries and the UK, as identified by the Commission, namely with respect to: (i) supply of online search and display advertising services (including intermediation services), (ii) the digital healthcare markets, and (iii) interoperability with Android OS. The Transaction should therefore be declared compatible with the internal market and the EEA Agreement as it will not create any significant impediment to effective competition in all relevant markets in which competition concerns were initially identified.

12. CONDITIONS AND OBLIGATIONS

(1012) Pursuant to the second subparagraph of Article 8(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.

(1013) The fulfilment of the measure that gives rise to the structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market is no longer applicable. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(6) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.

(1014) In accordance with the basic distinction described in recital (1013) as regards conditions and obligations, this Decision should be made conditional on the full compliance by the Notifying Party with Section A (including Annexes 1 to 4 and Annex 6) and Section F (to the extent the definitions in Section F contain operative provisions) of the Final Commitments. All other Sections of the Final Commitments (including Annex 5) should be obligations within the meaning of Article 8(2) of the Merger Regulation. The full text of the commitments is attached as Annex A to this Decision and forms an integral part thereof.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Google LLC acquires sole control of Fitbit, Inc. within the meaning of Article 3(1)(b) of the Merger Regulation is hereby declared compatible with the internal market and the EEA Agreement.

Article 2

Article 1 is subject to compliance with the conditions set out in Sections A (including Annexes 1 to 4 and Annex 6) and F, to the extent the definitions contain operative provisions, of Annex A to this Decision.

Article 3

Google LLC shall comply with the obligations set out in Sections B to F (including Annex 5) of Annex A to this Decision, to the extent not referred to in Article 2 of this Decision.

Article 4

This Decision is addressed to:

Google LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043
United States

Alphabet Inc.
1600 Amphitheatre Parkway
Mountain View, CA 94043
United States

Done at Brussels, 17.12.2020

For the Commission

(Signed)
Margrethe VESTAGER
Executive Vice-President

November 4, 2020

**Case M.9660 – GOOGLE / FITBIT
COMMITMENTS TO THE EUROPEAN COMMISSION**

Pursuant to Article 8(2) and 10(2) of Council Regulation (EC) No 139/2004 (the “*Merger Regulation*”), Google LLC hereby enters into the following Commitments (the “*Commitments*”) vis-à-vis the European Commission (the “*Commission*”) with a view to rendering its proposed acquisition of Fitbit, Inc. (the “*Concentration*”) compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission’s decision pursuant to Article 8(2) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the “*Decision*”), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under the Merger Regulation and under Commission Regulation (EC) No 802/2004.

Section A. Commitments

A.1 Ads Commitments

1. Google commits not to use any Measured Body Data or Health and Fitness Activity Location Data in or for Google Ads.
2. Google commits to maintain Data Separation.
3. Compliance with the commitments set out in paragraphs 1 and 2 above is to be achieved through a technical structure for data storage consisting of auditable technical and process controls, reflected in the following approach:
 - a. **Fitbit Account data.** To the extent either Measured Body Data or Health and Fitness Activity Location Data is written to a Fitbit Account, and this data is not subsequently transferred to a Google Account following the close of the Concentration, this data will not be available to Google Ads. Google commits to maintain existing separations that are in place as of the Effective Date between (i) any data that is not transferred to a Google Account and (ii) any dataset or data storage within Google. For clarity, the foregoing does not prohibit Fitbit’s use of Google solely as a data processor following the closing of the Concentration, pursuant to a customary data controller to processor agreement, as permitted pursuant to the General Data Protection Regulation.
 - b. **Maintenance of an Access Restricted Data Store.** Google will maintain a strictly permissioned virtual storage environment within Google. Measured Body Data and Health and Fitness Activity Location Data sent to Google (i) as part of any migration from a Fitbit Account to a Google Account, or (ii) having been

collected using a Google Account from future First-Party Wrist-Worn Wearable Devices, First-Party Connected Scales or Fitbit Other Devices, will be stored in such an Access Restricted Data Store. Access to the compartment of Google's backend storage layer housing such an Access Restricted Data Store will be controlled through Access Permissioning.

c. **Implementation of Access Permissioning to the Access Restricted Data Store.**

Google will restrict access to such an Access Restricted Data Store through Access Permissioning. Access Permissioning will apply to both individuals and Google Services and Fitbit Services that seek to access Measured Body Data or Health and Fitness Activity Location Data stored in the Access Restricted Data Store:

- i. **Individual level access:** Google will limit individual-level Access Permissioning to an authorized, restricted group of personnel for engineering, product, and other related business activities, such as product development or improvement, research, and other service provision, maintenance, or enhancement work, excluding any uses in or for Google Ads. Google will require a fully documented compliance review and approval process for the grant of Access Permissioning. Google will log each access session in Individual Level Access Documentation, which will include at least the criteria set out in **Annex 1**.
- ii. **Service level access:** Google will limit Access Permissioning to Google Services or Fitbit Services that comply with the Data Protection System, thus excluding any uses in or for Google Ads. Any such access will be documented in Service Level Access Documentation, which will include, at least, the criteria set out in **Annex 2**. Google will log each Service that is granted access in Auditable Service Logs.

d. **Implementation of a Data Protection System.** To the extent that a Google Service accesses Measured Body Data or Health and Fitness Activity Location Data, Google will apply a Data Protection System to ensure Data Separation of the accessed data, reflected in the following approach:

- i. Measured Body Data and Health and Fitness Activity Location Data will either be stored in an Access Restricted Data Store or, if it is stored outside an Access Restricted Data Store, in Temporary Logs and subject to a retention and deletion plan supervised by the Monitoring Trustee. Measured Body Data or Health and Fitness Activity Location Data that a Google Service accesses as a result of an integration between a Google Service and the Fitbit Web API following the Effective Date is subject to the requirements of Data Separation.

- ii. Google will strictly permission these Temporary Logs to enable only access pursuant to paragraph 3(c) above. For the avoidance of doubt, the Temporary Logs will not be accessible to Google Ads.
 - iii. Google will maintain a Service Level Access Map.
4. The technical means by which Google achieves Data Separation may change over time to reflect evolving technologies and standards. Any changes will be subject to supervision by the Monitoring Trustee.
5. Google commits to present each EEA User the choice to grant or deny use by Other Google Services of any Measured Body Data stored in their Google Account or Fitbit Account.
6. The commitment set out in paragraph 5 above is without prejudice to, and should not be interpreted based on, any privacy or data protection laws or regulations, and does not come under the jurisdiction or purview of any privacy or data protection regulators.

A.2 Web API Access Commitment

7. Google commits to maintaining access, subject to user consent consistent with applicable laws and without charge for access, to Supported Measured Body Data for API Users subject to the following conditions:
 - a. API Users' continued compliance with the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via the Relevant Google API).
 - b. API Users' continued compliance with the Privacy and Security Requirements.
 - c. Google can terminate access for violation of these requirements where Google has established such a violation or temporarily suspend access where Google has a reasonable belief of violation of such requirements. Google will notify the termination or suspension to the Monitoring Trustee within 14 days and indicate the reason for the termination or suspension.
8. Access may be provided through: (i) the existing Fitbit Web API (conditioned on the user whose Supported Measured Body Data are being accessed using a Fitbit Account); or (ii) the Relevant Google API (conditioned on the user whose Supported Measured Body Data are being accessed using a Google Account).
9. Following the Effective Date and during the term of the Commitments, Measured Body Data types may be added into the scope of Supported Measured Body Data, as set forth in the Update Mechanism.

A.3 Android APIs Commitments

10. Google commits to making the Core Interoperability APIs available, without charge for access, under the same license terms and conditions that apply to all other Android APIs that Google makes available as part of AOSP and on a non-discriminatory basis, meaning without differentiating their availability or functionality depending on whether they are accessed by a First-Party Wrist-Worn Wearable Device or Companion App or a Third-Party Wrist-Worn Wearable Device or Companion App.
11. Google commits not to degrade the Core Interoperability APIs by reducing their functionality to Third-Party Wrist-Worn Wearable Devices relative to First-Party Wrist-Worn Wearable Devices.
12. Google further commits:
 - a. Not to discriminate against Wrist-Worn Wearable Device OEMs by withholding, denying, or delaying Wrist-Worn Wearable Device OEMs' access to functionalities of Android APIs that Google makes generally available to other Android Smartphone App Developers for use with an Android App.
 - b. Not to discriminate between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in relation to changing, replacing, or retiring Android APIs.
 - c. Not to discriminate between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in terms of the access it provides to Developer Previews.
 - d. Not to discriminate between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in terms of the access it provides to Developer Documentation.
13. Google will not circumvent these requirements:
 - a. By discriminating between Wrist-Worn Wearable Device OEMs and other Android Smartphone App Developers in terms of warnings, error messages, or permission requests displayed in Android Apps.
 - b. Through conditions imposed on access to the Google Play Store by Wrist-Worn Wearable Device OEMs' Companion Apps (*e.g.*, regarding the use of data gathered by the Wrist-Worn Wearable Device OEM or the use of Android APIs by the Third-Party Wrist-Worn Wearable Device).
14. For the avoidance of doubt, Google shall be permitted under these Commitments to:
 - a. Make available, exclusively for API Development and Testing purposes, in-development Android APIs internally within Google, or to certain third parties.

- b. Develop features associated with first-party Google products, apps, or services, for use solely with a First-Party Wrist-Worn Wearable Device, or as part of a partnership with a third party, provided that the implementation of such features shall not impede in any way the functioning of Android APIs for Third-Party Wrist-Worn Wearable Devices. For the further avoidance of doubt, any third party shall remain free similarly to develop and make available features associated with their own first-party products, apps, or services, including for use solely on their own first-party Wrist-Worn Wearable Devices in a proprietary software layer. Nothing in these Commitments shall require Google to license versions of its first-party applications or services for preinstallation or download onto a Third-Party Wrist-Worn Wearable Device.
15. Google shall not be in breach of these Commitments in the event of any degradation of interoperability between an Android Smartphone and a Third-Party Wrist-Worn Wearable Device that is solely or primarily attributable to any acts or omissions of an Android OEM, Android Smartphone App Developer, or Wrist-Worn Wearable Device OEM.

Section B. Monitoring Trustee

B. 1 Appointment procedure

16. No later than the date of closing of the Concentration, Google shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee.
17. The Monitoring Trustee shall:
- a. At the time of appointment, be independent of the Parties and each of their Affiliated Undertakings;
 - b. Possess the necessary experience, competence, and qualifications to carry out its mandate. In particular, the Monitoring Trustee shall possess experience, competence, and qualifications in relation to cybersecurity, data governance, information technology systems (including algorithms), data protection, APIs, and privacy, as applicable, including via the technical expert appointed pursuant to paragraph 28 below; and
 - c. Neither have nor become exposed to a Conflict of Interest.
18. The Monitoring Trustee shall be remunerated by Google in a way that does not impede the independent and effective fulfillment of its mandate.
19. *Proposal by Google.* No later than four weeks after the Effective Date, Google shall submit the name or names of one or more natural or legal persons whom Google proposes to appoint as the Monitoring Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons

proposed as Monitoring Trustee fulfil the requirements set out in paragraph 17 and shall include:

- a. The full terms of the proposed mandate, which shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments; and
- b. The outline of a work plan that describes how the Monitoring Trustee would carry out its duties under these Commitments.

20. *Approval or rejection by the Commission.* The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, Google shall appoint or cause to be appointed the person or persons concerned as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Google shall be free to choose the Monitoring Trustee to be appointed from among the names approved. The Monitoring Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

21. *New proposal by Google.* If all the proposed Monitoring Trustees are rejected, Google shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with paragraphs 17 and 19 of these Commitments.

22. *Monitoring Trustee nominated by the Commission.* If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a Monitoring Trustee, whom Google shall appoint, or cause to be appointed, in accordance with a Monitoring Trustee mandate approved by the Commission.

B. 2 Functions of the Monitoring Trustee

23. The Monitoring Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Monitoring Trustee or Google, give any orders or instructions to the Monitoring Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

24. The Monitoring Trustee shall:

- a. Monitor the performance of the Commitments by Google, including by auditing on a semiannual basis the Audit Points detailed in **Annex 3**;
- b. Assess the technical means through which Google generates access logs and synthesizes such logs and access information into Auditable Service Logs and Auditable Individual Logs that are provided to the Monitoring Trustee for review;

- c. Propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;
- d. Provide to the Commission a written report, sending Google a non-confidential copy at the same time, within fifteen working days after the end of each six-month period so that the Commission can assess whether the Commitments are being complied with;
- e. Propose, as applicable, to Google such measures as the Monitoring Trustee considers necessary to ensure Google's compliance with the Commitments;
- f. Promptly report in writing to the Commission, sending Google a non-confidential copy at the same time, if it concludes on reasonable grounds that Google has failed to comply with the Commitments;
- g. Act as a contact point for questions from third parties about the nature and scope of the Commitments; and
- h. Assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.

B. 3 Duties and obligations of the Parties

25. Google shall provide and shall cause its advisors to provide the Monitoring Trustee with all such cooperation, assistance and information as the Monitoring Trustee may reasonably require to perform its tasks. The Monitoring Trustee shall have full and complete access to any of Google's books, records, documents, management or other personnel, facilities, sites and technical information reasonably necessary for fulfilling its duties under the Commitments and Google shall provide the Monitoring Trustee upon request with copies of any documents except where such disclosure would give rise to a loss of any applicable legal privilege. At any time it plans to start processing data that it reasonably considers qualifies as Measured Body Data or Health and Fitness Activity Location Data, Google shall provide the Monitoring Trustee with a proposed updated **Annex 4**.
26. The Monitoring Trustee shall be entitled to share reports prepared for and provided to the Commission with the DPC. Before sharing any such reports with the DPC, the DPC shall confirm in writing that it will protect any Confidential Information according to law.
27. Google shall indemnify the Monitoring Trustee and its employees and agents (each an "Indemnified Party") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Google for, any liabilities arising out of the performance of the Monitoring Trustee's duties under the Commitments, except to the extent that such liabilities result from the willful default, recklessness, gross negligence or bad faith of the Monitoring Trustee, its employees, agents or advisors.

28. At the expense of Google, the Monitoring Trustee shall appoint a technical expert and may appoint other advisors, subject to Google's approval (this approval not to be unreasonably withheld or delayed) if the Monitoring Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the mandate, provided that any fees and other expenses incurred by the Monitoring Trustee are reasonable. Should Google refuse to approve the technical expert and/or advisors proposed by the Monitoring Trustee the Commission may approve the appointment of such technical expert and/or advisors instead, after having heard Google. Only the Monitoring Trustee shall be entitled to issue instructions to the technical expert and/or advisors. Paragraph 27 of these Commitments shall apply *mutatis mutandis*.
29. Google agrees that the Commission may share Confidential Information proprietary to Google with the Monitoring Trustee. The Monitoring Trustee shall not disclose Confidential Information received from the Commission, Google, or Fitbit to any third party other than the Commission, a technical expert appointed pursuant to paragraph 28, and the DPC pursuant to paragraph 26. The principles contained in Article 17(1) and (2) of the Merger Regulation apply *mutatis mutandis*.
30. Google agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition and they shall inform interested third parties of the identity and the tasks of the Monitoring Trustee.

B. 4 Replacement, discharge and reappointment of the Monitoring Trustee

31. If the Monitoring Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Monitoring Trustee to a Conflict of Interest:
- a. The Commission may, after hearing the Monitoring Trustee and Google, require Google to replace the Monitoring Trustee; or
 - b. Google may, with the prior approval of the Commission, replace the Monitoring Trustee.
32. If the Monitoring Trustee is removed according to paragraph 31 of these Commitments, the Monitoring Trustee may be required to continue its function until a new Monitoring Trustee is in place to whom the Monitoring Trustee has effected a full hand over of all the relevant information. The new Monitoring Trustee shall be appointed in accordance with the procedure referred to in paragraphs 16–22 of these Commitments.
33. Unless removed according to paragraph 31 of these Commitments, the Monitoring Trustee shall cease to act as Monitoring Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Monitoring Trustee has been entrusted have been implemented.

Section C. Dispute Resolution

34. In the event an API User or Wrist-Worn Wearable Device OEM informs Google and the Monitoring Trustee in writing that Google has either denied or revoked its access in violation of Google's obligations arising from the Web API Access Commitment or failed to comply with its obligations arising from the Android APIs Commitments, the Fast-Track Dispute Resolution Procedure described in **Annex 5** shall apply.

Section D. General Provisions

35. Google shall be permitted under these Commitments to take steps to: (a) meet any applicable law, regulation, legal process, or enforceable governmental request; (b) detect, prevent, or otherwise address fraud, security, or technical issues; (c) improve user privacy or security; or (d) protect against harm to the rights, property, or safety of Google, Google users, or the public as required or permitted by law.

36. The Commitments shall take effect upon the Effective Date.

37. The Commitments shall remain in effect for ten years from the Effective Date.

38. The Commission may, during the final year of the initial ten year period, decide to extend the duration of paragraphs 1 to 4 of the Ads Commitments and any associated clauses or definitions that relate to these paragraphs of the Commitments, by up to an additional ten years having justified the necessity for such an extension.

Section E. Review

39. The Commission may in response to a reasoned request from Google showing good cause, waive, modify, or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall at the same time send a non-confidential copy of the report to Google. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section F. Definitions

40. For the purpose of the Commitments, the following terms shall have the following meaning:

Access Permissioning: the auditable control of access rights to an Access Restricted Data Store.

Access Restricted Data Store: a strictly permissioned virtual data storage environment within Google that holds Measured Body Data and Health and Fitness Activity Location Data, separate from any dataset within Google accessible for use in or for Google Ads. If Google creates any dataset that stores Measured Body Data and/or Health and Fitness

Activity Location Data together with another Google dataset, that dataset shall be treated either as an Access Restricted Data Store or as Temporary Logs.

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings.

Android APIs: the APIs, including any improvements or bug fixes, that Google licenses to Android OEMs without charge for access, either as part of AOSP or GMS, for use by Android Smartphone App Developers with an Android App.

Android App: a mobile application designed to run on a compatible Android Smartphone.

Android Compatibility Definition Document: the document published at <https://source.android.com/compatibility/cdd> (or any successor site).

Android OEM: any actual or potential supplier of Android Smartphones, excluding the Parties.

Android Smartphone: a handheld device (as defined in the Android Compatibility Definition Document) running AOSP.

Android Smartphone App Developer: a third-party developer of an Android App.

AOSP: the open-source Android binary code available at <https://source.android.com> (or any successor site) or any successor open-source smartphone operating system.

API Development and Testing: the process by which Google develops and tests new versions of Android APIs, prior to their simultaneous release to Android Smartphone App Developers. For the avoidance of doubt, this may include Google's use of a lead device to develop and test new software.

API User: any third party with a software application distributed or made available to EEA Users that requests access to the Fitbit Web API or the Relevant Google API, meets the Privacy and Security Requirements, and agrees to the Fitbit Platform Terms of Service (where access is made available via the Fitbit Web API) or the Terms of Service and the Services User Data Policy (where access is made available via the Relevant Google API).

Audit Points: the minimum data and information points that the Monitoring Trustee will audit on a regular basis.

Auditable Individual Logs: a list of all individuals that have accessed an Access Restricted Data Store or Temporary Logs and the date of that access.

Auditable Service Logs: a list of all Google Services that have access to an Access Restricted Data Store or Temporary Logs.

Benchmark OEMs: the 5 largest suppliers of consumer wrist-worn wearable devices that process the data types that qualify as Measured Body Data and/or Health and Fitness Activity Location Data if processed by Google or Fitbit as measured in the Industry Report, excluding Fitbit, Google, and any Wrist-Worn Wearable Device OEMs using Wear OS and that provide developers with access to their health and wellness data solely through the Fitbit Web API or the Relevant Google API.

Companion App: a mobile app available for an Android Smartphone whose functionality includes but is not limited to pairing, notification bridging, and device management and settings for a Wrist-Worn Wearable Device.

Confidential Information: any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

Conflict of Interest: any conflict of interest that impairs the Monitoring Trustee's objectivity and independence in discharging its duties under the Commitments.

Core Interoperability APIs: Android APIs licensed as part of AOSP offering at least the functionality of Android APIs that currently exist in AOSP, including any improvements of those functionalities as a result of updates or bug fixes, that, when properly implemented by an Android OEM on an Android Smartphone, and with appropriate user consent, provide the means for a Third-Party Wrist-Worn Wearable Device (or, as appropriate, associated Companion App) to:

- a. Connect to the Android Smartphone via Bluetooth (or any successor technology), maintain such a connection, and transfer data between the Wrist-Worn Wearable Device and the Android Smartphone;
- b. Scan for any nearby Wrist-Worn Wearable Devices and/or make the Android Smartphone visible to those devices;
- c. Display and act upon notifications (including phone calls, text messages, and calendar events) from the Android Smartphone on the connected Wrist-Worn Wearable Device;
- d. Read, initiate, and reply to a text message sent to the paired Android Smartphone;
- e. Display controls for initiating, answering or declining phone calls on the paired Android Smartphone;
- f. Display, initiate, and edit calendar events on the paired Android Smartphone;
- g. Access and control the camera on the paired Android Smartphone;

- h. Access a geolocation sensor (*e.g.*, GPS) on the paired Android Smartphone that is capable of providing geolocation coordinates;
- i. Control media playback on the paired Android Smartphone; and
- j. View and sync contacts stored on the paired Android Smartphone.

Data Protection System: the auditable set of requirements supervised by the Monitoring Trustee to ensure that Measured Body Data and Health and Fitness Activity Location Data to which a Google Service gains access is permissioned in a manner that prevents its use in or for Google Ads.

Data Separation: the auditable holding separate of Measured Body Data and Health and Fitness Activity Location Data from any dataset within Google accessible for use in or for Google Ads.

Developer Documentation: information that Google makes generally available to facilitate the use of Android APIs, of the kind that is currently provided for existing APIs on developer.android.com (or any successor site) and <https://developers.google.com/android/> (or any successor site).

Developer Previews: a process by which Google makes forthcoming Android software available to Android Smartphone App Developers to facilitate their development of apps for an upcoming Android release.

DPC: Irish Data Protection Commission, the Irish supervisory authority for the General Data Protection Regulation (GDPR).

EEA: the 27 Member States of the European Union (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden), Iceland, Liechtenstein and Norway as well as the United Kingdom.

EEA User: a user that has during the period of the Commitments been (i) located in the EEA as determined by Google Account information or Fitbit Account information, as applicable, or (ii) located outside of the EEA according to Google Account information or Fitbit Account information, as applicable, but whose IP address associated with use of Google or Fitbit Health and Fitness Apps, as applicable, has been located in the EEA for more than 30 consecutive days.

Effective Date: the date of adoption of the Decision.

Equivalent Data Type: a commonly defined and standardized consumer health and fitness data type sent to a supplier of consumer wrist-worn wearable devices from sensors on such supplier's wrist-worn wearable devices or that is manually inputted into such supplier's apps usable with such devices.

First-Party Connected Scale: any consumer connected scale for measuring a user's weight developed or manufactured by Fitbit or Google, regardless of its branding, that collects or processes Measured Body Data and/or Health and Fitness Activity Location Data. For the avoidance of doubt, this definition does not capture devices that are not sold or otherwise provided to customers for everyday use.

First-Party Wrist-Worn Wearable Device: any consumer wrist-worn wearable device developed or manufactured by Fitbit or Google, regardless of its branding, that collects or processes Measured Body Data and/or Health and Fitness Activity Location Data. For the avoidance of doubt, this definition does not capture devices that are not sold or otherwise provided to customers for everyday use.

Fitbit: Fitbit, Inc. or any Affiliated Undertakings of Fitbit, Inc, or any successor entities.

Fitbit Account: a user account subject to the Fitbit Terms of Service and Fitbit Privacy Policy during the term of the Commitments.

Fitbit Other Device: any device developed or in development or manufactured by Fitbit at the Effective Date that is not a First-Party Wrist-Worn Wearable Device or a First-Party Connected Scale and that collects or processes Measured Body Data and/or Health and Fitness Activity Location Data, such as Fitbit Clips.

Fitbit Platform Terms of Service: the terms of service applicable to the Fitbit Platform available at: <https://dev.fitbit.com/legal/platform-terms-of-service/>, or any successor site, as may be updated from time-to-time, for instance to comply with changes to applicable privacy laws or regulations. Any updates to the Fitbit Platform Terms of Service following the Effective Date specific to access to the Fitbit Web API will be consistent with the spirit of the Web API Access Commitment. Google will notify the Monitoring Trustee of changes to these Fitbit Platform Terms of Service ten days prior to their becoming effective, unless the change is urgent in which case Google will notify the Monitoring Trustee as soon as reasonably practicable and no later than five days after such terms become effective.

Fitbit Service: any product or service (including algorithms) operated by Fitbit at any time during the term of the Commitments.

Fitbit Web API: Fitbit's web-based API as described at <https://dev.fitbit.com/build/reference/web-api/> or any successor site that enables third-party applications and services to access and modify Fitbit users' Supported Measured Body Data on their behalf subject to the Fitbit Platform Terms of Service.

GMS: Google's proprietary software layer as licensed to OEMs for preinstallation on a compatible Android Smartphone.

Google: Google LLC or any Affiliated Undertakings of Google LLC.

Google Account: a user account (as described in account.google.com or any successor site) created subject to the Google Terms of Service and Google Privacy Policy and used during the term of the Commitments.

Google Ads: any current or future Google Service providing search advertising, display advertising, and advertising intermediation, including advertising measurement, regardless of the property on which ads are displayed, including any Google owned and operated properties. For the avoidance of any doubt, any Fitbit Services providing search advertising, display advertising, and advertising intermediation developed, offered, or sold following closing of the Concentration would constitute Google Ads for the purposes of these Commitments. Google Ads currently includes the following services: Google Ads (includes Google Display Network, Google Search Network, YouTube Ads, Gmail Ads), Google Marketing Platform (includes Display & Video 360, Search Ads 360, Campaign Manager, Google Analytics, Google Tag Manager, Optimize, Data Studio, Google Surveys), AdSense (includes AdSense for Search, AdSense for Shopping, AdSense for Content, AdSense for Games, AdSense for Video, AdSense for Domains), AdMob (includes Open Bidding), Google Ad Manager (includes Open Bidding, Network Bidding, Dynamic Ad Insertion), Authorized Buyers, Ad Connector, Ads Data Hub, Google Hotel Ads, Google Shopping Ads, Local Inventory Ads, Manufacturer Center, Merchant Center, and Waze Local Ads.

Google or Fitbit Health and Fitness App: a Google or Fitbit web, mobile or wearable application used with either a Google Account or a Fitbit Account and designed to enable a registered user to measure, track, and manage their health and fitness using Measured Body Data and/or Health and Fitness Activity Location Data. As of the Effective Date these consist of the iOS, Android, and WearOS versions of the Google Fit app and the iOS, Android, Amazon, and Windows versions of the Fitbit apps, including the Fitbit Coach and Fitbit Premium services.

Google Play Store: Google's app store for Android Smartphones, available at: <https://play.google.com/store>, or any successor Google app store for Android Smartphones.

Google Service: any product or service (including algorithms) operated by Google at any time during the term of the Commitments. For the avoidance of any doubt, Google Services include any product or service Google may develop in the future, including via acquisitions, regardless of its branding.

Google Smartphone: an Android Smartphone that is developed or manufactured by Google.

Health and Fitness Activity Location Data: any data (including processed data and derived data) relating to identified or identifiable (as defined under applicable data protection laws) EEA Users' geolocation collected by a health and fitness activity tracking feature on Google or Fitbit Health and Fitness Apps (or any replacement or successor Google or Fitbit Health and Fitness Apps), where such geolocation data is

collected and sent to Google or Fitbit from the First-Party Wrist-Worn Wearable Device, First-Party Connected Scale or Fitbit Other Devices. **Annex 4** lists the data types that can qualify as Health and Fitness Activity Location Data at the Effective Date. **Annex 4** will be updated on a semiannual basis, with the supervision of the Monitoring Trustee, and at such other times as the Monitoring Trustee may reasonably request, to include other data types meeting the definition of Health and Fitness Activity Location Data introduced during the term of the Commitments. Health and Fitness Activity Location Data does not include (i) any data (including derived data) relating to identified or identifiable EEA Users' geolocation collected by any apps or services other than Google or Fitbit Health and Fitness Apps (or any replacement or successor Google or Fitbit Health and Fitness Apps), including background geolocation data; or (ii) data collected from participating Google Accounts or Fitbit Accounts, as the case may be, operated by Google employees or Fitbit employees as part of internal Google Services or Fitbit Services testing or development, including to test compliance with these Commitments.

Individual Level Access Documentation: a record of Google's approval process for applying Access Permissioning to individuals.

Industry Report: Global share of sales (excluding sales in the People's Republic of China) of wrist-worn wearable devices by volume over the most recent four quarters as measured by the most current IDC Worldwide Quarterly Wearable Device Tracker or, were IDC to suspend publication of this tracker, an equivalent industry report.

Measured Body Data: any data (including processed data and derived data) relating to identified or identifiable (as defined under applicable data protection laws) EEA Users that measures and tracks the user's body functions, physical condition, fitness activities, nutrition or wellness, and similar functions, and that is sent to:

- a. Google or Fitbit, from sensors on First-Party Wrist-Worn Wearable Devices, First-Party Connected Scales, or Fitbit Other Devices; or
- b. Fitbit, having been manually inputted into a Fitbit Account through a Fitbit Health and Fitness App; or
- c. Google, having been manually inputted into a Google Account through a Google Health and Fitness App where such app is usable with First-Party Wrist-Worn Wearable Devices, First-Party Connected Scales, or Fitbit Other Devices.

Annex 4 lists the data types that qualify as Measured Body Data as of November 2, 2020. **Annex 4** will be updated on a semiannual basis, with the supervision of the Monitoring Trustee, and at such other times as the Monitoring Trustee may reasonably request, to include other data types meeting the definition of Measured Body Data introduced during the term of the Commitments. Measured Body Data does not include data collected from participating Google Accounts or Fitbit Accounts, as the case may be, operated by Google employees or Fitbit employees as part of internal Google Services or Fitbit Services testing or development, including to test compliance with these Commitments.

For the avoidance of doubt, and to avoid circumvention of the Ads Commitments, if Google or Fitbit knowingly and intentionally transmits Measured Body Data to a third party for the purpose of receiving such data back to use in or for Google Ads, such received data shall also constitute Measured Body Data.

Monitoring Trustee: one or more natural or legal persons who are approved by the Commission and appointed by Google, and who have the duty to carry out the functions specified in the Commitments for a Monitoring Trustee.

Other Google Services: any Google Service (such as Google Search, Google Maps, Google Assistant, and YouTube) other than:

- a. Any Google Service or Fitbit Service whose primary purpose is related to users' health and fitness or healthcare;
- b. Common or shared Google infrastructure and internal systems, tools, processes, programs, and services (e.g., hosting, network infrastructure, security or any other internal tools (including Google Takeout), platforms and operating systems, backup storage, personnel, or support services (including customer support), payment processing, and fraud prevention, technical engineering support, security, and troubleshooting services);
- c. Sharing with or use by Google of Measured Body Data where reasonably necessary for Google to: (a) meet any applicable law, regulation, legal process, or enforceable governmental request; (b) enforce applicable terms of service, including investigation of potential violations; (c) detect, prevent, or otherwise address fraud, security, or technical issues; or (d) protect against harm to the rights, property or safety of Google, Google users, or the public as required or permitted by law.

Parties: Google and Fitbit.

Privacy and Security Requirements:

- a. **Primary Purpose:** The primary purpose for requesting access and use of data must be related to users' health and fitness or healthcare;
- b. **Minimum and Proportionate Access:** The application or service must request only the minimum access to user data necessary to perform the functionality;
- c. **User Notice:** The application or service must provide adequate notice to the user about their data being accessed and used, prior to such access and use;
- d. **Express and Informed User Consent:** The application or service must obtain the user's express and informed consent under applicable data protection laws;
- e. **Purpose Limitations:** The application or service may only use and transfer data for the permitted purposes for which the API User obtained access to the data and

only to the extent necessary, for security purposes, to comply with applicable laws, or with express and informed user consent. The application or service may not use or transfer the data for prohibited purposes, such as personalized advertising purposes, to determine credit-worthiness, or provide the data to data brokers, advertising platforms, or other information resellers;

- f. **Security Requirements:** API Users are required to handle data securely in accordance with industry standard security requirements and practices. To ensure compliance with security requirements, Google may require third parties seeking to access Supported Measured Body Data to undergo standardized security assessments, for which API Users may incur a charge to be paid to the third parties conducting the security assessment.

Relevant Google API: the existing Google Fit APIs, described at: <https://developers.google.com/fit>, or any successor site, or a successor Google API that enables third-party applications and services to access and modify Measured Body Data subject to Google's Terms of Service and offering substantially similar or increased functionality as the Fitbit Web API.

Service Level Access Documentation: a record of Google's approval process for applying Access Permissioning to Google Services.

Service Level Access Map: a record of all of the Google Services with service-level access pursuant to paragraph 3.c.ii and the storage locations in Google (*e.g.*, a Temporary Log) in which those services store Measured Body Data or Health and Fitness Activity Location Data they may have accessed.

Services User Data Policy: the user data policies applicable to the use of the Relevant Google API (*e.g.*, the Google API User Data Policy available at <https://developers.google.com/terms/api-services-user-data-policy> and the Fit Developer Guidelines available at <https://developers.google.com/fit/overview>) as may be updated from time-to-time, for instance to comply with changes to applicable privacy laws or regulations. Any updates to the Services User Data Policy following the Effective Date specific to access to the Relevant Google API must be consistent with the spirit of the Web API Access Commitment. Google will provide the Monitoring Trustee on a semiannual basis a list of the changes, if any, that have been made to the Services User Data Policy in the preceding six months.

Supported Measured Body Data: as of the Effective Date, Supported Measured Body Data consists of Measured Body Data collected from any global Google or Fitbit user (and not just from EEA Users) and made available to third parties through the Fitbit Web API under the Fitbit Platform Terms of Service. Such data types are listed in **Annex 6**. The types of Measured Body Data that can constitute Supported Measured Body Data shall be updated pursuant to the Update Mechanism.

Supported Measured Body Data excludes:

- a. Data collected solely for the purpose of product testing or development for Google Services or Fitbit Services (including as part of healthcare partner collaborations or early access end user testing), health-related research efforts (such as clinical research studies), or to test compliance with this Commitment;
- b. Data subject to applicable health or privacy laws and regulations that Google or Fitbit may not lawfully make available to third parties under such applicable laws;
- c. Data exclusively made available to users as part of a paid service (such as Fitbit Premium);
- d. Data collected separately by Verily, Calico or other separately operated Alphabet companies as part of their separate business and product activities;
- e. Data collected from Google Services or Fitbit Services offered solely outside of the EEA.

Temporary Logs: a strictly permissioned, time-limited virtual dataset that contains Measured Body Data and/or Health and Fitness Activity Location Data that have been accessed by Google Services.

Terms of Service: the terms of service applicable to the use of the Relevant Google API available at: <https://developers.google.com/fit>, or any successor site, as may be updated from time to time, for instance to comply with changes to applicable privacy laws or regulations. Any updates to the Terms of Service following the Effective Date specific to access to the Relevant Google API must be consistent with the spirit of the Web API Access Commitment. Google will notify the Monitoring Trustee of changes to these Terms of Service ten days prior to their becoming effective, unless the change is urgent in which case Google will notify the Monitoring Trustee as soon as reasonably practicable and no later than five days after such terms become effective.

Third-Party Wrist-Worn Wearable Device: a Wrist-Worn Wearable Device that is designed by the third party to pair with an Android Smartphone and/or Google Smartphone and that is developed or manufactured by a Wrist-Worn Wearable Device OEM.

Update Mechanism: following the Effective Date, Measured Body Data either (i) of a type listed in **Annex 4** as of the Effective Date; or (ii) of a type newly made available after the Effective Date to users in a Google or Fitbit Health and Fitness App, will come to constitute Supported Measured Body Data if: (i) such data meets the conditions of Supported Measured Body Data set forth above; and (ii) an Equivalent Data Type is made available to developers without charge through publicly documented APIs by at least 3 of the 5 Benchmark OEMs.

On a quarterly basis following the Effective Date, Google will report to the Monitoring Trustee if a new data type meets the requirements in the preceding sentence. Such a data type will qualify as Supported Measured Body Data no later than one calendar year from the date of such reporting to the Monitoring Trustee, unless the data type met the requirements of the Update Mechanism within the first calendar year following the Effective Date, in which case that data type will qualify as Supported Measured Body Data no later than two calendar years from the Effective Date. **Annex 6** will be updated on a semi-annual basis or at the request of the Monitoring Trustee to include any additional types of Supported Measured Body Data that arose during that period.

Wrist-Worn Wearable Device: any consumer wrist-worn wearable device that is compatible with an Android Smartphone and/or Google Smartphone and that processes data types that would qualify as Measured Body Data and/or Health and Fitness Activity Location Data if processed by Google or Fitbit. For the avoidance of doubt, this definition does not capture devices that are not sold or otherwise provided to customers for everyday use.

Wrist-Worn Wearable Device OEM: any actual or potential supplier of Wrist-Worn Wearable Devices other than the Parties.

[Signed]

duly authorised for and on behalf of Alphabet Inc. and Google LLC

Annex 1 – Data Points Google Will Document With Respect To Individual Access

1. Individual's name
2. Individual's Google ID
3. Individual's role
4. Confirmation that individual is not in a reporting line related to Google Ads
5. Reason for Individual receiving access
6. Date of access

Annex 2 – Data Points Google Will Document With Respect to Service-Level Access

1. Name of Google Service receiving access (*e.g.*, Assistant)
2. List of data types from **Annex 4** the Google Service can access from the ARDS
3. Reasons for Google Service receiving access
4. Start date of access
5. The Google Service's compliance proposal for adhering to the Data Protection System. This proposal will include at a minimum:
 - a. An explanation of the process through which the Google Service will ensure that accessed Measured Body Data and Health and Fitness Activity Location Data will be stored in an Access Restricted Data Store or, if it is stored outside an Access Restricted Data Store, will be stored in Temporary Logs
 - b. Type of storage location of such relevant data accessed by such a Google Service (*e.g.*, in an ARDS, or Temporary Log(s))
 - c. An updated version of the Service Level Access Map that accounts for any new storages of Measured Body Data or Health and Fitness Activity Location Data as a result of the new service level access
 - d. The Google Service's retention and deletion plan with respect to the accessed Measured Body Data and Health and/or Fitness Activity Location Data
 - e. If such a service creates Temporary Logs, the documentation will include a link to the Google Service's individual access documentation for such relevant Temporary Logs

Annex 3 – List of Minimum Audit Points

1. All individuals appearing in Auditable Individual Logs appear in Individual Level Access Documentation
2. All Individual Level Access Documentation provides a reason for access unrelated to Google Ads

3. At the time of access, no individual with a reporting line running into Google Ads appears in Auditable Individual Logs. Google will provide the Monitoring Trustee with the reporting lines up to the Google CEO for all individuals appearing in Auditable Individual Logs drawn directly from Google’s Human Resource systems at the Monitoring Trustee’s request
4. All Google Services appearing in Auditable Service Logs appear in Service Level Access Documentation
5. All Service Level Access Documentation provides a reason for the service receiving access that is unrelated to Google Ads
6. All Service Level Access Documentation includes an adequate Google Services’ compliance proposal as described in **Annex 2**
7. No Google Ads service appears in Auditable Service Logs
8. Following the Effective Date, no Google Service has access to the Fitbit Web API or, if a service does, Google has provided to the Monitoring Trustee appropriate Service Level Access Documentation for that service prior to its gaining access. Google will provide the Monitoring Trustee with a list of all services having access to the Fitbit Web API drawn directly from Fitbit’s systems at the Monitoring Trustee’s request

Annex 4 – Indicative List of Current Data Types that Can Qualify as Measured Body Data and Health and Fitness Activity Location Data (as of November 2, 2020)

Data Type	Measured Body Data	Health and Fitness Activity Location Data
Heart Rate	✓	
Heart Rate Variability	✓	
Cardio Fitness Score	✓	
Time In Heart Rate Zones	✓	
Resting Heart Rate	✓	
VO2 Max Values	✓	
Electrocardiogram	✓	
Breathing Rate	✓	
Height	✓	
Stride Length	✓	✓ ¹

¹ When a Fitbit user tracks a run using Activity GPS, Stride Length is updated automatically. Stride Length thus may be partially derived from Activity GPS, which qualifies as Health and Fitness Activity Location data.

Data Type	Measured Body Data	Health and Fitness Activity Location Data
Weight ²	✓	
Body Mass Index	✓	
Body Fat Percentage	✓	
Steps	✓	
Distance	✓	✓ ³
Floors	✓	
Altitude	✓	
Calories	✓	
Basal Metabolic Rate (BMR) Calories	✓	
Activity Name	✓	
Activity Minutes (duration)	✓	
Activity Calories	✓	
Activity Distance	✓	
Activity Steps	✓	
Activity Floors	✓	
Activity Altitude	✓	
Activity Heart Rate	✓	
Activity Speed	✓	
Activity GPS		✓
Lightly Active Minutes	✓	
Moderately Active Minutes	✓	
Sedentary Minutes	✓	
Very Active Minutes	✓	
Active Zone Minutes	✓	
Swimming (length, stroke style)	✓	
Activity Pace	✓	
Menstrual Cycle Log	✓	
Menstrual Cycle Dates	✓	
Birth Control Log	✓	
Average Period Stats	✓	

² Includes “weight” that is part of the user’s profile information.

³ “Distance” is calculated by multiplying “steps” by “stride length”, and therefore may include input derived from “activity GPS”, which qualifies as Health and Fitness Activity Location Data.

Data Type	Measured Body Data	Health and Fitness Activity Location Data
Sleep Log (e.g., date, duration)	✓	
Sleep Efficiency ⁴	✓	
Sleep Stages (e.g., timestamp, length)	✓	
Sleep Score	✓	
Blood Glucose	✓	
Water Intake	✓	
Food Log Item	✓	
Favorite Foods	✓	
Food Log Item Nutritional Information (e.g., calories, macronutrients)	✓	
Estimated Oxygen Variation	✓	
Blood Oxygen Saturation (SpO2)	✓	
Electrodermal Activity Responses	✓	
Body Temperature	✓	
Sickness Symptoms Log	✓	
Skin Temperature Variation	✓	
Meditation Minutes	✓	
Mood Reflection	✓	
Stress Management Score	✓	
Fitbit Coach Workouts (e.g., Workout Duration, Calories Burned)	✓	
Fitbit Coach Achievements	✓	
Badges derived from Measured Body Data or Health and Fitness Activity Location Data	✓	
Trophies derived from Measured Body Data or Health and Fitness Activity Location Data	✓	

Annex 5 – Fast Track Dispute Resolution Procedure

1. An API User or Wrist-Worn Wearable Device OEM that wishes to avail itself of the fast track dispute resolution procedure (the “**Requesting Party**”) shall inform Google and the Monitoring Trustee in writing, setting out in detail the reasons leading the Requesting Party to believe that Google is failing to comply with the requirements in the Commitments. The Requesting Party and Google will use commercially reasonable efforts to settle all disputes that may arise through cooperation and consultation within a

⁴ Fitbit has not collected Sleep Efficiency since 2017. The Fitbit Web API nevertheless still calculates the data type (based on other sleep data) and it remains available to third parties.

reasonable period of time not exceeding fifteen working days (such period being extendable by mutual consent of Google and the Requesting Party) (“**Consultation Period**”) after receipt of the request.

2. The Monitoring Trustee shall present its own proposal (the “**Trustee Proposal**”) for resolving the dispute within eight working days, specifying in writing the rationale for the Trustee Proposal, and the action, if any, to be taken by Google in order to ensure compliance with Commitments vis-à-vis the Requesting Party.
3. Should the Requesting Party and Google (together, the “**Parties to the Arbitration**”) fail to resolve their differences of opinion in the Consultation Period, then the Requesting Party may, within 20 working days after the Consultation Period has expired, serve a notice (the “**Notice**”), in the sense of a request for arbitration, to the International Chamber of Commerce (the “**Arbitral Institution**”), with a copy of such Notice and request for arbitration to Google.
4. The Notice shall set out in detail the dispute, difference or claim (the “**Dispute**”) and shall contain, inter alia, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon shall be attached, *e.g.*, documents, agreements, expert reports, and witness statements. The Notice shall also contain a detailed description of the action to be undertaken by Google and the Trustee Proposal, including a comment as to its appropriateness.
5. Google shall, within ten working days from receipt of the Notice, submit its answer (the “**Answer**”), which shall provide detailed reasons for its conduct and set out, inter alia, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon, *e.g.*, documents, agreements, expert reports, and witness statements. The Answer shall, if appropriate, contain a detailed description of the action which Google proposes to undertake vis-à-vis the Requesting Party and the Trustee Proposal (if not already submitted), including a comment as to its appropriateness.

Appointment of the Arbitrators

6. The Arbitral Tribunal shall consist of three persons. The Requesting Party shall nominate its arbitrator in the Notice; Google shall nominate its arbitrator in the Answer. The arbitrator nominated by the Requesting Party and by Google shall, within five working days of the nomination of the latter, nominate the chairman, making such nomination known to the parties and the Arbitral Institution which shall forthwith confirm the appointment of all three arbitrators.
7. Should the Requesting Party wish to have the Dispute decided by a sole arbitrator it shall indicate this in the Notice. In this case, the Requesting Party and Google shall agree on the nomination of a sole arbitrator within five working days from the communication of the Answer, communicating this to the Arbitral Institution.
8. Should Google fail to nominate an arbitrator, or if the two arbitrators fail to agree on the chairman, or should the Parties to the Arbitration fail to agree on a sole arbitrator, the default appointment(s) shall be made by the Arbitral Institution.

9. The three-person arbitral tribunal or, as the case may be, the sole arbitrator, are herein referred to as the “**Arbitral Tribunal**”.

Arbitration Procedure

10. The Dispute shall be finally resolved by arbitration under the International Chamber of Commerce Rules of Arbitration, with such modifications or adaptations as foreseen herein or necessary under the circumstances (the “**Rules**”). The arbitration shall be conducted in London, United Kingdom, in the English language. For good cause, any Party may apply to the Arbitral Institution (or Arbitral Tribunal as may be appropriate) for an extension of the timelines provided in this Annex.
11. The procedure shall be a fast-track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as admissible and appropriate in the circumstances. The Parties to the Arbitration shall consent to the use of email for the exchange of documents.
12. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organizational conference to discuss any procedural issues with the Parties to the Arbitration. Terms of Reference shall be drawn up and signed by the Parties to the Arbitration and the Arbitral Tribunal at the organizational meeting or thereafter and a procedural time-table shall be established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within two months of the confirmation of the Arbitral Tribunal.
13. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Parties to the Arbitration, to appoint experts and to examine them at the bearing, and to establish the facts by all appropriate means. The Arbitral Tribunal is also entitled to ask for assistance by the Monitoring Trustee in all stages of the procedure if the Parties to the Arbitration agree.
14. The Arbitral Tribunal shall not disclose confidential information and apply the standards attributable to confidential information under the Merger Regulation. The Arbitral Tribunal may take the measures necessary for protecting confidential information in particular by restricting access to confidential information to the Arbitral Tribunal, the Monitoring Trustee, and outside counsel and experts of the opposing party.
15. The burden of proof in any dispute under these Rules shall be borne as follows: (i) the Requesting Party must produce evidence of a prima facie case; and (ii) if the Requesting Party produces evidence of a prima facie case, the Arbitral Tribunal must find in favor of the Requesting Party unless Google can produce evidence to the contrary.

Involvement of the Commission

16. The Commission shall be allowed and enabled to participate in all stages of the procedure by
 - a. Receiving all written submissions (including documents and reports, etc.) made by the Parties to the Arbitration;

- b. Receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the Parties to the Arbitration (including Terms of Reference and procedural time-table);
 - c. Giving the Commission the opportunity to file amicus curiae briefs; and
 - d. Being present at the hearing(s) and with the permission of the Arbitral Tribunal, it may also make oral observations.
17. The Arbitral Tribunal shall forward, or shall order the Parties to the Arbitration to forward, the documents mentioned to the Commission without delay.
18. In the event of disagreement between the Parties to the Arbitration regarding the interpretation of the Commitments, the Arbitral Tribunal may seek the Commission's interpretation of the Commitments before finding in favor of any Party to the Arbitration and shall be bound by the interpretation.

Decisions of the Arbitral Tribunal

19. The Arbitral Tribunal shall decide the dispute on the basis of the Commitments and the Decision. Issues not covered by the Commitments and the Decision shall be decided (in the order as stated) by reference to the Merger Regulation, EU law and general principles of law common to the legal orders of the Member States without a requirement to apply a particular national system. The Arbitral Tribunal shall take all decisions by majority vote.
20. Upon request of the Requesting Party, the Arbitral Tribunal may make a preliminary ruling on the Dispute. The preliminary ruling shall be rendered within one month after the confirmation of the Arbitral Tribunal, shall be applicable immediately and, as a rule, remain in force until a final decision is rendered.
21. The Arbitral Tribunal shall, in the preliminary ruling as well as in the final award, specify the action, if any, to be taken by Google in order to comply with the Commitments vis-à-vis the Requesting Party (*i.e.*, specify that the Requesting Party gain access to the relevant API). The final award shall be final and binding on the Parties to the Arbitration and shall resolve the Dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The arbitral award shall also determine the reimbursement of the costs of the successful party and the allocation of the arbitration costs. In case of granting a preliminary ruling or if otherwise appropriate, the Arbitral Tribunal shall specify that terms and conditions determined in the final award apply retroactively.
22. The final award shall, as a rule, be rendered within six months after the confirmation of the Arbitral Tribunal. The time-frame shall, in any case, be extended by the time the Commission takes to submit an interpretation of the Commitments if asked by the Arbitral Tribunal.
23. The Parties to the Arbitration shall prepare a non-confidential version of the final award, without business secrets. The Commission may publish the non-confidential version of the award. The Parties to the Arbitration, the Arbitral Tribunal, all other persons participating in the proceedings and all further persons involved, *i.e.* in the administration of the arbitral

proceedings, shall maintain confidentiality towards all persons regarding the conduct of arbitral proceedings. All proceedings will be held in private and remain confidential.

24. Nothing in the arbitration procedure shall affect the power to the Commission to take decisions in relation to the Commitments in accordance with its powers under the Merger Regulation.

Annex 6 – Indicative List of Supported Measured Body Data (as of November 2, 2020)

Supported Measured Body Data
Heart Rate
Time In Heart Rate Zones
Resting Heart Rate
Weight
Height
Body Mass Index
Body Fat Percentage
Steps
Distance
Floors
Altitude
Basal Metabolic Rate (BMR) Calories
Calories
Activity Name
Activity Minutes (duration)
Activity Calories
Activity Speed
Activity Pace
Activity Steps
Activity Floors
Activity Altitude
Activity Heart Rate
Activity Distance
Lightly Active Minutes
Moderately Active Minutes
Sedentary Minutes
Very Active Minutes
Swimming (length, stroke style)
Sleep Log (e.g., date, duration)
Sleep Stages (e.g., timestamp, length)
Sleep Efficiency
Water Intake
Food Log Item
Favorite Foods
Food Log Item Nutritional Information (e.g., calories, macronutrients)