Bundeskartellamt

7th Decision Division

B 7 - 61/21

Determination of the status as addressee of Section 19a(1) GWB
-Public version-

This translation is provided for information purposes only. It has been made available by Alphabet. Only the German version of the decision is authentic.

Decision

In the administrative proceedings

1. Alphabet Inc., Mountain View/USA
   1600 Amphitheatre Parkway
   Mountain View, CA 94043/USA

2. Google Germany GmbH, Hamburg
   ABC-Straße 19
   20354 Hamburg

– Parties 1 and 2 –

Legal representatives of the parties 1 & 2:
Cleary Gottlieb Steen & Hamilton LLP
Theodor-Heuss-Ring 9
50668 Cologne

for the determination of the status as addressee of Section 19a(1) German Competition Act (GWB), the Bundeskartellamt's 7th Decision Division decided on 30 December 2021:

1. It is hereby determined that Alphabet Inc., Mountain View/USA, including all its affiliated companies pursuant to Section 36(2) GWB, is of paramount significance for competition across markets within the meaning of Section 19a(1) GWB.

2. The validity of the decision is limited to five years from the date on which it becomes final.

3. The administrative fee for the proceedings, including this decision, amounts to EUR […]and is payable jointly and severally by the parties to the proceedings.

Reasons

A. Facts

I. Affected company

1. The Alphabet Group

(1) Alphabet Inc. (hereinafter referred to as “Google”) is a publicly listed holding company based in Mountain View (USA), which was founded in 2015 to restructure the then existing Google Group. Alphabet’s subsidiaries are active in various technology sectors. As part of the restructuring, Google Inc. was also integrated into Alphabet Inc. In 2017, Google Inc. was then reorganized into Google LLC. In the meantime, the holding company XXVI Holdings Inc. has been interposed as the sole shareholder and a wholly-owned subsidiary of Alphabet.[1]

(2) Google is a multi-national group of companies which offers in particular internet services and software products. In Germany, it is represented by Google LLC through its subsidiary Google Germany GmbH, Hamburg. In addition to Google LLC, Alphabet currently indirectly controls […] other companies, each with further subsidiaries, […]. All business

---

[1] Cf. European Commission, Decision of 18 July 2018, AT.40099 *Google Android*, paras. 7 seq.

activities outside Google LLC (so-called "Other Bets"[2]) are assigned to these companies. Details of the current group structure can be found in the following organizational chart.

[Figure 1 is confidential]

[…]

(3) Google's worldwide revenue amounted to approximately USD 183 billion in 2020. The group's core revenue driver is online advertising, which generated around USD 147 billion in 2020. This corresponds to approximately 80.5% of revenues.[3]

2. Product portfolio

(4) The business segments "Google Services" and "Google Cloud" are assigned to Google LLC. Google Services includes Android, Chrome, Gmail, Google Drive, Google Maps, Google Photos, Google Play, Search, YouTube and Google hardware (Pixel smartphones, Chromecast, Google TV and Google Nest Hub). Google services are largely financed by advertising.[4] The Google Cloud business segment includes Google's infrastructure and data analytics platforms, collaboration tools, and other services for business customers. Google generates revenue in this business segment primarily through fees for the use of cloud services and the workspace collaboration tools.[5] Google's business activities in the segment of "Other Bets" are manifold and range from undertakings focusing on internet access (Access or Fiber), smart home applications

---

2 Google 2020 Annual Report, p. 5, available at: https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf (accessed 24 August 2021).

3 Cf. for all data mentioned in this paragraph: https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf?cache=b44182d (accessed 17 November 2021).

4 Google 2020 Annual Report, pp. 6 seq., available at: https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf (accessed 8 August 2021).

5 Google 2020 Annual Report, p. 7, available at: https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf (accessed 24 August 2021).

(Nest), artificial intelligence "AI" (DeepMind) to biotechnology companies (Verily), driverless cars (Waymo), delivery drones (Wing) and venture capital companies (GV and CapitalG).[6]

a) Overview of key Google services […]

(5) The allocation of Google LLC services […] and the year of launch can be seen in the following presentation.

[Figure 2 is confidential]

[…]

(6) A non-exhaustive selection[7] of these Google services is described in more detail below.

aa) […]

(7) The general search engine Google Search allows users[8] to search for information throughout the open internet. It is available for both desktop computers (PCs and laptops) and mobile devices (smartphones and tablets). While the display of the search results page differs depending on the device type, the search engine technology is essentially the same. Google Search may be accessed via country-specific web pages such as www.google.de, www.google.com, www.google.co.uk or www.google.fr and,

---

6 Other Bets include: Access, including Fiber (internet access, fiber optics, broadband), Nest (smarthome applications, Internet of Things, "IoT"); Deep Mind: Research and applications in the field of artificial intelligence. Other Bets include, in particular, projects in which Alphabet researches and develops new products (so-called Google X or Moonshot projects, see https://x.company/projects/ (accessed on 11 November 2021)). These include: Verily: Various projects in the life sciences sector; Waymo: Development of autonomous vehicles; Loon (internet balloons), Wing (delivery drones); Everyday Robots: Autonomous robots for unstructured human environments; Tidal: Underwater sensors (including for fish farms); Mineral: Diversification of the cultivation of agricultural products; Taara: Wireless optical data transmission; Malta: Energy storage in molten salt and other so-called "moonshot" projects. In addition, Alphabet also operates two venture capital firms, GV and CapitalG. Well-known companies in which GV has invested are: Uber, Slack, Stripe or Nest (was acquired by Google itself in 2014). CapitalG's portfolio includes Airbnb, Snap, Lyft and Stripe, among others. Looker, which was also part of CapitalG's portfolio, was acquired by Google in 2019.

7 In accordance with their significance, see on user figures V. 3. a) aa) (1).

8 A user (as distinguished from advertising customers) is a private or commercial, inactive or active, unique or anonymous user of a Google service.

especially in mobile operating systems, additionally via special Google Search apps or so-called “widgets”[9], which allow for direct interaction with Google Search on the “home screen” or start page of the mobile device.

(8) After a user enters a query[10] in Google Search, the results page of Google Search returns different categories of results.

(9) Generic search results are displayed in the form of a title designed as a blue link (so-called “blue links”). Below the blue link, a short text excerpt is displayed (so-called “snippet”), which describes the content of the linked page. For certain result types, the blue link results can also be enriched (based on data provided by the web pages) with richer formats such as small images, page metadata such as links to specific sections, star ratings, or an FAQ extension.[11]

(10) The display of generic search results is based on an automated process. First, as part of the “crawling” process, the internet is continuously searched by[12] “crawlers” (“Google bots”) that automatically search for new or updated content. The web page data found in this process is catalogued and stored in the so-called web index (“indexing”). During a search, algorithms then draw on the data in the web index and generic signals derived from this data (e.g., the PageRank signal, which measures the quality of a web page according to the number and quality of the links pointing to it) to display the search results relevant to the query in question and to rank them according to their relevance.[13]

(11) In the course of time, so-called specialized search results have been added to the blue links. This is information from different sources that is displayed to the user in a form specific to the query in question, for example, in the case of a search query for “hospitals

---

9 The English term “widget” is a portmanteau word formed from “window”, and “gadget”, for “accessory device”, see https://en.wikipedia.org/wiki/Widget (accessed 26 August 2021).

10 A query is any valid query in a search engine without spam.

11 Google’s response of 5 July 2021 to question 5 of the request for information (“RFI”) of 7 June 2021, paras. 5.3 seqq.

12 […]

13 Google’s response of 5 July 2021 to question 5 of the RFI of 7 June 2021, para. 5.3.

in the vicinity", a map showing the locations of hospitals, opening hours, contact information and details of emergency facilities.[14]

(12) From the generic and specialized search results, Google uses a comparative and evaluative algorithm to select the subset that will be displayed on the search results page. In a first step, the best results for different categories are determined (e.g., generic results and local results). These results are then sorted and displayed according to their relevance based on a standardized rating system.[15]

(13) Google sometimes answers queries for factual information directly on the search results page. For example, if a user enters a mathematical calculation, Google immediately shows the result of the calculation. Further examples are queries about the current time, a currency conversion rate, stock market information, sports results, events, showtimes for movies or even the height of the Eiffel Tower.[16] For certain search queries, e.g., for people, places or things, Google also displays info boxes with relevant information, so-called Knowledge Panels. The information usually comes from the Knowledge Graph, an internal database of Google Search, in which facts on all kinds of topics are collected.[17]

(14) In response to a query by the user, a maximum of four text-based advertisements (text ads) can appear on the search results page above the generic search results and a further four in the lower area of the search results page. On mobile devices, the user is also shown four ads each. Here, the display of the text ads above the generic search results leads to the generic search results only becoming visible to the search user[18] by scrolling down on the search results page due to the usually much smaller screen area.

---

14 Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, paras. 5.8 seqq.

15 Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, paras. 5.16 seqq.

16 Google's response of 5 July 2021 to questions 5 and 7 of the RFI of 7 June 2021, paras. 5.19 and 7.7.

17 Cf. Munich Regional Court I, Decision of 10 February 2021, 37 O 15720/20, WuW 2021, 190 (194) – Kooperation Bundesgesundheitsministerium/Google; it can be left open whether the Knowledge Panels can be assigned to the generic search results or whether they represent a category of their own.

18 Users of a search service (as distinguished from advertising customers of a search service).

In addition to text ads, Google also offers product ads, which, among other things, show images of the advertised products.

(15) Google auctions the advertising spaces in automated processes mostly via its own platforms or services. When deciding which text ad to display for a particular query, Google takes into account the price offered by the advertiser[19] and the quality value of the ad as defined by Google.

bb) […]

(16) Launched in 2005 and available in Germany since 2006, Google Maps is a mapping and navigation application developed by Google that offers, among other things, satellite images, aerial photographs, street maps, bicycle routes,[20] public transportation timetables,[21] panoramic views of streets (Google Street View), information on traffic conditions, and route planning.[22]

(17) For example, users can store their home and work addresses in Google Maps, which facilitates navigating to these two locations. The stored address data can also be taken into account by Google in other services.[23]

(18) Via Google My Business, Google offers companies the possibility to provide information about themselves, such as opening hours, contact and address data. Users can then access this information either in a specific query about the company, but also in a general query for specific company categories or the so-called points of interest.

---

19 Customers of advertising space (“advertisers”).

20 In May 2013, extensive data on bicycle routes from the Allgemeiner Deutscher Fahrrad-Club (ADFC) was integrated into Google Maps.

21 Deutsche Bahn, for example, has been integrated into Google Maps with its timetables since September 2012.

22 Cf. on the overall development and expansion of Google Maps from 2005 to 2020: https://www.googlewatchblog.de/2020/02/jahre-google-maps-meilensteine/ (accessed 3 September 2021).

23 Cf. https://support.google.com/maps/answer/144349?hl=en (accessed 3 September 2021).

cc) […]

(19) YouTube is a video portal founded in 2005 which was acquired by Google in 2006. The portal is available as a web service or app for all standard mobile operating systems, and as an app for smart TVs. Google's advertising-based service YouTube brings advertisers and two types of users together: So-called "creators" who post video content on YouTube and viewers who watch that content. Creators can be both individuals and companies. They produce video content and post it on YouTube. To do this, they must both use a Google account and create their own channel. On this channel all posted creator videos are available in a separate playlist. Watching videos on YouTube is possible without signing in to a Google account. A search box can be used to search for videos by entering search terms. It is also possible to view trends in the areas of music, gaming, news and movies. The use of further functionalities requires signing in to a Google account. This allows users to subscribe to channels, comment and rate videos, reply to comments from other users, and create and share playlists.[24]

(20) YouTube is largely advertising-based. Advertising takes place largely through videos themselves ("in-stream video advertising"), displayed as so-called "pre rolls" prior to starting the video or as "mid rolls" while the video is playing. In addition to the ads that are part of the videos viewed by the user, other ads can be displayed at the top, next to or above other video search results listed on the search results page when the YouTube page is accessed.[25] In some cases, a shopping unit is also displayed above the list of results.

dd) […]

(1) Chrome

(21) Google Chrome is a (web) browser that Google provides to users free of charge.

---

[24] https://support.google.com/youtube/answer/9879569?hl=en&ref_topic=9267674 (accessed 27 August 2021).

[25] Cf. in detail https://support.google.com/google-ads/answer/2375464?hl=en (accessed 20 October 2021).

(22) (Web) browsers are software programs that enable users of mobile or stationary devices to access and interact with web content stored on servers connected to the internet. In order for browsers to be used for stationary and for mobile applications, different versions are required to establish compatibility with the respective operating systems. The graphical browser interface can also differ to optimize the display for screens in stationary or mobile applications.

(23) To interact with the web content via the browser, users can make entries in the address field, which can take on two functions in Chrome as a so-called "omnibox"[26]. Entering the full web address (the URL,[27] for example www.bundeskartellamt.de) in the address field leads directly to the calling of the web address. If, on the other hand, only the name of the website (such as "Bundeskartellamt") is entered in Chrome's address field, Chrome interprets this as a query that is performed using the search engine set as the default in Chrome.

(24) On desktop devices and until March 2020 also on Google Android end devices, Google Search is set as default in Chrome. For new Google Android end devices, Google has introduced a choice screen since March 2020, after the European Commission's *Google Android*[28] decision, which allows users to choose between several general search engines when setting up their smartphone.[29]

(25) Chrome can be used with and without signing in to a Google account. If the user is signed in with their account and the synchronization function is activated,[30] they can synchronize Chrome on different devices. The user can then see and update the synchronized data on all their devices, e.g., bookmarks, history, passwords and other settings.

---

26 https://support.google.com/chrome/answer/95426?hl=en&co=GENIE.Platform%3DDesktop (accessed 27 August 2021).

27 A Uniform Resource Locator (URL) identifies and locates a resource, such as a web page, by the access method to be used (for example, the network protocol used, such as HTTP or FTP) and the location of the resource in computer networks, see https://de.wikipedia.org/wiki/Uniform_Resource_Locator (accessed 27 August 2021).

28 European Commission, Decision of 18 July 2018, AT.40099 – Google Android.

29 Cf. B. VI. 2. b) bb) (6).

30 https://support.google.com/chrome/answer/185277?co=GENIE.Platform%3DDesktop&hl=en.

(26) Chrome is relevant as a browser for additional services and applications that can be used via the browser. For this purpose, Chrome provides programming interfaces (so-called APIs[31]) with which third parties can also program corresponding applications. These applications include extensions, which users can often download free of charge to extend the functionality of the browser. Website operators or service providers commissioned by them also use interfaces or functions of the browser, e.g., to be able to monitor the user's surfing behavior by setting cookies, small text files.[32]

(27) Under the name Chromium, Google makes the majority of Chrome's source code available to other browsers as an open source project. Well-known browsers from competitors are based on Chromium. These include the Opera browser (since 2013),[33] the Samsung internet browser[34] and the Microsoft Edge browser (since January 2020).[35]

(2) Android

(28) Android is an open-source operating system for mobile devices that Google acquired from Android Inc. in 2005.

(29) Operating systems are required for the use of end devices. These are specific software solutions that support the basic functionalities of the end device and enable its control. Mobile operating systems usually offer a graphical user interface, APIs[36] and other additional functions that are required for the operation of a mobile device and enable new combinations of functions to provide greater ease of use and innovation. Applications written for a specific mobile operating system usually run on a mobile device with the same operating system, regardless of the device manufacturer.[37]

---

31 Application Programming Interface.

32 Cf. B. V. 2. c) bb).

33 https://en.wikipedia.org/wiki/Opera_(web_browser) (accessed 27 August 2021).

34 https://en.wikipedia.org/wiki/Samsung_internet (accessed 27 August 2021).

35 https://support.microsoft.com/en-us/microsoft-edge/download-the-new-microsoft-edge-based-on-chromium-0f4a3dd7-55df-60f5-739f-00010dba52cf (accessed 27 August 2021).

36 Application Programming Interfaces.

37 European Commission, Decision of 17 December 2020, AT.9660 – *Google/Fitbit*, para. 44.

(30) In addition to mobile devices such as smartphones and tablet computers,[38] Android is also used as an operating system in televisions (Android TV[39]) and cars (Android Automotive OS as part of "Android for Cars"[40]).

(31) Google provides the Android source code free of charge via the Android Open Source Project ("AOSP")[41] and under an open source[42] license ("AOSP license").[43] This means that basically anyone can access the AOSP source code and create modified versions of it (so-called "Android Forks"). However, in its *Google Android* decision, the Commission found that Google exerts a strong influence on these Android development steps despite providing the Android source code for free.[44]

(32) Most Android devices have proprietary applications preinstalled as factory settings, which are not part of the Android Open Source Project (AOSP). Therefore, under the name "Google Mobile Services" (GMS), Google licenses a package with Google apps and the Play Services[45] to device manufacturers (OEMs). Outside the EEA, the GMS package includes Google services such as Google Search, Chrome, YouTube, Gmail, Google Maps, Google Assistant and the Google Play Store. On devices shipped to the EEA, the GMS apps, with the exception of Google Search, Google Assistant and Chrome, are licensable via the European Mobile Application Distribution Agreement

---

38 https://www.android.com/intl/en/phones-tablets/ (accessed 1 September 2021).

39 https://www.android.com/intl/en/tv/ (accessed 1 September 2021).

40 https://www.android.com/intl/en/auto/ (accessed 1 September 2021).

41 https://source.android.com/ (accessed 1 September 2021).

42 Open source refers to software whose source code can be viewed, modified and used publicly and by third parties. The Open Source Initiative (OSI, available at: https://opensource.org/) applies the term open source to all software whose license agreements comply in particular with the following three characteristic features. 1. The software (i.e., the source code) is in a form that can be read and understood by humans. 2. The software may be copied, distributed and used as desired. 3. The software may be modified and distributed in the modified form. Even in the case of open source, conditions may be attached to the use, see https://de.wikipedia.org/wiki/Open_Source#:~:text=As%20Open%20Source%20(from%20English,can%20mostly%20be%20used%20free%20of%20charge (accessed 1 September 2021).

43 https://source.android.com/setup/start/licenses?hl=en (accessed 1 September 2021).

44 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android,* paras. 125 seqq.

45 The Play Services are a so-called programming interface (Application Programming Interface API.): https://developers.google.com/android/guides/overview (accessed 1 September 2021).

("EMADA").[46] Google Search and Google Chrome, on the other hand, are no longer part of the GMS and EMADA in response to the Commission's Android decision[47] and can only be licensed upon request and only separately.[48]

(3) Google Play Services

(33) The Google Play Services offer background services for Google Android end devices. They represent the interface between different Google services and the hardware functions of the Google Android end device. Many Google apps require the Play Services and would not work without them (this is especially true for the Play Store). In addition, they serve as an API[49] for developers to enable communication between applications. Google Play Services are updated automatically on Google Android end devices with Android 4.1[50] or higher.[51]

ee) […]

(34) In […] Cloud […], Google provides different cloud computing services that enable organizations to move all or part of their IT processes to Google's data centers.

(1) Google Cloud

(35) At its core, the Google Cloud consists of data centers through which Google offers a variety of different services. This includes data analysis and databases, machine learning and solution approaches with artificial intelligence, as well as the use of Google's

---

46 Cf. Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.6.

47 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android*.

48 https://www.android.com/gms/ (accessed 1 September 2021); see also https://www.blog.google/around-the-globe/google-europe/complying-ecs-android-decision (accessed 1 September 2021).

49 Cf. above (3).

50 The Android 4.1 version named Android "Jelly Bean" has been available since 27 June 2012, see https://en.wikipedia.org/wiki/Android_version_history (accessed 3 September 2021).

51 https://developers.google.com/android/guides/overview (accessed 3 September 2021).

computing infrastructure in the context of computing, i.e., in all goal-oriented activities that are based on computers or algorithmic processes.

(36) The Google Cloud is currently divided into 29 regions,[52] each of which is physically represented by a data center. Google recently announced the expansion of the cloud region in Frankfurt/Main and the introduction of a new cloud region in Berlin-Brandenburg with an investment volume of EUR 1 billion.[53] The distributed infrastructure makes it possible to provide data and services in geographical proximity to customers, which minimizes latencies and also offers the possibility of responding to geographical particularities.

(2) Gmail

(37) Google also counts Gmail, a free email service, as part of […]. In addition to accessing emails via the web, a Gmail app is also provided to the user for this purpose. Through Gmail email accounts from other providers can also be accessed. The use of Gmail requires the creation of a Google account.[54]

(3) Google account

(38) Typically, a Google account is set up or an existing Google account is used when setting up an Android device for the first time. Some Google services require users to sign in with their Google account (e.g., Gmail, Google Cloud, Google Drive, Google Play and 17 other Google services).[55] In some cases, signing in with a Google account is not a prerequisite for using the service, but without it, not all functions can be provided in full to the user (e.g., Google News, Google Spreadsheets, Google Presentations, Google Assistant and 6 other Google services).[56] Apart from the absence of certain personalization features, some services can be used without restrictions even without signing in

---

52 The Google Cloud is soon to be expanded to include seven more regions, source: https://cloud.google.com/ (accessed 11 November 2021).

53 https://blog.google/intl/de-de/unternehmen/engagement/google-investiert-in-deutschlands-digitale-zukunft/ (accessed 11 November 2021).

54 Google's response of 2 August 2021 to question 3 of the RFI of 6 July 2021, Annex Q3.

55 Google's response of 2 August 2021 to question 3 of the RFI of 6 July 2021, Annex Q3.

56 Google's response of 2 August 2021 to question 3 of the RFI of 6 July 2021, Annex Q3.

with the Google account. These include Google Search, Google Maps, Chrome and YouTube.[57]

(39) If users are signed in with their Google account (so-called signed in users), Google stores the collected data by linking the users with an ID at Google account level, provided that the user has agreed to the collection of their data in the Google account settings.[58] The data linkage may also take place across devices, services and browsers.[59]

(40) Via the so-called Sign-in feature, users may also sign in to third-party services with their Google account. When a user logs in to a third-party website using the "Sign-in with Google" feature, Google stores data about the context in which the user is authenticated (e.g., login attempts and the location from which the user logs onto a website, based on the IP address).[60]

ff) […]

(41) […] comprises in particular Google's own device offerings such as the Google Pixel smartphone and the Chromecast TV stick. Via the service Google Nest, which also belongs to this segment, Google offers smart home applications and devices such as a Nest Cam, a Nest Doorbell and the Nest Audio smart speaker.

gg) […]

(42) Google also offers services […].

(43) […] Google Translate, which was introduced in 2006 and automatically translates words, texts and entire websites. The Google Arts & Culture service, […], enables users to take a virtual tour of a wide range of museums and exhibitions. The […] Google Authenticator enables two-factor authentication, which can be used, for example, when

---

57 Google's response of 2 August 2021 to question 12 of the RFI of 6 July 2021, para. 12.1.

58 Google's response of 5 July 2021 to question 21 of the RFI of 7 June 2021, para. 21.1.

59 Reverse conclusion from Google's response of 5 July 2021 to question 21 of the RFI of 7 June 2021, para. 21.3 and on the cross-service data linkage of signed in users, see also response of 18 July 2021 to question 18 of the RFI of 7 June 2021, paras. 18.2 seqq.

60 Google's response of 5 July 2021 to question 15 of the RFI of 7 June 2021, para. 15.2.

signing in to the Google account, but can also be used by third-party providers. With Google Pay, Google offers a mobile payment system that has been available in Germany since June 2018. Google Messages is an SMS and instant messaging application […].

b) Google advertising services

(44) Google offers advertising space on Google Search for search-based advertising and video advertising space on YouTube. In addition to offering its own advertising space, Google is also a provider of advertising services that bring together supply and demand for digital advertising space. In doing so, Google does not only offer the possibility to place advertisements on Google's own advertising spaces through its advertising services, e.g., Google Ads, but also on the advertising spaces of third parties that are part of Google's advertising network.[61]

(45) Google provides a range of advertising services for publishers and advertisers, covering the entire supply chain between the supply of advertising space on websites and the demand for such advertising space. These include, in particular, services for advertisers to manage their ads, systems for purchasing advertising space, a platform for selling advertising space, and services for publishers to manage their advertising inventory.[62]

II. Course of the proceedings

(46) The Decision Division has initiated proceedings to determine that Google is an undertaking with paramount significance for competition across markets within the meaning of Section 19a(1) GWB on 29 April 2021 and notified Google of this in a letter dated 25 May 2021. On 8 October 2021, the request of Oracle Corporation, Austin (USA), to be admitted as a third-party intervener was rejected. After several discussions and extensive inquiries with Google and different market participants, a detailed hearing letter was sent to Google on 24 November 2021. After Google responded on 8 December 2021, the company was granted full access to the file on 14 December 2021 and another detailed hearing letter was sent on 17 December 2021. On 21 December 2021,

---

61 European Commission, Decision of 17 December 2020, M.9660, Google v Fitbit, para. 57.

62 Cf. in particular IV. 2. b).

Google stated that it would not deny its status as an addressee of Section 19a(1) GWB, even though this cannot be construed as Google agreeing with the facts as established by the authority in its decision and the conclusions drawn from these facts. Google would not consider its rights to be violated by the decision and would not consider further reasoning to be necessary if the content of the decision corresponded to that specified in the hearing letter of 17 December 2021. Google announced in the letter that it would not appeal the final decision and would declare a waiver of appeal immediately after service of the decision.

B. Legal analysis

(47) Alphabet, Inc., which operates to a substantial extent in markets within the meaning of Section 18(3a) GWB, including all companies affiliated with it pursuant to Section 36(2) GWB (hereinafter referred to as "Google") is of paramount significance for competition across markets (Section 19a(1) sentence 1 GWB).

I. Principles

(48) Section 19a GWB, together with other provisions on abuse control, was introduced by the so-called "GWB Digitization Act" (10th amendment of the GWB)[63] and largely aims to capture special positions of economic power and their possible anti-competitive effects and potential threats to competition in the area of "digital ecosystems", in which individual companies may have a so-called gatekeeper function.[64]

(49) Large digital companies offering a broad variety of products and services may have a position of economic power across markets that is difficult to contest, opening up a scope of action for the respective company to further consolidate, expand or otherwise use this position to its own advantage without sufficient control by competition. Such positions of power and their expansion are enhanced by the dynamics of the digital and

---

63 "Act Amending the Act Against Restraints of Competition for a Focused, Proactive and Digital Competition Law 4.0 and Other Provisions" (GWB Digitization Act), Federal Law Gazette 2021, Part 1 No. 1, 18 January 2021.

64 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

internet economy, which leads to accelerated and increased concentration, especially in markets under Section 18(3a) GWB, and produces conglomerate or vertically integrated corporate structures[65] in which cross-market systems of frequently scalable products and services that are linked in different ways – for example, by combining the data generated – can be operated and expanded.[66]

(50) The provision's reference to significance "across markets" accounts for the fact that the tendency to form ecosystems can blur market boundaries in the digital economy and that markets are constantly being extended through expansion strategies.[67] Competition from alternative providers in relation to existing positions of power can often only take place – at least at the outset – at the edges of an ecosystem. This is because competitors for example offer individual services that cover only a subsection of the portfolio of offerings, or the individual services, for their part, can only be offered as part of the ecosystem – for example, on the competitor's technical platform. Ecosystem operators regularly have good possibilities to avert competition by other providers (e.g., in the form of innovation competition in subsectors) and the expansion of competitors' activities. It is easy for such companies to expand into a new service and into new markets, for example because within their ecosystem they can themselves organize the markets, their entry conditions and thus the competitive possibilities and/or there can be high switching costs for users due to the breadth and characteristics of the ecosystem. Furthermore, large digital companies regularly have access to an exceptional amount of resources that can be deployed in a variety of different areas, such as a large user base, access to data and data sources, know-how, technology, own computing capacities or financial resources.

(51) An overall assessment of all relevant facts in the individual case determines whether a company in the digital economy is in a position of economic power across markets in

---

65 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper. 19/23492, p. 73.

66 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

67 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, pp. 73 seq.

this sense.[68] Section 19a(1) GWB lists several factors that can contribute to a company's competitive potential for the purpose of characterizing a company's paramount significance for competition across markets. According to the statement of legislative intent, these are neither conclusive nor required to be met cumulatively, nor is any weighting intended by the order in which they are enumerated.[69] The individual factors determining whether a company is an addressee of the provision must be interpreted in light of Section 19a GWB's objective to capture the scope of action resulting from *significance across markets*. Accordingly, market-related factors such as those listed in Section 18(3), (3a) or (3b) GWB for the finding of dominance, cannot be used schematically to interpret Section 19a(1) GWB. However, the principles developed for market-related positions of power can be applied *mutatis mutandis* for the purposes of Section 19a GWB.

II. Overview

(52) Google is active to a significant extent on markets within the meaning of Section 18(3a) GWB (see para. 54 for further details) and is of paramount significance for competition (see paras. 55 seqq. for further details). Google is one of the largest digital companies in the world and offers a wide range of internet services that shape everyday internet use for both consumers and companies. One of the most well-known services, which also marks the beginning of Google's activity, is Google Search, the predominant general search engine in Germany and also worldwide. Google is also continuously expanding its offering and now offers a broad portfolio of services, a number of which also have wide reach and which at the same time may secure or strengthen the power of Google Search. The services that – with a reach of in some cases more than [90-100]% of German internet users – have found widespread use in Germany in particular, include the Android mobile operating system, the Play Store app store, the Google Maps map service, the YouTube video platform, and the Chrome browser.

---

68 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 75.

69 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, pp. 74 seq.

(53) Google is active to a significant extent on markets within the meaning of Section 18(3a) GWB (see III. for further details). The larger part of Google's higher-level business model is that users on the free side of the respective multi-sided market generally do not have to pay a (monetary) fee to use the services.[70] Monetization is essentially achieved through advertising. On Google Search in particular, Google generates around EUR […] billion worldwide and around EUR […] billion in Germany with search-based advertising. This corresponds to approximately [50-60] % of its worldwide total revenues and [70-80] % of its total revenues in Germany in the Google Services business segment.[71] For its business activities in the advertising sector, Google can rely on comprehensive broad datasets collected via the use of its services,[72] to deliver targeted advertising to users, i.e., advertising that is very precisely tailored to the user preferences determined with the help of this data. This can contribute in particular to the good monetizability not only of its own advertising space (e.g., YouTube), but also the placement of advertising on third-party advertising spaces via Google's advertising services.

(54) Google is of paramount significance for competition across markets because, when all relevant circumstances in the individual case are considered overall, the company has a position of economic power across markets that allows for a scope of action across markets that is not sufficiently controlled by competition (see IV. – IX. for further details).

(55) Starting from its strong position in general search, Google has developed into a broadly positioned company with a variety of services in diverse areas with vertical or conglomerate relationships within the meaning of Section 19a(1) sentence 2 no. 3 GWB (see IV. for further details). This could result in possibilities to gain significant competitive advantages or control market access.

---

70 The main exception is the so far loss-generating cloud segment, which accounts for around 10% of total revenue. Here, Google pursues the business model of generating revenue directly from the provision of services for third parties.

71 According to the categorization in the Annual Report 2020, Alphabet Inc., Form-10-K for the Fiscal Year Ended 31 December 2020, p. 33 (accessible under https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf?cache=b44182d), the revenues of the business segments Cloud, Other Bets, Hedging Activities and other Alphabet Services are not included in the Google Services business segment, see also Google's response of 31 August 2021 to question 50 of the RFI of 23 July 2021, para. 50.1; at worldwide level, the respective share would be around [50-60] %, see also III. 2. c) aa).

72 See paras. 161 seqq. for details on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements.

(56) This applies, for example, in general search, which Google has supplemented over time with several specialized search services integrated into its general search function. Even beyond this, it can be observed that Google, with its services aimed at end users, now offers a whole range of internet services for diverse purposes. In this business activity, Google can rely on comprehensive, broad, and granular datasets collected about the use of its services to tailor its offerings precisely to users and thereby increase their attractiveness.

(57) Google also offers the most widely used operating system for mobile devices, Android, and has developed a broad portfolio of software applications compatible with Android. Through agreements on preinstallations[73] and default settings[74] of its Google services, e.g., with hardware manufacturers and mobile network providers, Google is able to secure a wide distribution for its matching and comprehensive product portfolio. This applies in particular to the Google services Google Search, the Chrome browser, the Maps service, the Play Store app store, the YouTube video platform and the Gmail email service. Chrome is also particularly important in this respect, since Google can also preset an access point to its search service on third-party operating systems via this browser, which has a wide reach and is also operated outside of the Android environment, e.g., on stationary end devices.

(58) Google also offers a broad portfolio of services for advertisers and owners of advertising space and operates on all levels of the supply chain in the so-called AdTech sector. In addition to marketing its own advertising space for search-based[75] and non-search-based advertising, particularly on Google Search and YouTube, Google offers services and a platform for bringing together supply and demand, particularly for the open segment of display advertising ("Open Display").[76] At least in Europe, Google has high user shares at different levels of the supply chain, i.e., both with regard to services demanded

---

[73] Installation of apps on mobile devices before or automatically during the initial setup of a device, which are available immediately ("out of the box").

[74] Setting that automatically starts a certain service (in the example, the default search engine) when a certain function is called (e.g., entering a query in the address bar of a browser).

[75] Search-based advertising is the advertising displayed on the search results page.

[76] Display advertising is advertising that is shown on websites or apps in various formats (e.g., as banners). Open display is the segment of display advertising in which smaller providers typically market their advertising space via third parties.

by publishers[77] and advertisers, as well as the systems responsible for conducting advertising auctions, and in this respect already holds a special position compared to other providers.

(59) Google's advertising-side service portfolio thereby benefits from Google's comprehensive user-side service portfolio, which forms the basis for Google's prominent access to data relevant for competition (Section 19a(1) sentence 2 no. 4 GWB, see V. for further details). The focus here is on user data that Google collects as part of its services and can use in particular for targeted advertising. The data collected and processed by Google is diverse and includes, in addition to the data actively provided by users, for example, by signing in to their Google account or entering search terms in Google Search, data about the hardware and software used, the user's activities in the different services and data about the user's respective location. By having extensive access to data generated by the use of its services, Google obtains the potential to gain insight into the personal preferences and needs of the respective user. In addition, Google receives data about user behavior on third-party services or third-party websites in particular via its advertising services.

(60) Google also has diverse ways to combine user data across services. Google can use existing identifiers and identifiers created for data combination, such as the advertising ID on mobile devices, to enable personalized advertising. Google can also link data in a more aggregated way, for example to identify groups of users with similar preferences.

(61) After all, Google has data on a very large number of users due to its high dissemination or reach. This breadth of data is a considerable competitive advantage, because it offers highly representative datasets and enables accurate statements about user behavior and preferences. This is particularly true if the data collected is at the same time very granular, as a variety of observations can be assigned to individual users (or even user groups). In this regard, Google is particularly well positioned for a business model of largely advertising-based services that is widespread among digital platforms. The broad and deep access to data can also make it easier for Google to continually expand its activities and develop new services in new fields of activity.

---

77 Providers of advertising space.

(62) Google's significance for competition across markets is also reflected in its strong market position/power in several areas (see VI. for further details). Market dominance within the meaning of Section 19a(1) sentence 2 no. 1 GWB exists in any case in the market for general search services for search users throughout Germany. Google has had very high market shares in this market for a long time, consistently exceeding 80% and thus more than doubling the threshold for the presumption of market dominance. In addition, there are economies of scale associated with network effects: As the number of queries increases, so does the amount of data available about user behavior ("click-and-query data"), which may contribute to an ongoing increase in the relevance of search results and thus to product improvement, giving Google a competitive advantage. Indirect network effects favor Google in the competition with other providers, because a strong user base of the search service has a positive effect on the attractiveness of the search-based advertising space for the advertising side and opens up further possibilities for Google in the advertising-supported monetization of its service.

(63) As a publisher on the search platform, Google also has a strong market position/power as a provider of search-based advertising. Google's competitors in general search services, which include Microsoft (Bing) in particular, generate only a fraction of Google's advertising revenues, even when added together. From the advertisers' point of view, other platforms, such as large trading platforms, are only a meaningful alternative in certain segments, but they cannot offer advertising space across all sectors like Google and also differ from Google because they do not have an advertising space comparable to the search results page of Google Search. Google also has strong market positions in other products and services such as Android, Chrome and YouTube.

(64) Google controls the market access of third parties in several of its areas of activity and therefore has a significant influence on their business activities within the meaning of Section 19a(1) sentence 2 no. 5 GWB (see VII. for further details). In this respect, it is possible to say that at least individual services have an "infrastructural character", because they have a high relevance for the economic activities of third parties. Due to its wide reach, it is usually important for websites to be found via Google Search. This means, for example, that the criteria in Google's search algorithms, which are decisive for the question of whether and where a website is displayed as a result of a query, are taken into account to a large extent in the design of websites to be as visible as possible. Or the website operators have to place text ads according to the framework conditions

specified by Google. Furthermore, Google's activities on YouTube have decisive significance for the business of video providers and their access to the attention of YouTube users both as viewers of their videos and as recipients of advertisements to monetize their videos. Google's advertising services are also of considerable significance for market access, especially for smaller advertisers and publishers. It is regularly not possible for them to organize this activity independently due to its complexity. Google's decisions and determinations on the design of automated auctions for the sale of advertising space via its platform provided for this purpose are highly relevant for the entire industry. Similarly, Google's activity is of considerable significance to providers of software and technical services that rely on the use of Google Play, by far the most significant platform for the distribution of Android apps. Due to Chrome's strong market position and reach, it is of fundamental importance for third-party providers, to the extent that their software and services need to access browsers, that their solutions are compatible with Chrome.

(65) Google's position is also secured by the considerable resources at its disposal within the meaning of Section 19a(1) sentence 2 no. 2 GWB (see VIII. for further details). Google is one of the most valuable companies in the world in terms of market capitalization. Google has extensive financial leeway that can be used for research and development or the acquisition of other companies. Google may also operate for extended periods of time in areas where it does not generate profits. Other resources that contribute to Google's position include, in particular, the *Google* brand, which has a high recognition value and is one of the most valuable brands in the world.

III. Substantial activities on markets within the meaning of Section 18(3a) GWB

(66) Google is active to a significant extent on markets within the meaning of Section 18(3a) GWB.

1. Purpose of the condition

(67) The condition of being active on markets within the meaning of Section 18(3a) GWB to a substantial extent is a mandatory component of the status as addressee of Section 19a GWB. Firstly, the condition is intended to ensure that only companies with a focus

on digital business models are subject to the provision.[78] With the 9th amendment of the GWB and the provisions thereby introduced in Section 18(2a) and (3a) GWB, the legislator has identified multi-sided markets and networks as the core of the frequently internet- and data-based business models concerned with recognizable concentration tendencies in certain business fields, which go hand in hand with the increasing digitalization of the markets.[79] In addition, the condition takes up the above-mentioned[80] favoring of positions of power across markets through the concentration and self-reinforcement dynamics of multi-sided markets and networks, which poses the risk of further consolidation and the expansion of a position of power to additional business fields and markets.[81]

(68) It does not matter whether the paramount significance for competition across markets is attributable precisely to such products or whether it has also been facilitated on the basis of other activities. In particular, companies that are active to a significant extent on markets within the meaning of Section 18(3a) GWB, but whose paramount significance for competition across markets is also fed to a substantial extent by other activities on digital markets, are also subject to the provision.[82] In this respect, the legislator has found the potential competitive threat posed by such business models to be a sufficient starting point for the legal assessment of the status as addressee of Section 19a GWB.

(69) This does not cover companies whose activity in a multi-sided market or network either plays only a completely subordinate role for the company itself – compared to its other activities – or which play only a subordinate role on the relevant markets compared to

---

78 The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 74.

79 The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, pp. 1, 39.

80 Cf. I.

81 The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

82 The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 7.

their competitors.[83] According to the purpose of the condition, which is to capture an essential element of the potential competitive threat arising from the significance of a company in the digital economy *across markets*, it does not matter whether dominant positions or even monopolies also exist on such markets pursuant to Section 18(3a) GWB.[84] Moreover, in the case of Google's core activity in the area of general search services, this holds true (for more details, see the section on market dominance).

2. Google Search as activity on markets within the meaning of Section 18(3a) GWB

(70) With Google Search alone, Google is already active to a significant extent in markets within the meaning of Section 18(3a) GWB.

a) Multi-sidedness of Google Search

(71) Google Search fulfills the characteristics of a platform with multi-sided relations. A platform within the meaning of competition law[85] is characterized in particular by its capacity as an intermediary enabling the direct interaction of two or more user groups, between which indirect network effects exist.[86]

(72) Google Search fulfills this characteristic because it enables direct interactions between the group of users on the one hand and the group of website operators on the other, with positive indirect network effects between the groups in particular.

(73) At least two groups are thus involved in Google Search as an advertising-based platform: One group consists of users who search for information or websites on Google's

---

83 The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 74.

84 According to the legislative intent, market dominance is not a prerequisite for the status as addressee of Section 19a GWB to be applicable, see the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73 and recommendation for a resolution regarding the 10th amendment of the GWB, Bundestag printed paper 19/25868, p. 113.

85 The Decision Division believes it is appropriate to define and use a platform term for antitrust purposes. In the antitrust context, it is suitable as a delimiter for a group of constellations posing specific analytical problems described in more detail below.

86 See Bundeskartellamt, working paper "Market Power of Platforms and Networks", June 2016, pp. 14 seqq.

Search Engine Result Page (SERP). The other group is made up of website operators. Website operators want their websites to be found and used by users. In response to a user's query in Google Search, Google displays, among other things, a list of non-paid search results in the form of so-called snippets on the search results page. In addition, the search results page can be enriched with a variety of additional information depending on the query.[87] Finally, the Google search results page can also display paid search results (advertisements) to the user in response to a query. These ads appear on the search results page above, below and/or to the side of the generic search results and are designated as ads. Google itself sells these spaces on the search results page to website operators via an auction mechanism in Google Ads and Search Ads 360.[88] In these advertising services, advertisers submit bids for keywords based on which the ads are to be displayed on the search results page when they are entered in a query. The first prerequisite for this is that the defined keywords match or are similar to the words used in the query.[89] The actual placement of the ad also requires that Google's auction mechanism selects the specific ad of the advertiser website operator, taking into account the bid level and evaluation of the ad quality.[90]

(74) In this respect, Google conveys the attention of users to advertising website operators with the consequence of an advertising contact and thus acts as an intermediary between the group of users on the one hand and the group of advertising website operators on the other.[91] Google Search enables the interaction between both groups, as users notice the advertisements when using Google Search and the advertising website operators receive the users' attention accordingly. In particular, there are positive indirect network effects between the group of users and the advertising website operators for the advertising website operators. Thus, as the reach of Google Search increases,

---

87 Cf. A. I. 2. a) aa).

88 Nor in relation to the former name of the advertising service "AdWords": European Commission, Decision of 20 March 2019, AT.40411 – Google Search (AdSense), para. 16.

89 https://support.google.com/google-ads/answer/6323?hl=de&ref_topic=24937 (accessed August 16, 2021)

90 In terms of text-based advertisements: Google's response of 5 July 2021 to question 7 of the RFI of 7 June 2021, para. 7.12.

91 Bundeskartellamt, Working Paper Market Power of Platforms and Networks, June 2016, p. 18; Bundeskartellamt, Decision of 8 September 2015, B6-124/14, para. 122. – Google/VG Media.

search-based advertising space in Google Search becomes more attractive to advertisers who want to be found on Google Search.[92]

b) Market quality of the user side of Google Search (Section 18(2a) GWB)

(75) The Google Search platform constitutes a market within the meaning of Section 18(2a) GWB. In this case, the provision of the service to users free of charge is an integral part of the business model, which taps into monetization opportunities via advertising revenues and sales with website operators.

(76) First of all, the finding of a market in the present context does not require a market definition and also does not require any remuneration (see Section 18(2a) GWB).

(77) In the context of Section 19a(1) in conjunction with Section 18(3a) GWB, the only decisive factor is the extent to which the different sides of the platform constitute markets, whereby the absence of monetary consideration does not exclude a platform side from constituting a market, see Section 18(2a) GWB. However, the separate question which other services could be considered as alternatives for users of the intermediary service, which is to be answered by the market definition, is not relevant.[93]

(78) In any case, the marketing of parts of the search results page to website operators in return for payment easily demonstrates the market quality required under this provision.

(79) The fact that the service provided to users of the Google Search platform is free of charge does not prevent the finding of a market pursuant to Section 18(2a) GWB. It is true that the finding of a gratuitous exchange relationship does not always justify the finding that there is a relevant market under competition law. This is especially true outside of multi-sided markets. If gratuitous services are offered for non-economic reasons without being part of a strategy that is at least indirectly or in the longer term designed for profit-making purposes, they lack competitive relevance.[94] In contrast to this,

---

92 Still open in terms of the relationship between users and non-advertising websites (operators): Bundeskartellamt, Decision of 8 September 2015, B6-124/14, para. 123 – Google/VG Media.

93 *Nothdurft*, LB, §19a GWB, para. 24.

94 Cf. the government's statement of legislative intent to the 9th amendment of the GWB, Bundestag printed paper 18/10207, p. 48.

the present case involves a multi-sided market in which the free service is part of a business activity designed for profit-making purposes. Google provides its users with the services on the Google Search platform free of charge. Nevertheless, users are an integral part of the platform's business model. By clicking on paid search results, Google, as an intermediary, enables website operators to reach the platform's search users and thus finances the platform.[95]

c) Significant extent

(80) Google is active to a significant extent in the aforementioned markets.

(81) The condition of "significant extent" limits the scope of application of Section 19a GWB to companies with a focus on digital business models.[96] This does not cover companies for which this activity plays only a completely subordinate role either for the company itself, i.e., in comparison to its other activities, or in comparison to the activities of the company's competitors in the relevant markets.[97]

(82) The significant extent of activity does not require exclusive activity or activity largely on markets within the meaning of Section 18(3a) GWB. It is sufficient that the company has one (of possibly several) main focus(es) in such markets, but may also pursue other activities in addition.[98]

aa) Extent in relation to the overall activity of the company

(83) The extent of Google's activity in offering Google Search is significant in relation to the company's overall activity.

---

95 Cf. in relation to Facebook: Federal Court of Justice (BGH), Decision of 23 June 2020, KVR 69/19, para. 28. – *Facebook*.

96 Government draft of the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 74 (re para. 1).

97 Government draft of the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 74 (re para. 1).

98 See also reference in the government draft of the Act, according to which it does not matter whether the paramount significance for competition across markets is attributable precisely to products characterized by network effects or whether it has also been made possible on the basis of other activities. Government draft of the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 74 (on para. 1).

(84) The aforementioned market activities do not play merely a completely subordinate role for the company itself compared to its other activities. As already explained, for a company to be an addressee of Section 19a(1) GWB it is not necessary that it operates exclusively or even largely on markets within the meaning of Section 18(3a) GWB or that its revenues are focused on such markets. For Google itself, however, the aforementioned market activities actually represent the company's main revenue drivers. In 2020, the Google group generated more than EUR […] billion worldwide from search-based advertising on Google Search alone, accounting for almost [50-60] % of its total revenues. In Germany, the share should be higher with approximately EUR […] billion. On the basis of the German revenues from the Google Services segment as requested from Google, the share was approximately [70-80] %.[99] At a worldwide level, the share would be approximately [50-60] %.[100]

bb) Extent in relation to the activity of other providers

(85) The extent of Google's activity with the Google Search platform is also significant in relation to the activity of other providers.

(86) This already results from Google's dominant position in the market for general search services in Germany.[101] Google accounts for by far the most queries performed via general search engines compared to other general search engines (in particular to the closest competitors Bing, Ecosia, DuckDuckGo, Yahoo!, Startpage, gmx and t-online[102]). Thus, in 2020, about [80-90] % of queries in Germany were triggered in Google Search

---

99 According to the categorization in the Annual Report 2020, Alphabet Inc., Form-10-K for the Fiscal Year Ended 31 December 2020, p. 33 (accessible under https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf?cache=b44182d), the revenues of the segments Cloud, Other Bets, Hedging Activities and other Alphabet Services are not included in the segment Google services, see also Google's response of 31 August 2021 to question 50 of the RFI of 23 July 2021, para. 50.1

100 See Google's revenue figures in USD in the Excel spreadsheet accompanying Google's response of 31 August 2021 to question 50 of the RFI of 23 July 2021. The conversion to EUR was based on the annual average exchange rate for 2020 of 0.8768 USD to EUR, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.de.html (accessed 14 November 2021).

101 Cf. VI.

102 For reference, closest competitors *Nothdurft*, LB § 19a, para. 27.

in the desktop sector and about [90-100] % in the mobile sector. The next largest competitor, Bing, was only able to attract around [10-20] % of queries in the desktop sector and only around [0-10] % in the mobile sector.[103]

(87) Google's search-based advertising revenues also considerably exceed those of its closest competitors. Google generated approximately EUR […] billion globally from search-based advertising in 2020, a multiple of what its next largest competitor in terms of revenue, Bing, generated in the same period.[104]

3. Other substantial activities on markets within the meaning of Section 18(3a) GWB

(88) Although the applicability of Section 19a(1) GWB in conjunction with Section 18(3a) GWB does not require the establishment of further substantial activities on markets within the meaning of Section 18(3a) GWB, since the activity on the multi-sided Google Search platform is already substantial and sufficient in itself, it is to be summarily shown in addition that Google is also active to a significant extent in further markets within the meaning of Section 18(3a) GWB. These include in particular the Android mobile operating system, the associated Play Store app store, and the YouTube video platform.

a) Markets within the meaning of Section 18(3a) GWB

(89) First of all, Android and the Play Store are platforms and thus multi-sided markets in the sense of Section 18(3a) GWB that are characterized by network effects.[105] In particular, at least two groups are involved in each of the Google services Android and the Play

---

[103] Cf. VI. 2. b) bb) (1) (a).

[104] See Google's revenue data in USD in the Excel spreadsheet accompanying Google's response of 31 August 2021 to question 50 of the RFI of 23 July 2021. The conversion into EUR was based on the annual average exchange rate for 2020 in the amount of 0.8768 USD in EUR, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.de.html (accessed 14 October 2021). The information on Bing is based on Bing's responses to the RFI of 28 July 2021.

[105] Mobile operating systems such as Android are explicitly mentioned in the recommendation for a resolution regarding the 10th amendment of the GWB as a platform within the meaning of Section 18(3a) GWB, recommendation for a resolution, Bundestag printed paper 19/25868, pp. 114 seq.; *Nothdurft,* LB, §19a GBW para. 24.

Store. In the case of Android, for example, a distinction must be made between users of the Android mobile operating system, developers of apps for Android, and manufacturers of Android smartphones, among others, who license the Android mobile operating system from Google. With regard to the Play Store, which is based on Android, a distinction must be made between app users who purchase apps via the Play Store or obtain them free of charge and app publishers[106] who distribute third-party apps to users under their own name via the Play Store. In addition, advertisers may also be involved in this respect, insofar as advertising is displayed in the Play Store and the third-party apps obtained via it. The aforementioned relations are also characterized in particular by positive indirect network effects. The more users Android has, the more attractive it becomes for app developers to develop apps for Android and, especially with regard to the Play Store, for app publishers to distribute their third-party apps via the Play Store. At the same time, the more apps are available overall and in particular in the Play Store, the more attractive the Android operating system becomes for users.[107] The more users use Android and the more apps are available for Android, the more attractive the Android operating system becomes for manufacturers of Android mobile phones, among other things.[108]

(90) In this respect, the market quality required under Section 18(2a) GWB is also fulfilled. In particular, if the Play Store is used free of charge, the fact that the service provided to users is free of charge does not prevent the Play Store from being classified as a market, as the free service is part of a business activity designed for profit-making purposes, which is monetized, among other things, via the advertising side and, in the relationship with the app publishers, in particular via a revenue share (so-called service

---

[106] Legal or natural person that distributes an app under their name (usually indirectly), see also Bundeskartellamt, Sector Inquiry Mobile Apps, July 2021, p. 19 para. 44.

[107] See. European Commission, Decision of 24 May 2004, AT.37792 – Microsoft para. 16 and European Commission, Decision of 16 December 2009, AT.39530 – Microsoft (Tying), para. 26.

[108] See European Commission, Decision of 18 July 2018, AT.40099 – Google Android, paras. 464 seqq.

fee[109]). Even if Google provides the Android source code to device manufacturers for free,[110] Google's Android offering is also (at least indirectly) part of a business activity designed for profit-making purposes via the aforementioned monetization options in the Play Store.

(91) YouTube also fulfills the conditions of Section 18(3a) GWB. The YouTube platform involves three groups: viewers, video providers[111] and advertisers. Viewers largely watch video content posted by video providers and delivered to viewers by YouTube as an intermediary. YouTube, like Google Search, is essentially advertising-based. Google thus also conveys the attention of users to advertisers with the consequence of an advertising contact. In addition to the ads that play before, in the middle, or at the end of a video, other ads can be displayed at the top of the search results page or between the search results. To some extent, a shopping unit is also displayed above the results list. In the relationship between viewers and advertisers, indirect network effects occur in line with what was said about Google Search, as advertisers benefit from an increasing reach of YouTube. The market quality required under Section 18(2a) GWB is also fulfilled. In particular, to the extent that YouTube is used free of charge, the fact that the service is provided to the viewer side free of charge does not prevent YouTube from being classified as (part of) a market(s), since the free service is part of a business activity designed for profit-making purposes, which is monetized via the advertisers. Moreover, if YouTube is used free of advertising in return for payment of a fee, the service is, in fact, not provided free of charge.

b) Significant extent

(92) Finally, Google's activities relating to Android, the Play Store and YouTube already are of significant extent as required by Section 19a (1) sentence 1 GWB when viewed in

---

109 https://support.google.com/googleplay/android-developer/answer/112622?hl=de#:~:text=15%20%25%20Servicegeb%C3%BChr%20f%C3%BCr%20die%20ersten,1%20Million%20%24%20(USD) (accessed 11 October 2021).

110 Cf. A. I. 2. a) dd) (2).

111 Google refers to video providers as "creators" https://support.google.com/youtube/topic/2803176?hl=de&ref_topic=6151248 (accessed 22 October 2021).

isolation, but even more so when viewed together with the Google search engine. Neither for Google itself, i.e., in comparison to its other activities, nor in relation to other companies active with competing products, do the aforementioned activities play only a subordinate role.

aa) Extent in relation to the overall activity of the company

(93) Google generated EUR 17.3 billion in revenue from advertising on YouTube in 2020.[112] In addition, Android and YouTube occupy central roles in Google's ecosystem. Google can thus achieve via agreements concluded in connection with the distribution of Android that its own services can be preinstalled and set as default on Google Android end devices manufactured by hundreds[113] of OEMs and certified by Google.[114] These preinstallations and default settings can be used to distribute Google's own services such as Google Search, the Chrome browser, Google Maps or Gmail.[115] As of January 2020, a total of nine apps had broken the 5 billion downloads mark in the Play Store. Seven

---

[112] See Google's revenue figures in USD in the Excel spreadsheet accompanying Google's response of 31 August 2021 to question 50 of the RFI of 23 July 2021. The conversion to EUR was based on the annual average exchange rate for 2020 of 0.8768 USD to EUR, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.de.html (accessed 14 October 2021).

[113] See the listing of each OEM: https://www.android.com/intl/de_de/certified/partners/#tab-panel-brands (accessed 1 September 2021).

[114] Cf. Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, paras. 9.6 seq.

[115] With respect to Google Search and Chrome, it should be noted that in response to the Commission's Decision of 18 July 2018, AT.40099. – *Google Android* Google inserted a Choice Screen on Google Android end devices in Germany as of Q2 2020, whereby the user can choose a default search engine for the home screen and the Chrome browser from an auction-based selection of three other search engines in addition to Google Search when setting up their Google Android end device (see https://blog.google/around-the-globe/google-europe/presenting-search-app-and-browser-options-android-users-europe accessed 16 August 2021), which it intends to offer in a revised version (see https://blog.google/around-the-globe/google-europe/changes-android-choice-screen-europe accessed 16 August 2021) as of September 2021, cf. VI.2.b) bb) (6).

of them are Google apps.[116] The number of third-party apps developed for and distributed via the Play Store contributes to the significance and attractiveness of Android[117] due to network effects so that the Play Store does not play merely a subordinate role in the Google Group. For advertisers, YouTube represents an attractive advertising space due to its wide reach of almost […] million daily and almost […] million monthly active users in Germany,[118] as well as more than two billion monthly users worldwide (signed in alone)[119] which can only be booked via Google's AdTech products.

bb) Extent in relation to the activity of other providers

(94) Nor do the aforementioned Google services play a merely subordinate role in relation to the respective competing products of other companies. According to the European Commission's findings, Google's smartphone operating system Google-Android[120] was dominant in a worldwide (excluding China) defined market for licensing operating systems for smart mobile devices to OEMs with a market share of 96.4% in the period from 2011 to 2016.[121] Also on a worldwide (excluding China) market for Android app stores, the Commission found Google dominant based on Google's market share of 90-100% measured on the basis of app downloads in the same period.[122] Regardless of the (continued) existence of the aforementioned dominant positions, Google's market positions with Android and the Play Store have in any case not weakened to such an extent in the meantime that Google could only play merely a subordinate role in relation to its

---

116 Specifically, the Google apps were: YouTube, Google Maps, Google Search, Gmail, Chrome, Google Play Music, Google Drive. In addition, Facebook and WhatsApp also broke the mark, see https://www.googlewatchblog.de/2020/01/whatsapp-der-messenger-marke/ (accessed 16 August 2021).

117 See for instance European Commission, Decision of 18 July 2018, AT.40099 – Google Android, paras. 464 seqq.

118 Google's response to question 33 of the RFI of 23 July 2021; see in detail on the assumptions and possible inaccuracies of the best possible estimation of these user numbers, paras. 205 seqq.

119 https://www.youtube.com/intl/de/ads/how-it-works/ (accessed 20 October 2021).

120 That is, especially without Android-Forks, see definition above.

121 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android,* paras. 440 and 446.

122 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android,* paras. 590 and 598.

competitors. Google's not merely subordinate role in these areas can almost certainly be derived based on publicly available quantitative values for Android and the Play Store. The values available in this respect are in orders of magnitude that are in any case well above a merely subordinate role. The share of Android in terms of internet usage with mobile phones by data reported by StatCounter has been over 70% worldwide for several years, and over 60% in Germany.[123]

IV. Vertical integration and activities on otherwise related markets (Section 19a(1) sentence 2 no. 3 GWB)

(95) The variety of services offered by Google and the fact that Google is vertically integrated or active in related markets in different areas contribute to its paramount significance for competition across markets.

1. Purpose of the condition

(96) The condition set forth in Section 19a(1) sentence 2 no. 3 GWB aims at capturing the particularities of digital ecosystems arising from the vertical and/or conglomerate relationship of their products, services or offers.[124]

(97) The term digital "ecosystem", which is frequently used in economic literature and in competition policy, describes in particular a strategy in which the service provider combines various products for its customers in a portfolio-like manner so that they perform as many activities as possible on its platform or within its "ecosystem". The term also includes the formation of an ecosystem around a strong platform, without any real tying of services on the same platform, but that allows users to move back and forth between services in the system. The different forms of digital service offers from the same provider have the potential to keep the end user in the ecosystem.

(98) However, the characteristic of "relatedness" goes beyond user-side content-related connections and, in line with the protective purpose of Section 19a GWB, aims to determine

---

123 Cf. VI. 3. b).

124 Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

whether vertical integration or other connections between a company's fields of activity give rise to possibilities to achieve competitive advantages or even control market access.[125] In the case of functional or value-adding links between products, the possibility of digital ecosystems to leverage or deploy resources and capabilities in different areas of activity represents a considerable potential threat in contrast to a mere conglomerate. At the same time, a broad ecosystem allows companies in an exceptional way to offer certain services without monetary payment or at very low cost by financing them through revenues achieved elsewhere.

(99) Furthermore, the criteria of vertical integration and activity on otherwise related markets are not different in terms of their significance. Rather, they stand for the two perspectives of "depth" and "breadth". Vertical integration is already a well-established concept in competition law as a way of exploiting competitive leeway. In the internet economy, however, where the boundaries between "true" vertical integration and other interconnections that open up similar possibilities are blurring, it is precisely the latter that are also important. As the legislative intent to the Act clearly states, the aim of determining the range of activities and services is to capture the potential for conglomerate effects, i.e., effects that are not (only) based on the combination of value-adding stages that build on one another, but also effects that result from activities in different fields that are otherwise related to one another. In this respect, the legislative intent speaks at one instance, for example, of "particular potential competitive threats, especially as a result of increased possibilities for vertical and conglomerate exploitation of economic power"[126] and at another instance even only of "the fact that companies that operate digital platforms and networks can be of central significance for different markets due to the advantages of conglomerate structures and the occupation of key positions relevant to competition"[127].

---

[125] Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 75.

[126] Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

[127] Cf. the government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 73.

2. Close connection of Google services

(100) The close connections between the services offered by Google and the associated competitive advantages are particularly evident in the services provided by Google to its users[128] (see a. below) and in the advertising services to advertising customers[129](see b. below).

a) Google services directed at users (excluding advertising services)

(101) According to its own information, Google currently offers its users 68 services[130] which partly have considerable relevant connections within the meaning of Section 19a(1) sentence 2 no. 3 GWB. This is shown below by way of an example for selected services and connections. For this purpose, Google Search, specialized search services such as Google Shopping or Google Travel, the map and navigation service Google Maps, the mobile operating system Android, the browser Chrome, the video platform YouTube, the app store Google Play Store and the email service Gmail are considered.

(102) In the case of services directed at its users, there are competitively advantageous connections for Google that allow it to distribute additional services via its wide-reach services. In particular, possibilities to bundle may arise if services meet a need related to the very wide-reach Google Search (see aa) below). Android is also of importance to Google's activity across services. With this widely used operating system and apps based on it, Google offers diverse services, especially for the use of mobile devices. The licensing of Android and Android-based apps to mobile device manufacturers, mobile network operators and app publishers, through which Google can control access points to its services, is of substantial significance in this regard (see bb) below). In addition, Google controls Chrome, a browser with wide reach, through which in turn Google can offer other services as product combinations (see cc) below). To some extent, a connection of services also takes place via the Google account (see dd) below).

---

[128] Cf. D. (Glossary).

[129] Advertisers and providers of advertising space ("publishers").

[130] Google's response of 18 July 2021 to question 3 of the RFI of 7 June 2021, Annex F3.

aa) Google Search

(103) Relevant links exist in particular between the wide-reaching Google Search and a number of other significant Google services.

(104) Google's activities as a provider of a general search service on the one hand and as a provider of specialized ("vertical") search services on the other are particularly closely connected. Google's specialized search services include, for example, the product and price comparison service Google Shopping.[131] General search and specialized search are in a sense neighboring services with partly similar functions: Both Google Search and specialized search services contain search functionalities. In view of the search functionalities also contained in YouTube and Maps, these can also be classified as neighboring services to this extent, which are connected via the search functionality.

(105) On the one hand, Google can use the connection between these services to design and optimize its service Google Search. On the other hand, by choosing which and how search results and other content or ads are displayed via the general search, Google can influence which websites users will likely click on, or whether they will not click on any other websites at all. Search engines in general are of considerable significance for finding web content. This applies in particular to Google Search, with its wide reach of almost [80-90]% of internet users[132] in Germany. Google Search is an important distribution channel for many services. In *Google Search (Shopping)*[133] the European Commission obliged Google not to discriminate against competing price comparison services compared to its own service Google Shopping.

bb) Android, Android apps

(106) The Android operating system and the apps based on it (hereinafter referred to as: "Android apps") are of considerable significance for the distribution of Google services, including in particular Google Search. In this respect, too, there are connections between the respective services that are relevant for Google's position in the market, which result

---

131 Cf. European Commission, Decision of 27 June 2018, AT.39740, *Google Search (Shopping)*, paras. 26 seqq.

132 Cf. VI. 2. b) bb) (1) (b).

133 European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping)*.

on the one hand from users' expectations of the software equipment of mobile devices and on the other hand from Google's control over the access points to these services, in particular on the basis of agreements with device manufacturers.

(107) A substantial element of Google's business model is to license its software products to manufacturers of mobile devices to achieve the widest possible reach for its products and to tap monetization possibilities, particularly through advertising.[134]

(108) An operating system is a basic prerequisite for operating hardware like a mobile device. Manufacturers of mobile devices must therefore license an operating system if they have not developed one themselves. In addition, manufacturers of mobile devices are asking for other software products that cover the common functionalities expected by many end users of a mobile device, even if these are not strictly necessary for core hardware functions. In particular, this may include a browser to be able to display web content, a search engine to be able to find web content, a map service so that the device can be used for navigation, and an app store via which apps can be downloaded according to the user's individual needs.

(109) With Android, Google controls the most widely used operating system for mobile devices with […] million active devices in Germany[135] and has developed a number of apps for Android featuring essential functionalities expected by users of mobile devices. These include the Search app (search functionality), the Chrome app (browser functionality), the Maps app (navigation functionality) and the Play Store app (Android app store).

(110) Google offers OEMs licensing of Android and of a number of other apps, which can then be preinstalled or set as default on the device. It is true that in many areas preinstallations may generally be in the interest of the users who want to use their smartphone as quickly and easily as possible and do not want to download individual apps themselves ("out of the box"). At the same time, however, preinstallations influence user behavior.[136]

---

[134] Cf. European Commission, Decision of 18 July 2018, AT.40099, *Google Android*, para. 153.

[135] Google's response to question 41(a) of the RFI of 2 July 2021 (referring to the reference date of 31 March 2021).

[136] Cf. in general CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 31 seqq.

Preinstallation of products can thus create connections, which in a sense combine the products, even if users remain free to change default settings and install other apps.

(111) Through agreements that are concluded in the context of the distribution of Android and Google apps, Google has an efficient tool to distribute its products and services to OEMs with broad market coverage.

(112) In Germany, Google currently has agreements with four of the five OEMs with the highest sales in Germany in 2020 (Samsung, Xiaomi, Lenovo, LG) for the preinstallation of its apps. The preinstalled apps include the Search or Chrome app[137] that can now be licensed separately in the EEA[138] due to the European Commission's decision in *Google Android*, as well as the "Google Mobile Services" (GMS) apps covered by Google's European Mobile Application Distribution Agreement ("EMADA").[139] Based on the EMADA agreement, OEMs must preinstall the Google apps Google Drive, Duo, Gmail (or Gmail Go), Google TV, Google Maps (or Maps Go), Google Photos (or Gallery Go), Google Play, and YouTube (including YouTube Music). At their discretion, OEMs may preinstall other Google apps such as Google Earth, Calendar, Clock, Podcasts and Translate on their devices.[140] In addition, while Google has agreed with the aforementioned OEMs on setting the Search app as default ("default setting")[141] in the EEA, when setting up a mobile phone, users are presented with a prompt (so-called Choice Screen), on which users may pick the default search engine themselves. In return, Google gives the device manufacturers a share of the revenue from search-based advertising or pays for the

---

137 Outside the EEA, these apps continue to be part of the GMS.

138 Cf. https://www.blog.google/around-the-globe/google-europe/complying-ecs-android-decision (accessed 4 August 2021) and Annex Q.53.5 (EMADA Agreement) and Annex Q.53.6 (Chrome European License Agreement) and Annex Q.53.7 (Google Search European License Agreement) to Google's response to question 53.d of the RFI of 23 July 2021.

139 Cf. A. I. 2. a) dd) (2).

140 Cf. Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.3.

141 Cf. Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.6. The user can change the default setting via the Choice Screen.

preinstallation or default setting of the Search and Chrome app.[142] For these preinstallations or default settings on Android, Google paid a total of EUR […] billion to OEMs worldwide in 2020.[143]

(113) For the assessment pursuant to Section 19a(1) GWB, it is already sufficient to find, based on the observation of Google's fields of activity in the Android ecosystem, that, taking into account Google's potentials, there are relevant connections to the services directed at end users, which in turn significantly shape Google's monetization potential and thus contribute significantly to Google's special significance. However, a further assessment whether certain Google conduct (such as licensing agreements or the agreements regarding default settings) violates competition rules, as assumed by the European Commission in *Google Android*, is not covered by the legal assessment under Section 19a (1) GWB.

cc) Chrome

(114) The Chrome browser developed by Google has considerable significance for the distribution of Google Search in particular.

(115) There is already a close relevant connection between browsers and search engines due to their product characteristics. Both products are often used in a complementary way. To access content on the internet, users call up a browser. Often, they then enter search terms instead of a web address into a search engine to retrieve a specific resource, even if they know the web address. This behavior is supported by the configuration of all common browsers, where a search can be triggered by entering queries in the address line of the browser (in Chrome the so-called "Omnibox").

(116) Due to this user behavior, browsers may take a key position for the selection of the search engine. They may use default settings to direct their users to specific search engines. In general, as mentioned above, it can be observed that default settings, even

---

142 Cf. European Commission, Decision of 18 July 2018, AT.40099, *Google Android*, paras. 192 seqq. and Annex Q53.8 (Google Search and Chrome European Placement Agreement) and Annex Q53.9 (Google Mobile Revenue Share Agreement) to Google's response to question 53.b of the RFI of 23 July 2021.

143 Google's response to question 54(a) of the RFI of 23 July 2021.

if users can change them, may have significant relevance for the selection of the respective application.[144]

(117) Chrome also has a wide user base. In 2020, the Chrome browser had about […] million DAU[145] and about […] million MAU[146] in Germany.[147] Accordingly, default settings in Chrome are significant for actual user behavior.

dd) Linking several services via one Google account

(118) The Google user account sign in leads to a certain extent to a connection of Google services, because several services can be used with one account.

(119) By default, the user is prompted to sign in to the Google account or set up a Google account during the initial setup of an Android mobile device. This step can be skipped, but only after a note about then missing the ability to access the Play Store as well as other functionality limitations.

(120) Without Google account sign in, the following services, among others, are not available: Google Drive, Gmail, Google Fit, Google Meet and Google Pay.[148] Services can often be used without Google account sign in, but certain functionalities are missing, such as downloading apps from the Google Play Store, uploading videos to YouTube, or the Chrome sync function.[149]

(121) From the user's perspective, it may under certain circumstances also be convenient to use additional Google services using the already existing Google account with the information stored there. For example, in some cases, Gmail could be used as the email

---

144 Cf. on default settings of the search engine in the browser, European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* paras. 972 seqq. and generally on the significance of default settings for search engines CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, para. 3.92.

145 Daily Active User, user who has accessed a service or advertising service at least once via a mobile or stationary device in the 24 hours prior to the time of measurement.

146 Monthly Active User, user who has accessed a service or advertising service at least once via a mobile or stationary device in the 30 days prior to the time of measurement.

147 Google's response to question 33 of the RFI 23 July 2021.

148 Google's response of 2 August 2021 to question 3c of the RFI of 7 June 2021, Annex Q3.

149 Google's response of 2 August 2021 to question 12 of the RFI of 7 June 2021, Annex Q12.

provider, simply because the user has already received a Gmail address during the sign in to the Google account.

(122) When using an existing Google account to sign in to several services, a user can use this to centrally manage the information relevant to the use of services. Finally, the Google account can also be used to sign in to third-party services ("Sign in with Google"). This eliminates the need to register or manage credentials separately for each provider.

b) Advertising services

(123) In the area of advertising services for the intermediation of online advertising space, Google exhibits a particularly high degree of vertical integration. This in turn can create competitive advantages for Google.

(124) Specific market structures with specialized services have developed to bring together supply and demand for online advertising space (see aa) below). Google offers both providers of advertising space (publishers) and advertisers (collectively, advertising customers)[150] various advertising services that cover the entire supply chain (see bb) below) and have wide reach (see cc) below).

aa) Marketing of online advertising space

(125) The advertising services offered by Google are particularly important for the open display advertising segment ("Open Display"). In this segment, publishers market their online advertising space predominantly via trading platforms operated by third parties, while in the "Owned and Operated" segment[151] providers sell their advertising space via their own advertising services.[152] The supply of advertising space in this segment is fragmented compared to the Owned and Operated segment. Website operators often

---

150 Cf. D. (Glossary).

151 Term for online advertising space that larger, vertically integrated operators of ad-based platforms typically market via their own services.

152 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 2.48 seqq.

have only a relatively small advertising inventory and are accordingly rather unable to take on a technically complex sale of online advertising space themselves.

(126) The technical complexity of ad sales in today's very important so-called "programmatic advertising" results in particular from the need to bring together supply and demand in real time when the user calls up the respective website ("real time bidding"). Typically, advertising space on websites is allocated in automated auctions, in which the respective bid is accepted within a very short period of time. This requires special services and platforms ("AdTech"), which require a high level of expertise. On the advertisers' side Advertiser Ad Servers (inventory of ads, delivery of ads, and tracking of advertising activity) can be distinguished from Demand Side Platforms (DSP, systems for purchasing advertising space). On the side of publishers, Supply Side Platforms (SSPs, platforms through which auctions are held for the sale of advertising space) and Publisher Ad Servers (management of advertising space, decision on the acceptance of bids from advertisers) are used.[153] Digital marketplaces through which supply side platforms and demand side platforms are linked ("Ad Exchanges") used to be independent, but are now mostly part of the supply side platforms.[154]

(127) The increasing use of automated commerce is also a consequence of the growing need for targeted advertising, the use of which it facilitates. Targeted advertising aims to show users, e.g., visitors of a website, ads tailored to their individual interests based on their behavior as observed in the past. The interests of the user to whom the potential advertisement is to be displayed can in any case be taken into account much more easily in the automated process of "programmatic advertising" and "real time bidding" at the moment the website is called up.

(128) "Programmatic advertising" is now a very important form of distribution for online advertising space. By contrast, other forms such as direct agreements between advertising

---

[153] CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix M: intermediation in open display advertising, paras. 16 seq.; European Commission, Decision of 17 December 2020, M.9660, *Google / Fitbit,* para. 55.

[154] European Commission, Decision of 17 December 2020, M.9660, *Google v Fitbit*, para. 55.

space providers and advertisers at a fixed price agreed in advance have become much less important.[155]

(129) According to the data available to Statista, the economic importance of banner advertising, which includes significant parts of open display advertising[156] was in third place in recent years after search-based advertising and advertising via social media[157] listed separately by Statista. With increasing revenues in each of the segments listed, Statista also forecasts that this order will be maintained in the coming years until 2024.[158] According to Statista, advertising in the open display segment generated annual global revenues of around USD 52 billion in 2019 and 2020.[159]

bb) Google's advertising services

(130) Google, through Google Search, is the major publisher for search-based advertising. At the same time, Google is also strong in offering video advertising space via YouTube. In addition to offering its own advertising space, Google is also a major provider of advertising services that bring together supply and demand for digital advertising space. In this regard, Google benefits from its position as a provider of its own advertising space, some of which can be booked programmatically and exclusively only via Google's own advertising services[160] and which has a wide reach, particularly in relation to Google Search and YouTube. Google also offers through its advertising services, e.g., Google Ads, the ability to place advertisements not only on Google's own advertising spaces, but also on the advertising spaces of third parties that are part of Google's advertising network.[161]

---

155 European Commission, Decision of 17 December 2020, M.9660, *Google v Fitbit*, para. 53.

156 In addition to the insertion of banners on websites (and in apps), Statista also defines banner advertising as so-called "rich media ads" and video ads as a substitute for banners, see Statista, Digital Advertising Market Report 2020, p. 79.

157 This differentiation is a reproduction of the turnover data provided by Statista in this subdivision and not a market definition under competition law.

158 Statista, Digital Advertising Market Report 2020, p. 6.

159 Statista, Digital Advertising Market Report 2020, p. 83.

160 See with regard to YouTube: CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix M: intermediation in open display advertising, paras. 410 seqq.

161 European Commission, Decision of 17 December 2020, M.9660, *Google v Fitbit*, para. 57.

(131) Google provides a range of advertising services for providers and advertisers, practically covering the entire supply chain between the supply of advertising space on websites and the demand for such advertising space.

(132) On the advertisers' side, Google operates the Advertiser Ad Server Campaign Manager 360 ("CM 360") and the demand side platform Display & Video 360 ("DV 360") for display and video advertising. Through DV 360, Google markets its own advertising space (e.g., on YouTube) and third-party advertising space for non-search-based advertising; and through the demand side platform SearchAds 360 ("SA 360"), Google markets its own advertising space and third-party advertising space for search-based advertising. The integrated service Google Ads is primarily aimed at smaller advertisers. They may use Google Ads to place ads on Google's own advertising spaces and on third-party advertising spaces.

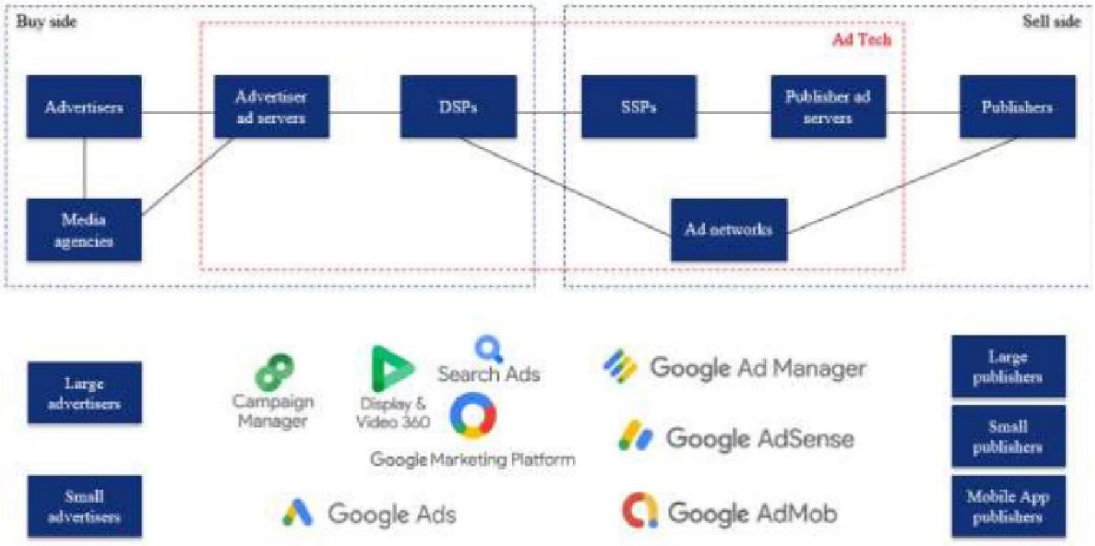
(133) For publishers, Google operates the Google Ad Manager. It includes a Publisher Ad Server (formerly DoubleClick for Publishers) and a Supply Side Platform / Ad Exchange (formerly AdX[162]). For smaller publishers, Google offers the integrated service AdSense, through which they can market advertising space on websites. AdMob is used to market advertising space in apps.

(134) The following overview[163] shows the main Google services with the different contractual links between them (see link lines) and their allocation to the respective levels of the value chain:

[162] Referred to as "Authorized Buyers" with respect to advertisers, see Autorité de la Concurrence, Décision n° 21-D-11 du 7 juin 2021 relative à des pratiques mises en oeuvre dans le secteur de la publicité sur Internet, para. 89.

[163] European Commission, Decision of 17 December 2020, M.9660, *Google v Fitbit*, Fig. 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).

Figure 3: Overview of Google's advertising services

cc) Wide reach of Google's advertising services

(135) With these advertising services, Google has wide reach with advertising customers.

(136) According to the results of the investigations in the *Google/Fitbit* proceedings, Google's AdTech services have high shares of advertising customers on all levels of the supply chain. The European Commission considered the advertising customer shares of advertising services in the segments Demand Side Platforms for advertisers,[164] Supply Side Platforms for publishers[165] and analysis. In addition, it also relied on the advertising

164 For non-search-based advertising.

165 For non-search-based advertising.

customer shares for AdTech services for search-based and non-search-based advertising overall[166] in its decision.[167] The shares for Germany and the EEA in 2020 are shown in the following table[168]:

Table 1: Google's advertising customer shares in the AdTech sector

	Demand Side Platforms	Supply Side Platforms	Analysis	Ad Network Services
Germany	60-70%	50-60%	70-80%	80-90%
	60-70%	50-60%	80-90%	70-80%

(137) The study by the Competition and Markets Authority ("CMA", United Kingdom) on the digital advertising sector in the United Kingdom also supports the assumption of very high market shares for Google on all levels of the display advertising supply chain. Specifically, the CMA looked at Advertiser Ad Server Providers, Demand Side Platforms, Supply Side Platforms and Publisher Ad Servers. In the United Kingdom, Google has a market share of 80-90% for Advertiser Ad Servers, 50-60% for Demand Side Platforms, 50-60% for Supply Side Platforms and 90-100% for Publisher Ad Servers.[169]

3. Significance for Google's competitive position

(138) Google's vertically integrated corporate structure and its operations in interconnected markets contribute to its paramount significance for competition across markets.

(139) On the user side, Google can continue to expand its reach due to the interconnectedness of services in terms of content. This user-side connection is reinforced by Google's control of access points to the services, for example by concluding agreements on pre-installations with mobile device manufacturers.

(140) On the corporate side, Google may gain competitive advantages from the connectedness of its services, as certain resources can be used across services. Economies of

166 Referred to in the decision as ad networks services.

167 European Commission, Decision of 17 December 2020, M.9660, *Google/Fitbit*, paras. 348 seqq.

168 European Commission, Decision of 17 December 2020, M.9660, *Google/Fitbit*, Table 14, "Google's shares of 'adtech services'".

169 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 5.212 seqq. and figure 5.15.

scope were the subject of academic discussion in the run-up to the introduction of Section 19a GWB, particularly with regard to the competitive potential arising from the possibility of combining data in the digital economy. Here, with reference to Google, it was rightly pointed out that there are possibilities for improving existing services (for example, through greater personalization on the basis of comprehensive user data)[170] or developing new services, as well as using the data for targeted advertising.[171]

(141) In this context, a use of data as "shareable input", i.e., input that can be used for diverse purposes, is of substantial significance. The user data collected in a service can be used not only with regard to this specific service, for example to further develop its functions, but it can also be used to improve other services or to develop completely new products. In this context, Google's ability to track user behavior with high accuracy by combining data from different services plays a significant role. Signing in to the Google account enables Google to assign user data across services and devices. Google also has a number of other identifiers that can be used to assign data to users.[172]

(142) The connection between the wide-reach services provided to users, mostly free of charge, and the advertising services operated by Google is of particular significance. Their success is largely based on the data collected by Google about the users of its services and its use for targeted advertising.

(143) These advantages of the interconnected data are further strengthened by the fact that Google, with its wide-reach advertising services, combines the supply of third-party advertising space in the open display area with the relevant demand across all levels of the supply chain, in addition to marketing its own advertising space. Google's particular position is again supported by the fact that it has significant own advertising space on its own services, which have a wide reach on the user side, and is active on both the demand and the supply side with its advertising services, which also have a wide reach on the advertising customer side and include not only its own advertising space but also

---

170 See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

171 See in this regard Schweitzer, Haucap, et al, Modernisation of abuse control for companies with market power – Final report, 2018, pp. 84 seq.

172 Cf. V. 2. c) bb).

a large number of third-party advertising spaces, especially in the open display area. As a result of the high level of interoperability between its own advertising services, activity on all levels of the supply chain on the advertising-side can lead to further time-[173] and data-related[174] advantages in the use of Google advertising services. No other company in this area has a comparable portfolio of services and advertising services that can meet the respective specific needs of market participants with such user and advertising customer coverage, with comparable access to diverse own and third-party advertising spaces, and with a comparable degree of interoperability.

V. Access to data relevant for competition, Section 19a(1) sentence 2 no. 4 GWB

(144) In addition, Google's particularly broad and deep cross-service and cross-device access to data relevant for competition from a variety of wide-reach sources contributes to its paramount significance for competition across markets.

---

[173] Time-related advantages may arise from the possibility of ensuring a lower latency in the submission of bids relative to competitors and thus, in particular, preventing the submission of bids from being disregarded due to exceeding a typically set time limit, see CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix M: intermediation in open display advertising, para. 129.

[174] Data-related, in particular, are potential benefits in cookie matching. Since each company uses its own cookie IDs to identify the user viewing the potential ad, these must be matched when one company's demand side platform trades with another company's supply side platform. According to the CMA's investigations, cookie matching can be flawed in around 30% of cases, which means that the value of the ad space cannot be accurately assessed by advertisers due to a lack of sufficient identification of the user potentially viewing it. Since Google carries out transactions between its demand side platform and its supply side platform on the basis of the same cookie ID within its AdTech stack, there are no losses in this respect, see also CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix M: intermediation in open display advertising, paras. 126 seqq.

1. Purpose of the condition

(145) The condition set forth in Section 19a(1) sentence 2 no. 4 GWB can be of considerable relevance for the legal assessment of the paramount significance of an undertaking for competition across markets.[175]

(146) Data is an important resource for building and strengthening digital ecosystems. The term “data” is to be understood broadly and ultimately encompasses any piece of information.[176] Many digital business models are based on personal data, i.e., information relating to an identified or identifiable natural person (Article 4 no. 1 GDPR)[177]. In addition, non-personal data can also have considerable cross-market relevance for an ecosystem.

(147) In contrast to the identically worded Section 18(3a) no. 4 GWB, this condition is not to be understood in terms of the market, but rather access to data relevant for competition is to be examined in a cross-market sense. For the classification of the condition as a factor of paramount significance for competition across markets, it is significant that the data is typically “shareable input” that can be used across services and devices.[178] If there is a possibility to use data across different areas, it can be a “bracket” for connecting markets or services into a system reaching across markets.[179] The generation and

---

[175] The government’s statement of legislative intent refers in several places to the significance of data in connection with Section 19a GWB, cf. the government’s statement of legislative intent to the 10th amendment of the GWB, see Bundestag printed paper 19/23492, pp. 74 seq.

[176] There is no generally accepted definition of the term “data”. In the following, the term is broadly understood to mean any information or its representation, often in combination with its storage in digital form on a computer or other structures such as data centers, see Autorité de la Concurrence, Bundeskartellamt, Competition Law and Data, 10 May 2016, https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2 (accessed 8 August 2021), p. 4.

[177] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data, on the free movement of such data and repealing Directive 95/46/G (General Data Protection Regulation), OJ No L 119, 4 May 2016, p. 1.

[178] Cf. M. Bourreau, A. de Streel, Digital Conglomerates and EU Competition Policy, 2019, p. 11.

[179] Cf. Schweitzer, Haucap, et al, Modernisation of abuse control for companies with market power – final report, 2018, p. 41.

commercial processing of data can be the aspect that incidentally keeps together quite different business areas and can establish overarching positions of power.[180]

(148) The possibility to use data across markets can affect competition in several ways: If it is possible to combine data derived from the use of different services, additional information that would not be available to the same extent or in the same quality if the different datasets were analyzed separately may be obtained to develop new services.[181] This effect is reinforced by the use of machine learning methods, which offer high added value especially when applied to large[182] or high quality datasets.[183] Improved personalization through the collected data within an ecosystem is of additional significance. This allows existing products to be improved and new ones to be developed that are tailored to the specific needs of users. This can facilitate the entering into new markets.[184] Furthermore, particularly the possibility to use data relevant for competition across markets can hold enormous potential to prevent innovative offers from competitors and thus further solidify the company's significance across markets.[185]

(149) Access to data relevant for competition can also become highly significant for monetization through online advertising: access to data across markets allows targeted advertising to be optimized across products, providing the core form of funding for the entire ecosystem. Thus, in the event of user overlaps between different services, the corresponding user data can be combined and the extensive user profiles thus obtained can be used for targeted advertising. Targeting can be continuously refined and in turn generate new data about the user.[186] In addition, financing with online advertising makes it

---

180 Cf. Schweitzer, Haucap, et al, Modernisation of abuse control for companies with market power – final report, 2018, pp. 84 seq.

181 Report by Vestager advisors Crémer/deMontjoye/Schweitzer, Competition Policy for the Digital Era, 2019, p. 33.

182 Parker/Petroupolos/Van Alstyne, Digital platforms and antitrust, Bruegel Working Paper 06/2020, p. 6 (https://www.bruegel.org/wp-content/uploads/2020/11/WP-2020-06-1.pdf).

183 Cf. Google's response of 8 December 2021 to the statement of objections of 24 November 2021, Attachment 2, p. 11.

184 Cf. Federal Ministry for Economic Affairs and Energy, A new competition framework for the digital economy – Report of the Competition Law 4.0 Commission, 2019, p. 18.

185 The government's statement of legislative intent to the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 76.

186 Cf. Bundeskartellamt, Decision of 6 February 2019, B6-22/16 – Facebook, paras. 482, 488, 492.

possible to offer or continuously expand and cross-finance the portfolio of *free* services, the data of which thus becomes, to a certain extent, the economic consideration for the use of the service.[187] This facilitates market entry with products that can be financed with online advertising, since with a particularly large amount of data personalized advertising requires a lower reach.

2. Collection and use of data by Google

(150) In particular, Google's broad and deep access to user-related data contributes significantly to its paramount significance for competition across markets. The data collected by Google forms a fundamental part of its business model, in which services are offered to users predominantly free of charge and are financed and monetized via advertising. Accordingly, the following assessment of data access pursuant to Section 19a(1) sentence 2 no. 4 GWB focuses on user-related data. It should not go unmentioned, however, that the data collected by Google that is not user-related also contributes to Google's paramount significance for competition. Non-user-related data includes, for example, the data on web content obtained by Google via the crawling of web pages, which is stored in Google's web index and forms the basis for the search engine operated by Google.[188] In particular, the web index maintained by Google gives Google a significant edge over other search engine providers.[189] The data collected by Google itself also includes panoramic images that are used for the virtual presentation of environmental views in Google Maps and for which Google operates Street View vehicles equipped with cameras.[190]

(151) However, the focus of the following assessment of data access pursuant to Section 19a (1) sentence 2 no. 4 GWB is to be on user-related data in this case, as mentioned above. In the following, particularly relevant user data is presented as an example – categorized according to the privacy policy used by Google (a)). The data originates

---

187 Cf. Federal Court of Justice, Decision of 23 June, 2020, KVR 69/19, para. 62 – Facebook.

188 Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, para. 5.25.

189 Cf. VI. 2. b) bb) (3).

190 https://www.google.de/intl/de/streetview/ (accessed 19 August 2021). Google Maps users can also create panoramic images and post them on Google Maps.

from a variety of wide-reach sources listed here only as examples (b)). Google is able to collect and combine the data across sources (c)).

a) Categorization of user data

(152) User data includes information that, according to its content, directly relates to a person, such as identity, interests, circumstances, communication content or behavior. The user data collected by Google is personal data within the meaning of Article 4 no. 1 GDPR,[191] insofar as it relates to an identified or identifiable natural person.

(153) User data, according to the cross-service privacy policy[192] used by Google, can be divided into data actively provided by the user (aa)), data collected via apps, browsers and devices (bb)), data that Google collects about the user's activities (cc)) and in location data collected by Google (dd)).

aa) Data actively provided by the user

(154) Users actively provide their data, for example, when creating a Google account. In any case, this data includes a surname, first name, an email address as a username and a password. There is no requirement to reveal one's true identity. Other information such as gender, date of birth, phone number and payment information may be added.

(155) User-provided data also includes data that the user creates, uploads, or receives from others when using Google's services, such as emails written or received by the user, photos and videos saved by the user, documents or spreadsheets created by the user, and comments written on YouTube videos.

---

[191] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data, on the free movement of such data and repealing Directive 95/46/G (General Data Protection Regulation), OJ No L 119, 4 May 2016, p. 1.

[192] Google Privacy Policy, effective 1 July 2021, https://policies.google.com/privacy?hl=de (accessed 18 August 2021).

bb) Data collected via apps, browsers and devices

(156) The category of data collected by Google via apps, browsers and devices includes unique identifiers, the type and settings of the browser, the type and settings of the device, the operating system, information about the mobile network such as the name of the mobile provider and the phone number, and the version number of the app. Google also collects data about the interaction of the user's apps, browsers, and devices with Google services, including the IP address, system activity, and the date, time, and referrer URL[193] of the user's request.

cc) Data on the user's activities

(157) Google also collects data on the user's activities in its services. This includes, but is not limited to, the following activity data:

- A user's search terms
- Videos that the user watches
- Content and advertisements that the user views and interacts with
- Voice and audio data when using audio functions
- Purchase activity in the app store
- Persons with whom the user communicates or exchanges content
- Activities on third-party websites and third-party apps that use Google services
- The Chrome browsing history that the user has synchronized with their Google account

[193] The URL immediately preceding the current URL (Uniform Resource Locator). The URL is the complete web address necessary to navigate to a resource on the web.

dd) Location data

(158) Finally, Google collects data on the user's location when the user uses Google services. Various technologies are used for this purpose, such as approximate localization based on the IP address. In addition, Google may collect satellite-based localization via GPS and localization via sensor data of the device, such as movement speed and direction determined by accelerometer and gyroscope, as well as the use of information about objects in the vicinity of the user's device, such as WiFi access points, cell towers and Bluetooth-enabled devices.

b) Origin of user data

(159) Already in view of the large number of different services, Google has a wide range of data sources at its disposal. With regard to the origin of Google's data, a distinction can be made in particular between data from its services directed at users (see aa) below) and its advertising services directed at advertising customers (see bb) below). However, Google also collects data from various other sources, such as publicly available information e.g., from web content indexed in the search engine context or user-related data from trusted partners such as directory services, marketing and security partners.

aa) Google services directed at users (excluding advertising services)

(160) In the following, we give an overview of Google's possibilities for data collection in a selection of the services with the most users (Android ((2)), Chrome ((3)), Maps ((4)), Google Search ((5)), YouTube ((6)). First, however, the effects of the user's options to deactivate data processing in this context will be discussed ((1)).

(1) Exclusive consideration of the potential for data processing

(161) In this decision, exclusively Google's potential for data processing is assessed and not Google's actual handling of it. With regard to the protective purpose of the law to address the aforementioned potential threats, in the framework of Section 19a(1) GWB, a company's abstract potential is decisive and not its actual conduct in practice. Google's overall potential for data processing is particularly visible in Google's cross-service pri-

vacy policy. Here, Google in general has users grant the possibility to collect and combine the listed different categories[194] of data in its various services with and without the user signing in to a Google account.[195]

(162) In the context of the present proceeding, it is irrelevant to which extent Google internally limits its possibilities to process data, e.g., by using the collected data only for specific purposes or by internally excluding the combination of specific data (e.g., because of internal or statutory requirements or contractual agreements with third parties). This does not change Google's competitive potential. Accordingly, it was not assessed to what extent Google does not use its potential to process data and particularly also to combine data.

(163) While Google currently offers its users, both with and without a Google account sign in, specific so-called "personalization settings" prior to the use of its services, which allow users to restrict Google's data processing to a certain extent by deactivating them. Deactivating the personalization setting has the effect of activating the corresponding data protection setting. Nevertheless, even if a certain restriction of Google's potential to process data should result from the deactivation of personalization settings, this is largely irrelevant.

(164) This is because, according to the Decision Division's investigations, such personalization settings are frequently not deactivated, at least by users with a Google account. This results from an assessment of the user choices in all newly set up Google accounts in Germany in 2020 (hereinafter "new Google accounts DE-2020") during account setup and an assessment of the personalization settings of the Google accounts active in Germany on the reference date of 31 March 2021 (hereinafter "active Google accounts DE-31 March 2021"). The user's origin was estimated by Google using the IP address. Users who have one or several accounts were therefore counted several times.

---

194 Cf. above a).

195 Google Privacy Policy effective as of 1 July 2021, https://policies.google.com/privacy?hl=en (accessed 18 August 2021).

(165) Only Location History[196] is disabled for the vast majority of users with a Google account, approximately [60-70]% (active Google accounts DE-31 March 2021). Location History is a particular case: it is disabled by default during the Google account set up and users can only enable it after the account has been fully set up, whereas the other personalization settings must be enabled or disabled by the user during the setup of the Google account.[197] The other personalization settings are each disabled by only [10-20] % of users. The next largest deactivation percentage is for personalized advertising, at [10-20] % (new Google accounts DE-2020) and [10-20] % (active Google accounts DE-31 March2021). For [30-40] % (active Google accounts DE-31 March 2021) and [0-10] % (new Google accounts DE-2020), no personalization settings are deactivated at all.

(166) Corresponding data on the choice of users who do not sign in to the Google account is not available, as according to Google data cannot be assigned to unique users across services and devices without the link to the Google account. However, at least the rough scale is transferable. There is no evidence that users that are not signed in to a Google account would choose to deactivate the personalization settings to a greater extent than users that are signed in.

(167) Whether or to what extent the aforementioned personalization settings meet the requirements of a sufficient choice pursuant to section 19a(2) sentence 1 no. 4a GWB, is not the subject of the present proceeding. Such questions are addressed in the proceedings B7-70/21.

(2) Android (with Google Play Services)

(168) Google may collect user data on Google Android devices regularly and automatically, in particular through the Google Play Services ("Google Play Services"). The four most

---

196 Even if Location History is deactivated, location data will be collected when using Google services. The activation of Location History enables Google, in addition and independently of the use of individual services, to continuously collect deeper location data of signed in users across sources and to be able to track their whereabouts over time (such as frequently visited places and professional commuting routes), https://support.google.com/accounts/answer/3118687?hl=en (accessed 13 October 2021).

197 Cf. Google's comment on the response to question 58 of the RFI of 23 July 2021, para. 58.2.

important functions of the Google Play Services that may collect user data are the Android Device Configuration Service, Usage and Diagnostics, the Google Location Accuracy or Google Location Services and Backup & Restore.[198]

(169) The user can actively provide Google with a variety of different user data, in particular by activating the Backup & Restore service.[199] This includes, for example, app data and settings, display settings, voice and time settings, contacts, device settings (such as saved WiFi networks and passwords and wallpapers), call history as well as SMS and MMS, Google Calendar events, notes and media (such as videos and photos). This data is stored in the Google account.[200]

(170) Data of the above-mentioned[201] category "Apps, browsers and devices" is collected in particular via the Android Device Configuration Service. This includes, for example, identification features transmitted automatically to Google, such as the serial number of the device, the Google account, the International Mobile Equipment Identity ("IMEI"),[202] features of the device such as model, manufacturer, storage space, information about the software version used and data in connection with the mobile network used, such as data in connection with the Subscriber Identity Module ("SIM")[203] used and the IP address.[204].

198 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column to 1. Android (with Google Play Services).

199 Cf. a) aa).

200 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column to 1. Android (with Google Play Services).

201 Cf. a) bb).

202 The IMEI is a 15-digit serial number used to uniquely identify mobile devices, https://de.wikipedia.org/wiki/International_Mobile_Equipment_Identity (accessed 19 August 2021).

203 The SIM card is used to identify the user on the mobile network, https://de.wikipedia.org/wiki/SIM-Karte (accessed 19 August 2021).

204 The IP address is used to uniquely identify devices in computer networks that – like the internet – are based on the internet protocol (IP). On the internet, the commonly used names for web pages are converted into IP addresses via specialized services, https://de.wikipedia.org/wiki/IP-Adresse#DNS_%E2%80%93_%C3%9Cbersetzung_von_Rechnernamen_in_IP-Adressen (accessed 17 September 2021).

(171) Google collects data about the user's activities[205] via the Play Services, especially if Usage and Diagnostic is activated. This includes, for example, data on battery status, the quality and duration of network connections, device crashes and the frequency of use of individual apps of the user.[206] Individual Google apps, insofar as they are installed on an Android device (e.g., Google Search, Maps, YouTube), also send data to Google, in particular when users interact with the respective Google apps. Google apps can also send data to Google in the background for functions such as app configuration.[207]

(172) If the user activates Google Location Accuracy, Google can collect the precise location of the user based on location data[208] from the Global Positioning System ("GPS")[209], the wireless local area network ("WLAN") used, from mobile networks and from sensors[210]. If the "Wi-Fi scanning" and "Bluetooth scanning" functions are activated, data about WiFi access points and Bluetooth[211] devices is also transmitted.[212]

(173) The Google Play Services and the Android Device Configuration Service regularly and automatically send data to Google. In particular, this includes data about device and account IDs, device attributes, software versions and security patches, network connectivity, battery life, and performance data, including the IP address (general area).[213]

---

205 Cf. a) cc).

206 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fourth and fifth column to 1. Android (with Google Play Services).

207 Google's response of 18 July, 2021 to question 17 of the RFI of 7 June 2021, para. 17.3.

208 Cf. a) dd).

209 A Global Navigation Satellite System for Positioning, https://de.wikipedia.org/wiki/Global_Positioning_System (accessed 19 August 2021).

210 Most Google Android end devices contain sensors that collect data on device movement, device orientation, and environmental conditions (e.g., temperature, humidity), https://developer.android.com/guide/topics/sensors/sensors_overview (accessed 19 August 2021).

211 Industry standard for short-range data transmission between devices via wireless technology, https://de.wikipedia.org/wiki/Bluetooth (accessed 19 August 2021).

212 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 1. Android (with Google Play Services) and Google's response of 18 July 2021 to question 17 of the RFI of 7 June 2021.

213 Google's response of 18 July 2021 to question 17 of the RFI of 7 June 2021, paras. 17.1 and 17.4., and in relation to the IP address Google's response of 8 December 2021 to the statement of objections of 24 November 2021, Annex 2, p. 14.

These data transfers to Google cannot be disabled, as according to Google they are needed for the system to function properly and to check the device health.[214]

(3) Chrome

(174) First, Google collects data provided by the user in Chrome,[215] especially if the sign in or sync feature is enabled. To set up this feature a Google account is required. Once the sign in/sync feature is enabled, the user is automatically signed in to Gmail, YouTube, Google Search and other Google services on the device used, or remains signed in if they were signed in on the device before enabling sync.[216] As part of this function, among other things data about web pages visited, bookmarks and information that users enter into the browser using the auto-fill function (such as name, address, telephone number and email address), credit card information, stored passwords and data about individual browser settings, may be sent to Google.[217]

(175) Data from the "Apps, browsers and devices" category[218] mentioned above is regularly sent to Google in Chrome as part of the update function. This includes data on the Chrome version, device information (such as manufacturer, model, identifiers, the Bluetooth address, the operating system version and the set device language) as well as information on the device status (such as charge level and battery status). In addition, the unique Android or iOS identifiers can also be transmitted to Google. In addition, usage data (including last day of use, number of days since last use) may be transmitted to Google.[219]

---

214 Google's response of 18 July 2021 to question 17 of the RFI of 7 June 2021, para. 17.7.

215 Cf. a) aa) above.

216 https://support.google.com/chrome/answer/185277?hl=de&co=GENIE.Platform%3DDesktop (accessed 19 August 2021).

217 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column on 3. Chrome).

218 Cf. a) bb) above.

219 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fourth column to 3. Chrome).

(176) In the above-mentioned[220] category “Data on the user’s activities”, Google collects in particular (according to the company’s information anonymized) data on system performance and the use of Chrome (including loading times of web pages).[221]

(177) Google initially collects data in the “location data” category[222] in the form of the IP address to determine the user's preferred language and to personalize the news page in the mobile version. If the user further activates the transmission of their location data by Chrome, Google sends more precise location data to the website called up in the browser. This location data includes information about local networks such as nearby WiFi access points, cell towers, the strength of the signals sent by these access points, the name of the wireless network (so-called Service Set Identifier, “SSID”),[223] the IP address and, for mobile devices, GPS data. If Google is the default search engine, location data can also be transmitted to Google together with queries in the address bar or the Omnibox. This location data can include location data available via the operating system, identification features of the visible networks (WLAN or cell towers of mobile networks) and, on mobile devices, GPS data.[224]

(4) Maps

(178) Within the framework of Maps, users can actively provide Google with content generated by the user (such as ratings or uploaded photos), search data and search settings data.[225] In addition, users can save locations in the Google Maps app and their Google account (home and work addresses and other marked locations) and thereby transmit

---

220 Cf. a) cc) above.

221 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fifth column on 3. Chrome).

222 Cf. a) dd) above.

223 https://www.netzwelt.de/wlan/163450-wlan-ssid-begriff-einfach-erklaert.html (accessed 19 August 2021).

224 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 3. Chrome).

225 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column on 8. Maps), cf. category under 2. a) aa).

the corresponding data to Google.[226] Google can also access information provided by companies when editing their business profile in Google My Business (such as opening hours, address, etc.) when responding to a query in Maps.

(179) In the above-mentioned category “Apps, browsers and devices”,[227] Google may collect data about the device and browser type, device hardware and operating system, device events (such as crashes, system activity, and hardware settings), and unique device identifiers about the network operator, battery level and condition, and Maps app version.[228]

(180) As data about the user’s activities,[229] Google receives in particular user interaction data with Maps (such as clicks and “swipes” when used with touch-controllable devices), search history data, data on viewing of content and time of interaction, information about the receipt and viewing of notifications, user feedback and booking information. In addition, any cookie,[230] authentication token, account level identifier or mobile advertising ID that Google has previously set in the user’s browser or app through which the user interacts with Google Maps may be retrieved by Google.[231]

(181) Depending on the user's settings, location data[232] may be sent to Google based on device signals (Bluetooth, WiFi and GPS signals), device activity and recent activity. Google may also collect data on the current location of the device based on the user's IP address and/or, if available, more precise location data of the device.[233]

---

226 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 8. Maps).

227 Cf. a) bb).

228 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June, 2021, Annex Q13 (fourth column to 8. Maps).

229 Cf. a) cc).

230 Cf. c) bb).

231 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fifth column on 8. Maps).

232 Cf. a) dd).

233 Google’s response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 8. Maps).

(5) Google Search

(182) In Google Search, the user actively provides Google with data, in particular with their query (including the language used) (see the category).[234] In addition, the user can save locations in their Google account (home and work addresses and other marked locations), which can be taken into account by Google in the context of the query.[235] Google can also access information provided by users in the course of editing their business profile in Google My Business (such as opening hours, address, etc.),[236] when answering a query in Google Search.

(183) In the above-mentioned data category "Apps, browsers and devices",[237] identification features of the device are transmitted to Google. In addition, for a query conducted in the browser, cookies that were previously set in the browser and for a query conducted in a third-party app, the mobile advertising ID may be transmitted to Google.[238]

(184) Google collects data on the user's activities,[239] in particular in relation to the user's interactions with the Google search results page (such as clicks, swipes on touch-controlled devices, viewing of content [differentiated by duration] and the time of interaction). If the user is on a remarketing list,[240] this information can also be transmitted to Google, as well as information about the app used.[241]

---

234 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column to 9. Search), cf. the category under a) aa).

235 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 9. Search).

236 See above facts.

237 Cf. 2 a) bb).

238 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fourth column to 9. Search).

239 Cf. 2 a) cc).

240 Remarketing lists collect information about users who have already visited a website via cookies (see c) bb)). Based on certain rules defined in detail, which reflect an interest derived from the visit to the website, targeted advertising can be directed to these users, https://support.google.com/google-ads/answer/2472738?hl=en (accessed 19 August 2021).

241 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fifth column to 9. Search).

(185) As location data, the IP address in particular is transmitted to Google.[242] Furthermore, additional more precise location data of the end device used may be sent to Google.[243]

(6) YouTube

(186) YouTube users actively provide data to Google, particularly with their queries for videos, their comments and feedback, and in connection with in-app purchases.[244]

(187) In the "Apps, browsers and devices" category defined above,[245] Google may collect information such as device and browser type, device hardware and operating system, device events (such as crashes, system activity and hardware settings), IP address, referrer URL, time data, cookie data, advertising ID, network operator data, battery level and state, and browser settings.[246]

(188) User interaction data[247] on YouTube includes, but is not limited to, clicks, mouse movements, queries for a video, watching and commenting on a video, adding a video to a playlist, rating a video, sharing a video, marking a video as a favorite, and posting messages to subscribers of a channel.[248]

(189) As location data[249] in particular the IP address is transmitted to Google. Furthermore, additional more precise location data of the end device used may be sent to Google.[250]

---

242 Cf. 2. a) dd).

243 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 9. Search).

244 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (third column on 10. YouTube), cf. the category under 2. a) aa).

245 Cf. 2. a) bb).

246 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (fourth column on 10. YouTube).

247 Cf. 2. a) cc).

248 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 10. YouTube).

249 Cf. 2. a) dd).

250 Google's response of 2 August 2021 to question 13 of the RFI of 7 June 2021, Annex Q13 (sixth column to 10. YouTube).

bb) Google advertising services

(190) Another important source of data for Google is its advertising services, which Google uses to collect user data not only in its own services, but with technologies such as cookies[251] and pixel tags[252] on third-party websites, as well as software development kits (SDKs)[253] in its advertising customers' third-party apps. The following description is limited to an overview which is based on publicly available sources.

(191) Google's advertising services for publishers (AdSense, AdMob, Google Ad Manager)[254] collect data about the users of the respective third-party website/app.[255] On third-party websites, Google receives user data when the user accesses the page via cookies and pixel tags. As soon as a Google Pixel Tag implemented by the website operator is loaded by the user when the page is called up, this triggers the user's browser to contact a Google domain. Whenever such a contact is triggered, Google may read the cookies that Google previously set in the user's browser or set a new cookie in the user's browser.[256] With the Google Tag Manager, Google provides a tool that may contain various pixel tags and allows third-party website operators to implement various trackers in their website.[257] A significant tracker that can also be embedded into the third-party website through Google Tag Manager is Google Analytics. Via Google Analytics,

---

251 Cf. c) bb).

252 Pixel tags (also called tracking pixels, IVW pixels, 1x1 pixels or web beacons) are small graphics that are automatically loaded when a web page or HTML email is called up and enable tracking of user behavior. The graphics usually have dimensions of only 1x1 pixels, which are often designed to be transparent, making them barely noticeable to the user, see https://de.ryte.com/wiki/Tracking_Pixel (accessed 29 September 2021). Google provides instructions on how to integrate various Google Ads tags, see for example https://support.google.com/google-ads/answer/2476688?hl=en (accessed 29 September 2021).

253 A software development kit (SDK) is a collection of programming tools and program libraries used to develop software. It supports software developers to create applications based on it, see https://de.wikipedia.org/wiki/Software_Development_Kit (accessed on 29 September 2021).

254 Cf. IV. 2. b) bb).

255 See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 et seqq.

256 Google's response of 18 July 2021 to question 20 of the RFI of 7 June 2021, Annex F. 20; see also CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 224.

257 Https://support.google.com/tagmanager/answer/6102821?hl=en (accessed 29 September 2021).

Google collects data on various interactions of the user with the third-party website on third-party websites that implement the tracker.[258] In the user's third-party apps, Google obtains access to the user data by integrating the Google Mobile Ads SDK into the respective third-party app.[259] Via the so-called Firebase SDK, third-party app publishers can also integrate Google Analytics into their apps.[260]

(192) Google's services directed at advertisers (Google Ads, Authorized Buyers, CM 360, DV 360, SA 360)[261] collect a variety of user data when they receive a request from a user's device. The request may be triggered by a user's interaction with a Google advertising service or with a third-party website/app that implements a Google advertising service. The data collected by these services may include: the request itself, system and device information, the user's IP address, for devices with a GPS module GPS data on the location, the respective time, for websites the full URL of the page visited and the previously visited referrer page, information on the mobile network, advertising IDs for mobile apps, cookie IDs (in web browsers) that Google has previously installed on the user's device, and so-called event data such as impressions,[262] clicks and conversions[263].[264]

---

258 See CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 72 and paras. 248 seqq.

259 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 224; https://developers.google.com/ad-manager/mobile-ads-sdk (accessed 29 September 2021).

260 https://firebase.google.com/docs/analytics (accessed 29 September 2021); see also CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 248.

261 Cf. IV. 2. b) bb).

262 Impressions are used to measure how often something is displayed on a screen. This can refer to entire pages (page impressions) or specific elements. An impression is counted whenever a specific element or a complete page is delivered on a user's screen. This metric does not require the user to interact with the element in any way other than scrolling it on the screen, see https://www.sistrix.de/frag-sistrix/impression (accessed 15 November 2021).

263 A conversion is a process in which the visitor of a website takes a certain defined action such as clicking the "buy" button or subscribing to a newsletter. The action can be freely defined and the measurement shows whether set goals of a page are achieved, see https://www.sistrix.de/frag-sistrix/conversion (accessed 15 November 2021).

264 See in detail CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, paras. 222 seq.

c) Data combination across sources and resulting usage potentials

(193) Google has a number of identifiers to uniquely identify a user across sources and to assign data collected from different sources to them in this way.

aa) Degree of identifiability of unique users or user groups

(194) To be unique in the aforementioned sense, the user does not have to be known by name. Assigning specific personal user data across sources to a user is already possible if the user can be identified by means of identifiers and is distinguishable from other users.[265]

(195) Furthermore, the combination of personal user data across sources does not necessarily require assigning concretely observed user behavior to unique users. It is also possible that users who have similarities or matches with other users with regard to specific characteristics and interests[266] are categorized into groups with regard to these characteristics and interests. Assigning a unique user to such a group may be sufficient to be able to deliver personalized advertising to such a user to a certain degree.

bb) Assignment of data to unique users or to user groups using identifiers

(196) The main identifiers used by Google include the Google account ID, the cookie ID of cookies stored in the browser and the advertising ID for mobile devices. In addition, Google uses a number of other identifiers such as the IP address and different features to identify a mobile device or SIM card.

(197) Signing in to the Google account enables Google to identify a user. If the user uses different Google services on several devices while signed in, Google can track the behavior of this unique user across services and devices. Incentives for users to sign in to the Google account are that certain functions in specific apps, such as e.g., downloading

---

[265] A unique user is a user who is identified or identifiable within the meaning of Article 4 no. 1 of the GDPR (Regulation EU/2016/679) (i.e., can be identified directly or indirectly, in particular by means of an identifier such as a name, an identification number, location data, an online identifier or one or more specific features).

[266] For example, with regard to their economic situation, health, personal preferences, interests, reliability, behavior or place of residence (see Article 4 no. 4 GDPR).

apps from the Google Play Store or the Chrome sync function are only available for signed in users.[267] In some cases, Google can also access this identifier without the user actively signing in to specific Google services. For example, on Google Android end devices a user is automatically signed in to individual Google services in the respective Google app even without actively signing in to the app by signing in on the Google Android end device. This applies to the Google apps Play, YouTube, Google Search, Google Maps, Gmail and Google Drive.[268] Signing out in the individual Google apps is not possible.[269]

(198) Google also uses cookies to identify a user's browser and thus indirectly the user. Cookies are small text files that a website sets in the browser when a user visits that website. At the time of this interaction, the website checks whether the browser already contains a cookie that it has previously set for the user. If it does not, the website sets a new cookie in the browser. The cookie may contain data (e.g., the user's login status in the respective website) or simply a string of letters and numbers that serves as an identifier (cookie ID). On subsequent visits to the website, the browser sends the user's cookies to the website.[270] Distinction is made between first-party cookies, which are set by the website operator of the domain in question, and third-party cookies, which are set on the domain in question by a third party independent of the website operator (e.g., an advertising or tracking service provider).[271] While first-party cookies can only provide the website operator with information on user behavior on the websites operated by such operator, advertising or tracking service providers can also track user behavior on third-party websites via their third-party cookies. Website operators (such as first-party

---

267 Google's response of 2 August 2021 to question 12 of the RFI of 7 June 2021, Annex Q 12.

268 Google's response of 2 August 2021 to question 22 of the RFI of 7 June 2021, paras. 22.1 seq.

269 This is not altered by the possibilities for the user listed by Google in para. 22.4 of its response of 2 August 2021 to question 22 of the RFI of 7 June 2021. In particular, the user's ability to sign out of the Google Android device as a whole does not constitute a user sign out *solely* in the individual Google app, which is the only relevant factor in the context of the statement made here.

270 Google's response of 18 July 2021 to question 20 of the RFI of 7 June 2021, Annex F. 20.

271 For differentiation see e.g., https://www.seo-kueche.de/lexikon/third-party-cookies/#:~:text=Third%20Party%20Cookies%20will%20be%20visited%20by,page%20with%20the%20Werbung%20 and https://de.wikipedia.org/wiki/HTTP-Cookie (each accessed 30 September 2021).

cookies) and advertising or tracking service providers (such as third-party cookies) can only read their own cookies.[272]

(199) The advertising ID (Android Advertising ID) is an identifier developed by Google for mobile applications. Every Google Android end device has an advertising ID. The function of the advertising ID largely corresponds to that of cookies in browsers, with the substantial difference that there is only one advertising ID that applies to all apps available on the respective end device. In principle, it allows the user's behavior to be tracked in all of the user's apps and thus forms the basis for personalized advertising.[273] Users can reset the advertising ID and instruct apps via a setting not to use the advertising ID to create profiles for personalized advertising.[274] However, it is currently not possible to deactivate the advertising ID.[275]

(200) Google accesses a number of other identifiers. These include mobile phone numbers, email addresses, IP addresses, the International Mobile Equipment Identity (IMEI) and the Embedded Subscriber Identity Module (ESIM).[276]

(201) Some identifiers are automatically transmitted to Google at regular intervals without the user being able to restrict this. These include, for example, the identifiers transmitted by the Google configuration service on Google Android end devices as part of the Play Services (identification features for devices and accounts such as the device's serial number, the Google account, the IMEI and data in connection with the mobile network used, such as those in connection with the subscriber identity module [SIM] used and the IP address).[277]

---

[272] See Google's response of 18 July 2021 to question 20 of the RFI of 7 June 2021, Annex F. 20.

[273] CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, paras. 32 seqq.

[274] Google's response of 18 July 2021 to question 20 of the RFI of 7 June 2021, Annex F. 20.

[275] Beginning in late 2021, Google intends to issue a sequence of zeros instead of a unique advertising ID to Android users who opt out of interest-based or personalized advertising (https://support.google.com/googleplay/android-developer/ans-who/6048248?hl=en#zippy=%2Cpermanent-ids-include%C3%9from-android-id (accessed 30 September 2021).

[276] Google's response of 18 July 2021 to question 20 of the RFI of 7 June 2021, Annex F. 20. On ESIM and IMEI see b) aa) (2).

[277] See 2. b) aa) (2).

3. Significance for Google's competitive position

(202) Google's broad and deep access to data relevant for competition from a variety of different wide-reach sources contributes to its paramount significance for competition across markets (a)). It opens up potential for Google to steadily improve and develop its services and advertising services and to open up new fields of activity (b)). Furthermore, this access to data forms a fundamental part of Google's largely advertising-financed business model (c)).

a) Broad and deep data access

(203) Google has access to particularly broad and deep user data. The breadth of data refers to the number of users whose data Google collects. A broader dataset means that information about more users is available, which in turn tends to increase its representativeness and, on average, more data is available per service or overall across all services. The notion of depth of data describes the quality of the data, which can be expressed in terms of the overall amount of data available on a unique user, its timeliness, its accuracy and/or its level of detail or granularity. Accordingly, a "deeper" dataset means that, on average, more, higher quality, more current, more accurate and/or more detailed or granular data is available per user.[278]

aa) Breadth of data

(204) The data collected by Google is very broad due to the large number of its wide-reaching services and advertising services, which allow the collection of the data described above[279] from a particularly large number of users.

(1) Google services (excluding advertising services)

(205) Google has provided data on the reach of its own services. This data only constitutes approximate values for the following reasons:

---

[278] See on the terms breadth of data and depth of data, Krämer, Schnurr, Micova (Centre on Regulation in Europe), The Role of Data for Digital Markets Contestability, September 2020, pp. 55 seq.

[279] See 2.

(1) Data on daily active users of Google Search and YouTube can double-count users who meet the conditions listed below, so the respective total can be overestimated to that extent. Daily active users who used the aforementioned services both signed in and signed out during the course of a day may have been double counted. If a signed-out user deletes their cookie IDs, the user will be treated and counted as a new user the next time they visit a service. If a user uses a Google service on multiple devices (e.g., mobile phone and laptop) while not signed in to their Google account, Google says it has no way to identify the user as the same user. The user is therefore counted as a new user on each device.[280]

(2) Conversely, however, MAUs may also be underestimated. For example, in the case of Google Search and YouTube, only signed-in users are taken into account in the context of MAUs, but not users who are uniquely identified via cookies.[281] The number of MAUs is therefore underestimated. In the case of Google Search, this even results in a considerably lower value being shown for MAUs than for DAUs, which is de facto not possible. In any case, the number of monthly active users must at least correspond to the number of daily active users.

(3) On Google Android end devices, the double counts listed under 1) cannot occur. On the one hand, the user is signed in to their Google account on a Google Android device. On the other hand, cookies are not relevant in this respect. The Decision Division takes into account a possible double counting of users who use several different Google Android end devices[282] by only considering Google Android mobile phones. Other double counting of individual users can only occur insofar as an individual user uses several Google Android mobile phones with different Google accounts.

(206) On the basis of the user numbers submitted by Google, in 2020, the Google service Chrome reached about […] million daily active users and about […] million monthly active users, Google Search about […] million daily and about […] million monthly active

[280] See Google's comment to the response to question 33 of the RFI of 23 July 2021, para. 33.1.
[281] See Google's comment to the response to question 33 of the RFI of 23 July 2021, para. 33.1.
[282] See Google's comment to the response to question 33 of the RFI of 23 July 2021, para. 33.1.

users, YouTube about […] million daily active users and about […] million monthly active users,[283] and Android on Google Android mobile phones about […] million daily active users and about […] million monthly active users.

(207) Based on the most favorable assumption for Google of the total number of internet users in Germany in January 2020 being at most 78 million,[284] the Google services mentioned above each achieved a daily and monthly reach of about [40-50] % and [90-100] % (Chrome), about [80-90] % (Google Search), about [50-60] % and [70-80] % (YouTube) and about [50-60] % and [60-70] % (Google Android Phone).[285] In this respect, see also the following Table 2:

Table 2: Approximation DAUs and MAUs of selected Google services while accounting for the assumptions and inaccuracies mentioned above:

			Total number of internet users in Germany 77.79 Mio. *(highest value given by Google in the period 2020 to 2021)*	
	DAU 2020 in m	**MAU 2020 in m**	**Share of DAU 2020 in total number**	**Share of MAU 2020 in total number**
Chrome	[…]	[…]	[40-50] %	[90-100] %
YouTube	[…]	[…]	[50-60] %	[70-80] %
Google Search	[…]	[…]	[80-90] %	[80-90] %
Google Android Phone	[…]	[…]	[60-70] %	[60-70] %

283 Based on the "client IDs" of Chrome. Covers users signed in and not signed in to their Google account, see Google's response to question 33 of the RFI of 23 July 2021, para. 33.1.

284 For this purpose, the entire section refers to the total number of internet users in Germany based on the study Digital 2020 Germany, https://datareportal.com/reports/digital-2020-germany (accessed 6 October 2021), which, among several studies (see Google's response of 31 August 2021 to question 32 of the RFI of 23 July 2021, para. 32.1), shows the highest total number of internet users in Germany in 2020 at 77.79 million.

285 The data on the daily active users (DAUs) and monthly active users (MAUs) of the individual services were requested from Google, Google's response of 31 August 2021 to question 33 of the RFI of 23 July 2021, Excel spreadsheet.

(2) Google advertising services

(208) Through its advertising services, Google can also collect user data[286] outside the use of Google services. Insofar as data of persons who do not use Google services are processed via the advertising services, Google thereby expands the group of data subjects observed by it (breadth of data). To the extent that data on users of Google services is also collected in third-party services, this may increase the depth of the data. The following description is limited to an overview based on publicly available sources.

(209) Google is a significant provider of advertising services. Especially in the area of display advertising, Google has achieved a high market penetration. The Google Display Network consists of a group of over two million websites, videos and apps. Websites in the Google Display Network reach over 90% of internet users worldwide.[287]

(210) Various studies have analyzed the prevalence of tracking tools on websites and mobile apps.[288] They have shown that Google is the company that has embedded the most tracking tools on the most popular websites and apps by far. In a 2019 study, for the one million most popular websites, it was found that 81% of those websites embedded trackers from Google.[289] Another study showed that Google trackers were found in 88% of the most popular apps.[290] The Australian Competition and Consumer Commission

---

286 See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

287 https://support.google.com/google-ads/answer/117120?hl=de (accessed 24 August 2021).

288 See also in principle Bundeskartellamt, Sector Inquiry Mobile Apps, Report Pursuant to Section 32e GWB, Ref. V-35/20, July 2021, https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Sektoruntersuchungen/Sektoruntersuchung_Mobile_Apps.pdf?__blob=publicationFile&v=4 (accessed 19 November 2021).

289 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 301 citing a study by Solomo et al, Clash of the Trackers, Measuring the Evolution of the Online Tracking Ecosystem, 2019, arXiv: 1907.12860, https://arxiv.org/abs/1907.12860 (abstract accessed 20 August 2021).

290 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix G, para. 301 referring to a study by Bins et al, Third Party Tracking in the Mobile Ecosystem. Proceedings of the 10th ACM Conference on Web Science, 2018, https://dl.acm.org/doi/10.1145/3201064.3201089 (abstract accessed 20 August 2021).

(ACCC) has determined that there are Google trackers on over 80% of 1,000 widely used websites.[291]

bb) Depth of data

(211) The data collected by Google also has a high depth.

(1) Depth of data in individual Google services

(212) First of all, Google is able to collect many, sometimes very granular, precise and current user data of the data categories listed in detail above[292] via a variety of services and advertising services. Only by way of example, the data on user interactions[293] and the location data[294] should be mentioned again. With regard to user interaction data, Google may observe clicks, views and viewing times, mouse or touch movements and conversions. In addition, each query received by Google contains at least an IP address, which is stored at least temporarily by Google. Thus, in all its services, Google collects location data on all daily active users of these services at least once a day, and at least IP address-specific.[295] Looking at Google Search alone, i.e., disregarding all other Google services, this amounts to IP-based location data on an average of about […] million users in Germany per day in 2020. This corresponds to about [80-90] % of German internet users.[296] Particularly for users of Google Android end devices, Google may also be able to collect significantly more precise location data than the IP address via the sensors integrated in the end devices (such as GPS module or Wi-Fi scanning and Bluetooth scanning functions).[297] Even insofar as only the location data based on IP

---

291 ACCC, Digital platform services inquiry, Interim Report, September 2020, p. 56. Users in Australia were considered.

292 Cf. 2.

293 Cf. 2. a) cc).

294 Cf. 2. a) dd).

295 Google's response of 31 August 2021 to question 55 of the RFI of 23 July 2021, paras. 55.1 seqq.

296 See in detail on the assumptions and possible inaccuracies of the best possible estimation of these user numbers, paras. 205 seqq.

297 Cf. I. 2. bb).

addresses, which at its base is rather imprecise, is collected in short intervals, the location of a user can be tracked with a high degree of accuracy.[298]

(2) Depth and breadth of data due to data linkage across sources

(213) In particular, Google's ability to collect and process data from the use of different services enables Google to create particularly deep and broad datasets about the users of its services. It is this ability to collect and process data across services that increases the competitive value of user data. This value is further enhanced for signed-in users by the possible combination of user data across devices, which allows, among other things, the validation of the data and, on its basis, the value-creating identification of cross-references and patterns.[299]

(214) As explained above,[300] Google has a number of identifiers that can be used to collect and process data from unique users across different services.

(215) In particular, signing in to the Google account can enable Google to collect and process user data not only across services, but also across devices. Against this background, Google can collect deep user data across sources on Google Android users as a result of the automatic sign-in to individual Google services when using a Google Android end device. If one considers the users of Google Android mobile phones in Germany in 2020, this concerns around [60-70] % of the total internet users in Germany with about

---

298 *Douglas, Leith, Farrell,* assume in the context of their assessment "Contact Tracing App Privacy: What Data is shared by Europe's GAEN Contact Tracing App (2020)", pp. 9 seq, that the connection of the Google Play Services with the Google servers, which takes place every 20 minutes and during which the IP address is necessarily transmitted to Google, which was observed on the Google-Android-test-device, potentially allows Google to track the location of the user very precisely. At this point, it should not be assumed that the connection actually takes place as in the aforementioned investigation and in the aforementioned frequency. The sole decisive factor is that with each connection the IP address is transmitted, with increasing frequency of IP address transmission (especially with short intervals) the accuracy of the IP addresses, which are rather inaccurate at the starting point, also increases, and Google in any case has the possibility to obtain IP address-based location data even several times a day.

299 Government draft of the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 76.

300 Cf. 2. c).

[…] million daily active users.[301] To the extent that users of Apple devices download apps from Google and sign in, user data from users of the iOS (iPhones) and iPadOS (iPads) operating systems may also be collected.[302]

(216) Of the monthly Google accounts active in March 2021, at least […] million users, corresponding to at least [40-50] % of the total number of internet users in Germany, calculated in Google's favor at 77.79 million, used five or more additional Google services in March in addition to using their Google account. The number of users meeting the above condition might in fact likely be even higher than […] million, as Google did not take into account all available Google services, and in particular not all of the 20 Google services with the most users, when calculating this number.[303]

(217) However, Google's aforementioned special capabilities are not limited to Google Android end devices. According to Google, about […] million[304] Google accounts were active per month in 2020[305] and about […] million in March 2021, which exceeds the total number of internet users in Germany in 2020 (max. 77.79 million) and indicates that individual internet users also actively use several Google accounts per month, possibly also on different mobile and stationary end devices.

(218) By way of example, the processing of data of a user signed in to their Google account in Google Search can be referenced:

(219) For example, when a user who is signed in to a Google account and has activated the "Personal Results" function in the search options submits a query, data from the following sources is used, whereby the user must in some cases expressly consent to the collection and use of data, e.g., in the case of location history or browsing history:[306]

---

301 Cf. aa) (1); see in detail on the assumptions and possible inaccuracies of the best possible estimation of these user numbers, paras. 205 et seqq.

302 Cf. https://support.google.com/accounts/answer/6390156?hl=de#zippy=, accessed 15 November 2021.

303 […]

304 Google's response of 31 August 2021, to Question 44 of the RFI of 23 July 2021, Excel spreadsheet.

305 Google's response of 31 August 2021, to Question 42 of the RFI of 23 July 2021, Excel spreadsheet.

306 Google's response of 2 August 2021 to question 24 of the RFI of 7 June 2021, para. 24.4.

- For the results page for a query about a movie recommendation, Search may draw from activities on YouTube.
- For the results page of a query about a restaurant, Search may take into account the user's ratings in Maps and dining preferences.
- For a results page for a query about orientation / directions regarding the user's home address, Search may access the home address stored in Search or in Maps by the user.
- For a results page for a query about specific locations, Search may rely on the location history if other signals about the user's whereabouts, such as the IP address, are not sufficiently accurate.
- To display results in the "Discover Feed" of Search, Search may use activities on YouTube and the browsing history in Chrome.
- The auto-fill function in Search takes into account a previous same query in Google Maps.
- The user's preferred language is derived from activities in Search, Maps, YouTube, Chrome, Gmail (as a complement to the user's active choice of a language).
- Search pulls basic account information such as language, country, and settings from the Google account.[307]

cc) Competitive relevance of data access

(220) Google's data access across sources is broad and deep. This is because it is based on a variety of wide-reach services and advertising services each of which offer access to considerable data of high quality, currentness and granularity. This access to data is of high relevance for competition. It is true that a few very large and competitively significant companies in the digital sector may also be able to collect and process data in a very considerable and competitively significant manner via their own services. However, this does not prevent Google's access to data from being competitively relevant. This is because the competitive relevance of a company's data potential is not called into question by the fact that other very large and competitively significant companies, for which

[307] For more examples, see https://policies.google.com/privacy?hl=de&fg=1#footnote-combine-info.

a determination of paramount significance across markets can also be considered, have comparable data potential. For the high competitive relevance of Google's data access, it is decisive that Google, due to its multitude of services and advertising services, has data potentials that give it a prominent position across markets.

b) Data as the basis for continuous improvement and expansion of services

(221) The broad and deep access to data across sources also creates the potential for Google to steadily develop its services and advertising services and expand its business activities. This aspect of data access is of particular importance for Google's activities across markets in the context of Section 19a(1) GWB. Due to its broad and deep access to data, Google is able both to improve existing services or develop new services for an existing demand and to identify a new demand and launch services geared to it in the market. This is made possible by the special property of data as a resource that cannot be exhausted through multiple use (so-called "shareable input"), which characterizes data-based business models.[308] As a result, economies of scope that are highly relevant to competition occur.

aa) Improvement of existing services

(222) Data access allows Google to improve its services. This applies, for example, to click-and-query data, which is of considerable significance for the quality of the Google search results page.[309] Data can also be used across sources to improve existing services. In this respect, user data may help Google determine which search terms are most frequently misspelled and, on that basis, to improve the spell-check used in its services.[310] Another example is the use of location data across sources. Google's broad and deep access to location data improves, for example, the navigation function of Google Maps, as the service can better predict travel times for specific points in time based on this data, e.g., by better predicting traffic jams. The very accurate, current and

---

[308] See Commission Competition Law 4.0, A new competition framework for the digital economy, September 2019, p. 14.

[309] See VI. 2. b) bb) (3).

[310] See Google Privacy Policy, effective 1 July 2021, "Maintaining and Improving Our Services" section, https://policies.google.com/privacy?hl=en (accessed 18 August 2021).

granular data on a variety of users that Google can draw on even enables Google to display the occupancy rate in local stores in real time and at peak times.[311]

(223) In addition, services may be better personalized. For a number of Google services, content is personalized to make it more attractive and user-friendly. For this purpose, in addition to data from the individual service, data collected and combined across sources may also be used. In addition to the cross-source personalization options of Google Search already mentioned,[312] Google Play can also be referenced in this respect. For example, Google Play uses data from apps that the user has installed and from videos that the user has watched on YouTube to recommend new apps to the user.[313] Another example is Google Discover, a feed that uses data from multiple services[314] to display content that the user is likely to be interested in.

bb) Development of new services or identification of new fields of activity

(224) The broad and deep data access can also make it easier for Google to expand its activities and develop new services in new fields of activity. The depth and breadth of data can then in turn help Google to potentially achieve wide reach with these new services quickly .

(225) For example, Google states that it used data collected as part of its existing services to gain insights on how people organized photos in Picasa, Google's first photo app, to develop Google Photos.[315] Google could also use data collected from its search engine to better position its Google Maps service when it was launched.[316]

---

311 https://support.google.com/business/answer/6263531?hl=en (accessed 18 November 2021).

312 See 2. b) aa) (5).

313 Google Privacy Policy, effective 1 July 2021, Section: "Provision of Personalized Services, including Content and Ads" https://policies.google.com/privacy?hl=en (accessed 8 August 2021).

314 In addition to search terms, including app information, contact details, location history, location settings, see https://support.google.com/websearch/answer/2819496?hl=de#zippy=%2Cneue-themen-hinzuf%C3%BCgen%2Cthemen-im-browser-nicht-mehr-folgen (accessed 26 August 2021).

315 Google Privacy Policy, effective 1 July 2021, Section: "Development of New Services" https://policies.google.com/privacy?hl=en (accessed 18 August 2021).

316 See Commission Competition Law 4.0, A new competition framework for the digital economy, September 2019, p. 14.

(226) Accordingly, Google's corporate policy is also geared towards opening up new areas of activity.[317] Google spends considerable amounts on research and development[318] and is pursuing a number of projects ("moonshots")[319] whose success appears uncertain even in the longer term, but which may also offer significant opportunities for success. The data available to Google can support Google.

c) Data as the basis of the advertising-based business model pursued by Google

(227) Google's access to broad and deep user data contributes to Google's competitive advantages in its advertising-based business model.

(228) Google is particularly well positioned to implement an advertising-based business model. In doing so, Google benefits from its ability to combine a variety of deep data about a large number of users (breadth of data) from a variety of wide-reach sources. In this business model, which relies substantially and increasingly on highly targeted advertising, the ability to combine data from different sources is particularly important. In particular, access to data that is broad, deep, and across sources can improve knowledge about the interests and preferences of users as recipients of advertising and enable Google to predict their behavior with relatively high accuracy. The greater the knowledge about the interests and preferences of unique users, the more targeted the advertising can be adapted to these user characteristics.

(229) The possibility of combining user data from different sources is of particular importance for open display advertising, which Google offers in particular via its advertising services on third-party advertising spaces. Without a query as a starting point for the advertising to be displayed, this advertising requires a target group definition that is as precise as possible and which the advertiser specifies for the display of their advertising. Google's advertising services offer criteria that the advertiser may use to define the users categorized by groups to whom the advertising is to be displayed. The more detailed the

---

317 Alphabet Inc., Form 10-K For the Fiscal Year Ended 31 December 2020, p. 5.

318 See VIII. 3.

319 See A. I. 2.

information the advertiser (or intermediary) has about the unique users, the more precise and granular the targeting options (such as user categories) can be offered. The more detailed and user-specific the targeting, the greater the value of the online advertising for the respective advertiser, which also increases the price that can be achieved in the auction. Therefore, the breadth and depth of the user-related data as well as abilities to analyze and cross-link this user data are decisive factors for the assessment of the price to be paid by the advertising partners.[320]

VI. Dominant position on one or several market(s), Section 19a(1) no. 1 GWB, strong market position/power regarding other activities

(230) Google's dominant position in the German market for general search services vis-à-vis search users[321] also contributes to its paramount significance for competition across markets (2.) pursuant to Section 19a(1) sentence 2 no. 1 GWB.

(231) In addition, there are indications that Google also holds strong positions on other markets within the meaning of Section 18(3a) GWB, specifically on those markets encompassing search-based advertising (3. a)), the Android operating system (3. b)), the Chrome browser (3. c)) and the YouTube video platform (4. c)). However, the exact definition of these markets and the existence of dominant positions can be left open in the present case. These strong market positions or positions of power further support, based on the criterion of Section 19a(1) sentence 2 no. 1 GWB that is to be interpreted broadly and also in the context of the required overall assessment, the finding that Google is of paramount significance for competition across markets.

---

[320] See Federal Court of Justice, Decision of 23 June 2020, KVR 69/19 – Facebook (cited in juris), para. 62.

[321] In the following, search users are referred to as the users (as distinct from advertising customers, see definitions) of search services.

1. Purpose of the condition of dominance

(232) The factor of market dominance in Section 19a(1) sentence 2 no. 1 GWB is, according to the meaning and purpose of the provision, not a mandatory requirement for the determination as an addressee of the provision.[322] The legislative intent to the government draft clarifies that the factors of Section 19a(1) sentence 2 GWB do not have to be met cumulatively and that their order does not imply any guidance for their weighting.[323] However, if the condition of dominance is fulfilled, this circumstance can carry considerable weight. This applies in particular if the company concerned has a dominant position in a market as defined in Section 18(3a) GWB, which potentially forms the basis for its ecosystem. Dominance in such a market, which is central to the activities of the company concerned, demonstrates its potency and its potential threat to competition, especially with regard to the specific protective purpose of Section 19a GWB. Both in the government's statement of legislative intent and in the economic committee's recommendation for a resolution, the legislative materials of the provision make strong reference to the particular threat to competition in platform and network markets due to the consolidation of market positions ("tipping").[324]

(233) Irrespective of the fact that the condition of Section 19a(1) sentence 2 no. 1 GWB is already met by Google's dominant position in general search services, a company's strong market position/position of power that – due to the difficulties of market definition in the area of digital markets – is difficult to capture using the concept of market dominance, can already be taken into account when applying the criterion of Section 19a(1) sentence 2 no. 1 GWB, which is to be interpreted broadly, but at the very least in the overall assessment of paramount significance across markets. The statement of legislative intent to the GWB clarifies in several places that the intervention threshold under

---

322 Explicitly the recommendation for a resolution regarding the 10th amendment of the GWB, Bundestag printed paper 19/25868, p. 113.

323 The government's statement of the legislative intent to the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 74 (at the end) and p. 75.

324 Government's statement of legislative intent to the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 74 (at the end) and p. 75, recommendation for a resolution regarding the 10th amendment of the GWB, Bundestag printed paper 19/25868, p. 113.

Section 19a GWB may be lower than the dominance threshold.[325] With regard to Section 19a GWB's objective to accelerate[326] the process and a strong market position/position of power being sufficient for the overall assessment, there is no need to define exact markets or determine a dominant position. Such market positions or positions of power – located in a "grey area" of the classic concept of market dominance – can be taken into account for the purposes of Section 19a(1) sentence 2 no. 1 GWB.

2. Google's market dominance in general search services vis-à-vis search users

(234) Google is dominant in the German market for general search services vis-à-vis search users.

a) Findings of the European Commission and other competition authorities and courts

(235) The European Commission last found Google to be dominant in this market in 2018. According to the Commission's findings in the *Google Search (Shopping)* and *Google Android* decisions, Google was dominant vis-à-vis search users in the German market for general search services, among others, from 2008 to 2016.[327]

(236) Following the findings of the European Commission, the Regional Court Munich I also assumed a market for the provision of general search services in Germany in civil law summary proceedings in the context of the legal assessment of Article 101 TFEU and

---

325 See the recommendation for a resolution regarding the 10th amendment of the GWB Bundestag printed paper 19/25868, p. 113, where it is again expressly clarified that market dominance is not a prerequisite for the applicability of Section 19a.

326 See the recommendation for aresolution regarding the 10th amendment of the GWB, Bundestag printed paper 19/25868, p. 113 second paragraph at the end.

327 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android,* paras. 674 seqq.; European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping),* paras. 271 seqq, confirmed by European Court of Justice, Decision of 10 November 2021, T-612/17, *Google and Alphabet v Commission (Google Shopping). Google has not contested market dominance, See para. 119.* This finding applies both to a comprehensive market for stationary and mobile devices and to separately defined markets for searches via stationary and mobile devices: European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping)*, paras. 325 seqq.

established Google's dominant position in this market.[328] In particular, the Regional Court Munich I did not identify any changes in the search engine market that occurred after the Commission's decisions and that might cast doubt on the Commission's assessment.

(237) The above findings relating to the German market for general search services vis-à-vis search users are also supported by the findings of national competition authorities which have investigated the market for general search services in other countries. The transferability of the findings is supported by the assessments of the respective market situation provided by internationally active competitors in the proceedings. Microsoft has stated that it perceives Google as the market leader with high market shares across all countries, even if its own search engine Bing has a stronger market position in some English-speaking countries, in particular the United States and the United Kingdom, than in non-English-speaking countries[329] and there are other providers such as Yandex, which focuses on Russia, and Baidu, which focuses on China.[330] DuckDuckGo identifies Google as its main competitor[331] and, with regard to the market structure, has stated that only Google and Microsoft, as well as some country-specific providers such as Yandex (Russia) and Baidu (China), have a complete, competitive infrastructure to operate a search engine.[332]

(238) For the United Kingdom, the CMA concludes in its 2020 market investigation, without providing a final market definition, that competitive pressure on the search engine operated by Google essentially comes from other operators of general search services such

---

328 Regional Court Munich I, Decision of 10 February 2021, 37 O 15720/20, WuW 2021, 190 (194) – Cooperation Federal Ministry of Health/Google; Regional Court Munich I, Decision of 10 February 2021, 37 O 15721/20, NZKart 2021, 193 (194) – Cooperation Federal Ministry of Health/Google.

329 See note on the conversation with Microsoft on 27 May 2021.

330 Microsoft's response to question C.5 of the RFI of 28 July 2021.

331 Note on the conversation with DuckDuckGo on 8 July 2021.

332 See DuckDuckGo, White Paper on the Search Engine Market, March 2021, https://staticcdn.duckduckgo.com/press/DuckDuckGo-White-Paper-on-search_March-2021.pdf (accessed 28 October 2021).

as Microsoft with Bing, but not from providers of specialized search services.[333] It assumes that Google has significant and lasting dominance in the search services offered in the United Kingdom (which are not part of the German market).[334]

(239) In its action against Google, the US Department of Justice (DoJ) defines a market for general search services limited to the United States (and separable from the German market) and asserts that Google has a monopolistic position in this market.[335]

(240) In particular, the findings of the European Commission for the German market support the assumption of Google's dominance in the Germany-wide market for general search services vis-à-vis search users.

b) Result of the investigation

(241) The investigations of this market conducted in the present proceeding have shown that Google is currently dominant vis-à-vis search users in the market for general search services, which is to be defined as Germany-wide. This investigation result is in line with the findings of the European Commission and confirms the assessment of the Regional Court Munich I, according to which no changes in the search engine market relevant for dominance in the market have occurred between 2016 and 2021.

aa) Market definition: General search services vis-à-vis search users

(242) With its Google Search, Google is active on the national market for general search services vis-à-vis search users.

333 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 3.25 seqq., 3.44 seqq.

334 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 3.145 seqq.

335 DoJ et al, Complaint dated 20 October 2020, paras. 88 seqq., 92 seqq.

(1) Product market definition

(243) Relevant product markets are to be distinguished from each other on the basis of the demand-side substitutability concept. The basic criterion is the functional interchangeability of the products from the point of view of the other side of the market. Accordingly, a relevant product market includes all goods or services that so closely resemble each other in terms of their characteristics, their economic purpose and the pricing that a reasonable customer would consider them suitable for meeting a particular demand, reasonably compare them with each other, and regard them as interchangeable.[336]

(a) Previous practice

(244) The European Commission has defined a market for general search services vis-à-vis search users in *Google Android*[337] and *Google Search (Shopping)*[338] and most recently in *Google/Fitbit*[339]. This market does not include websites of content providers ("content sites"), search services specializing in specific content (e.g., flights, hotels, restaurants or news) or social networks. A sub-segmentation by type of end device used (stationary or mobile) is also not required.[340]

(245) In its action against Google LLC, the DoJ also assumes a market for general search services. Other search services, in particular specialized search services, do not offer a volume of information equivalent to that offered by general search services. Only general search services can offer users a "one-stop shop" for all their information needs.[341]

---

336 Decisional Practice See: Federal Court of Justice, Decision of 24 October 1995, KVR 17/94, juris para. 10 – *Backofenmarkt*; Decision of 21 December 2004, KVR 26/03, juris para. 20 – *Deutsche Post/trans-o-flex.*

337 European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* paras. 323 seqq.

338 European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* paras. 154 seqq.

339 European Commission, Decision of 17 December 2020, M.9660, *Google v Fitbit*, paras. 139 seqq.

340 European Commission, Decision of 27 June 2017, AT.39740, Google Search (Shopping), paras. 161 seqq.

341 DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 of 20 October 2020, pp. 28 seqq., paras. 88 seqq. Unlike the European Commission, the DoJ also considers Amazon to be a provider of a specialized search service.

(246) In its market study, the CMA does not define a specific product market, but examines which search services exert competitive pressure on Google. According to the study, the main competitor is Bing. It found indications for a vertical relationship between Google's general search engine and specialized search engines, insofar as consumers often do not access specialized search engines directly but via Google's search engine. Accordingly, specialized search engines would have to invest considerably to be found via Google's search engine.[342]

(247) The Bundeskartellamt has not yet decided the question of market definition and in particular whether specialized search engines should be included in the market for general search services. In *VG Media* (partial) substitution relationships were discussed. However, according to the assessment at the time, specialized search engines could not cover the general search demand even in combination. Moreover, they were based on a different business model.[343] In its interim decision the Munich Regional Court I based its decision on an upstream market for the provision of general search services in Germany in the context of the assessment of Article 101 TFEU.[344]

(b) Assessment

(248) The market for general search services vis-à-vis search users comprises products which allow the user to search the entire internet by entering search terms. Specialized search engines, content sites and social networks, on the other hand, are not part of the market. Whether the market is to be differentiated according to desktop and mobile end devices can be left open in the present case.

(aa) Specialized search services

(249) From the point of view of the customer, which is relevant for the market definition, specialized search engines cover a different demand from general search services and are

---

342 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, pp. 74 seqq. esp. pp. 82 seqq. paras. 3.35 seqq.

343 Bundeskartellamt, Decision of 8 September 2015, B6-126/14, Google / VG Media and others, para. 143.

344 Regional Court Munich I, Decision of 10 February 2021, Ref.: 37 O 15720/20, WuW 2021, 190 (194) – Cooperation Federal Ministry of Health/Google.

therefore not to be included in the market. General search services satisfy a demand for information which can in principle extend to the entire internet. Specialized search services can also be found on the search results page of general search services, in particular via advertising displays on the search results page or, depending on their ranking, also as generic search results.

(250) In the case of specialized search services, compared to general search services, the user has from the outset a sole specific need for information (e.g., the intention to buy a particular product or to book a flight) and requires specific information to be able to make a decision (e.g., a comparison of prices). Even the fact that specialized search results are sometimes also displayed on the search results page of a general search engine does not change the fundamental lack of functional interchangeability from the point of view of a reasonable customer. When displayed on the search results page of the general search, which contains significantly more and broader search results, the specialized search results form only a subset.[345] In addition, essential functions of the specialized search engines are not available to the user in the general search. For example, a user interested in results regarding a specific topic (such as flights, hotels, price comparisons) cannot limit a query in the general search by means of specific topic-related filters, in contrast to the specialized search services covering this topic. Such topic-related filters or further information (such as customer reviews, hotel ratings, booking data or overviews of price developments) can only be found in the respective topic-related specialized search engine.[346] Conversely, a specialized search engine cannot provide other results beyond its field of activity. Thus, from the user's point of view, it is

[345] For example, a search for "Borussia Dortmund" on Google.de conducted on 19 August 2021 returns 63,800,000 results (including an ad for the current jersey, a box with information on the club, another box with information on the current matches and results as well as links to news and videos, etc.). The same search on https://www.google.com/shopping?hl=DE yields only 9 search results pages and thus in any case a total of less than 10,000 search results (including merchandising items such as jerseys, mugs, etc.); see also European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 167 footnote 95 for a corresponding example from 2015.

[346] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 176.

from the outset not suitable for the broader purposes of a general search engine ("one-stop shop").[347]

(251) The product search via trading platforms is also only to a limited extent interchangeable with general searches from the customer perspective. Such product search options are typically used if there is already an intention to buy. They provide relevant information for the purchase decision about different products offered on the trading platform, especially about prices, quality and availability.[348]

(252) In particular, general and specialized search services also differ from the provider's point of view, and supply-side substitution between the two is low. Due to the need to provide search results for the entire internet, general search engines are based on considerably more complex structures or technologies. In contrast to a specialized search service, a general search engine must be able to interpret a user's query correctly even without being linked to or limited to the subject area (e.g., hotels, flights, etc.) of the respective specialized search service.[349] Behind the query "Bonn" in a general search engine, for example, there may be a multitude of different intentions of the user, whereas the same query on a specialized search service for travel services is limited to one destination from the outset. In addition, general search services rely to a significant extent on automated crawling and indexing of web content[350] across the entire internet to allow for a search of the entire web content. The investment required for this is comparatively

---

347 DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 dated 20 October 2020, pp. 28 seqq., paras. 89 seq.

348 See also European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping)*, paras. 216 seqq.: Trading platforms such as Amazon Marketplace meet a different need than product comparison services (comparison shopping services). A fortiori, the needs met by trading platforms differ from the needs met by general search services.

349 See overall and further European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping)*, paras. 167 seqq.

350 Insofar as general search services also use as a supplement data that is made available to them by third parties, this does not alter the fact that, in particular outside the specialized search functions and services (such as Google News, Google Hotels, Google Shopping) additionally displayed on the search results page of their general search service [see Google's response of 5 June 2021, paras. 5.11 seqq. Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, paras. 5.11 seqq., which refers to "specialized search results"], they rely to a large extent on a web index to display the generic search results, as also stated in Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, paras. 5.3 and 5.25.

high.[351] In contrast, specialized search engines do not aim from the outset to provide all possible search results for a wide variety of queries, but limit themselves to providing specific information or purchase opportunities in their respective fields of activity. Moreover, the search results provided in specialized search engines are mostly based on content provided to the search engine operator by content providers.[352] They make extensive use of structured data provided by third parties via interfaces or product feeds[353].[354]

(253) Finally, the business models also differ. For general search services, separation between generic search results (no direct monetization) and search-based advertising (monetization) is typical.[355] Financing is almost[356]exclusively provided by search-based advertising. Specialized search engines, on the other hand, regularly monetize all search results by agreeing on compensation with content providers.[357] Success-based payments are relatively widespread.[358]

(254) Specialized search engines do not exert any substantial competitive pressure on the general search engines and there is only a limited degree of substitution competition in

---

351 Cf. bb) (7).

352 For example, Google also states on its help page for its specialized search service Google Shopping: "*Google Shopping allows users to see product information regularly updated by merchants. Online retailers send feeds of product information to Google Shopping. Because this product information comes directly from merchants, we can show the current prices, latest deals, and current availability of items*.", available at https://support.google.com/faqs/answer/2987537?hl=de#zippy=%2Cwhat-is-google-shopping%2Chow-does-google-shopping-work%2Cwas-ist-google-shopping%2Cwie-funktioniert-google-shopping (accessed 19 August 2021).

353 A feed is a digital message from the internet that can be subscribed to free of charge (as an email), see https://www.duden.de/rechtschreibung/Feed (accessed 29 September 2021). Here, this refers to the provision of product information by third parties in specialized search engines.

354 Cf. Ecosia's response to question D.1 of the RFI of 26 July 2021, Ströer's response to question D.1 of the RFI of 4 August 2021.

355 Cf. Ströer's response to question D.1 of the RFI of 4 August 2021.

356 The only exception is Neeva, an ad-free search engine, for the use of which an ongoing fee is payable. Brave also intends to offer users an ad-free search engine against payment. See para. 47.

357 See Ströer's response to question D.1 of the RFI dated 4 August 2021.

358 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix P, para. 13.

peripheral areas. On the contrary, many users who have a specialized need for information often use a general search service as a first step to reach, for example, a specialized search service. According to the European Commission's investigation, for a majority of the formed groups of price comparison sites from 2011 to 2016, more than 40% of the total visitors to the respective price comparison site accessed it via a redirect from the generic search results of Google Search.[359] The CMA's analysis of traffic data from the specialized search providers surveyed was able to identify that for most of them, at least 40% of their traffic was attributable to Google Search.[360] Trivago has confirmed to the Decision Division that the travel portal it operates is frequently accessed via Google Search.[361]

(255) Google's competitors that also operate general search engines have confirmed that there is little or no competitive pressure from specialized search engines.[362] Accordingly, general search engines essentially serve to redirect users to other websites, whereas specialized search engines directly provide information, products or services for which the user is searching.[363] In this respect, a general search service serves as a "stepping-stone" to reach a specialized search service. In some cases,[364] the operators of general

[359] The extent of onward routing via Google Search varied in this respect between different groups of specialized price comparison services assumed by the Commission (not published), Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 177 and Table 24 after para. 540.

[360] CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, pp. 87 seq. para. 3.47.

[361] And frequently via Google's hotel finder ("Google Hotels"), see note on conversation with Trivago on 13 April 2021. Google's specialized search services such as Google Hotels are frequently accessed via Google Search, see note on conversation with Google on 25 August 2021.

[362] Responses from Ecosia, Microsoft, Brave, DuckDuckGo, Verizon, and Ströer to Question D.1 of the RFIs of 26 July 2021, 28 July 2021, 2 August 2021, and 4 August 2021, respectively.

[363] DuckDuckGo's response to question D.1 of the RFI of 28 July 2021.

[364] Ströer's response to question D.1 of the RFI of 4 August 2021.

search services also refer to specialized search services as their partners.[365] 1&1 explicitly refers to the integration of specialized search services such as Solute GmbH, a provider of price comparison services.[366]

(bb) Content sites

(256) Internet sites of content providers through which users can access internet content (so-called "content sites" such as Wikipedia,[367] IMDB[368]) are not part of the market for general search services vis-à-vis search users. The use of a general search engine is not interchangeable with the use of a content site from the point of view of a reasonable customer. General search services which, despite answering individual questions directly on their website to an increasing extent in some areas,[369] primarily refer to third-party content on the internet. In contrast, content sites primarily show[370] the user the content requested in each case on their own web pages and regularly only refer to further links in a supportive manner as source information.[371] In addition, any search functions implemented in the content sites do not allow a comprehensive search of the entire internet, but are generally limited to the content of the respective content site.[372]

---

[365] Microsoft's response to question D.1 of the RFI of 28 July 2021, Ecosia's response to question D.1 of the RFI of 26 July 2021.

[366] 1&1's response to question D.1 of the RFI of 4 August 2021. This also explains 1&1's statement that the product characteristics of general and specialized search services do not differ significantly. 1&1 bases this on its business model of an integrated offer of general search services (with search results from Google and Bing) and specialized content or search services (with content from YouTube and Solute GmbH), see answer to question 2.

[367] www.wikipedia.de

[368] www.Imdb.com

[369] For example, directly on the Google Search webpage, answers to fact-related questions are provided, inter alia, for mathematical calculations, currency conversions and time information, etc., see Google's response of 5 July 2021 to question 5 of the RFI of 7 June 2021, para. 5.18.

[370] Accordingly, Google itself also describes its philosophy as follows: "*We may be the only people in the world who can say our goal is to have people leave our website as quickly as possible.*", available at: https://about.google/philosophy/ (accessed 18 August 2021). Notwithstanding the above, Google also aims to provide information directly on the search results page to increase the attractiveness of Google Search.

[371] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 164.

[372] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 165.

(cc) Social media

(257) Nor is social media part of the market for general search services vis-à-vis search users. From the perspective of a reasonable user, general search services and social media fulfil different functions. General search services help users to find what they are looking for by directing them primarily to other websites or, in part, by directly displaying content sourced from third-party content providers. In contrast, social media direct users to content in which they might be interested by offering the respective network users the possibility to contact, interact and mutually share interests and activities.[373] To the extent that social media offer their own search, they rely on the use of third-party search technologies to do so. Facebook (Meta), for example, had incorporated the Bing search engine into its search until 2014.[374] Since the end of this cooperation,[375] Facebook's own search (so-called "Facebook Search") is limited exclusively to the content on Facebook itself.[376] From the user's point of view, it is therefore not suitable for the broader purposes of a general search engine.

(dd) Distinction between desktop and mobile devices

(258) Whether the market for general search services vis-à-vis search users should be further differentiated according to desktop and mobile end devices can be left open. The fact that the search services are offered by the same search engine providers on both types of devices with mere differences in their presentation speaks against such a differentiation. Accordingly, the European Commission assumes a uniform market.[377] However,

---

[373] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 179.

[374] Cf. European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 180.

[375] Cf. European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* para. 180; https://www.spiegel.de/netzwelt/web/facebook-und-suchmaschine-bing-beenden-kooperation-a-1008265.html (accessed 20 August 2021).

[376] Cf. for example https://innsiders-media.de/facebook-search-eine-eigene-suchmaschine-fuer-facebook/ (accessed 20 August 2021).

[377] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* paras. 186 seqq.; European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* paras. 353 seqq., European Commission, Decision of 17 December 2020, M.9660, *Google / Fitbit*, para. 136.

the question can be left open in the present case. Regardless of the type of device considered, Google has high market shares and, overall, for essentially the same reasons for each type of device, a dominant position with a scope of action not sufficiently controlled by competition.[378]

(2) Geographic market definition

(259) The market for general search services vis-à-vis search users is national in scope.

(260) The geographic market definition is determined by the actual possibilities of switching that exist for the other market side. The decisive factor here are the actual market conditions. These can result from economic, technical or other actual circumstances, but actual consumer habits have to be taken into account.[379]

(261) The European Commission has assumed national markets in its decisions.[380] It justified this in particular by stating that Google operates its own national sites in the respective national language in most member states and that the majority of users use the respective national site.[381] The DoJ also assumes a relevant geographic market encompassing the USA on similar grounds.[382]

(262) It is true that users can access search engines across national borders. In fact, however, most search engine providers offer country-specific pages of their general search service in the respective language (for example: google.de, google.co.uk, google.com, google.fr). The reasonable user usually falls back on his country-specific search engine.

---

[378] Cf. bb).

[379] FCJ, Decision of 23 June 2020, KVR 69/19 – Facebook (cited in juris), para. 34 with further references.

[380] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* paras. 252 seqq.; European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* paras. 422 seqq., European Commission, Decision of 17 December 2020, M.9660, *Google / Fitbit*, paras. 143 seqq.

[381] European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping),* paras. 252 seqq.

[382] DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 dated 20 October 2020, pp. 28 seqq., para. 91.

Also from the provider's point of view, according to the European Commission's investigations, offering a general search service in other countries and language regions entails considerable costs and language barriers and thus barriers to market entry and expansion. Google has also not submitted to the European Commission that the relevant market should be defined other than nationally.[383]

bb) Market dominance in general search services vis-à-vis search users

(263) According to the overall assessment of the factors for market power pursuant to Section 18(3) and (3a) GWB, which are neither conclusive nor required to be met cumulatively,[384] Google is dominant in the German market for general search services vis-à-vis search users. Google's quasi-monopoly position measured by its market shares (Section 18(3) no. 1 GWB) regarding the number of queries (more than 80%) is an expression of market power when taking into account the further market power criteria under Section 18(3) and (3a) GWB. In this respect, the development of market conditions in the market for general search services vis-à-vis search users strongly suggests the assumption of quasi-monopolization through advanced so-called market tipping. Google's strong market position/position of power is essentially due to direct and indirect network effects (Section 18(3a) no. 1 GWB), Google's economies of scale (Section 18(3a) no. 3 GWB), its access to data relevant for competition (Section 18(3a) no. 4 GWB), the low level of multi-homing (Section 18(3a) no. 2 GWB) and the lack of current and potential (innovation-driven) competitive pressure (Section 18(3) no. 7 and (3a) no. 5 GWB). Furthermore, in particular, Google's access to supply and sales markets (Section 18(3) no. 4 GWB) and barriers to entry or expansion resulting from the above factors as well as other high barriers to market entry or expansion (Section 18(3) no. 6 GWB) are of outstanding significance for Google's market position.

(1) Market shares and market share development, Section 18(3) no. 1 GWB

(264) Irrespective of the assessment method, Google's dominant position is primarily supported by its consistently high market shares for several years, with consistently high

---

383 Cf. in total European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping)*, paras. 253 seq.

384 Cf. *Bardong*, in: Langen/Bunte, competition law 13th edition, 2018, § 18, paras. 79 seqq., 153.

and considerable leads over all subsequent competitors, which neither individually nor in total achieve market shares of more than 20%. Google, on the other hand, has market shares of over 80% in Germany. The threshold of the single dominance presumption of Section 18(4) GWB is thus surpassed by over twofold.

(265) The market shares presented in more detail below have been calculated based on the number of queries (excluding spam) ((a)). This unit-count-based approach is, in the opinion of the Decision Division, the most suitable for calculating the market shares of the search engine operators.[385] The following providers were identified as competitors based on publicly available studies or analyses (by StatCounter or using Wikipedia data): Microsoft (Bing), Verizon Media (Yahoo!), Ecosia, DuckDuckGo, Ströer (t-online) and 1&1 (web.de, gmx). Except for the very small Netherlands-based provider startpage, all providers provided information on the number of queries processed in their search engines. Insofar as Microsoft did not provide any data for 2016 and Verizon only for 2020, the Decision Division used the value from 2017 for Bing[386] and the market shares reported by StatCounter for Yahoo! as a basis. In addition, the Decision Division used the reach of Google Search, i.e., its user share in relation to the total of all internet users ((b)). Finally, the aforementioned market share calculations by StatCounter and with Wikipedia data were taken into account ((c)). Overall, the different calculation methods lead to very similar results. In particular, Google's market share is always above 80%.

(266) Google and the competitors surveyed consider the methods of market share calculation presented to be appropriate in general. Google itself will use the shares determined by StatCounter for its revised Choice Screen, planned for the period from September 2021,

---

385 Similarly CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix C, para. 25.

386 According to StatCounter, Bing had a higher market share in 2017 than in 2016. The overall shares for Bing reported in StatCounter are lower than the market shares determined by the Decision Division based on queries. In favor of Google, the Decision Division used the number of queries in Bing reported by Microsoft for 2017 to determine market volume and calculate Bing's market share in 2016.

to determine the five search engines that are most widely used for the respective country, which will be displayed in the Choice Screen when setting up new smartphones with the Android operating system.[387]

(267) A revenue-based market share calculation, on the other hand, is not at all suitable, because this side of the multi-sided market is free of charge.[388] The share calculation chosen here, which is based on the number of queries or the number of users and usage figures, is meaningful to estimate the competitive potentials,[389] since it shows in particular the relative market share gap and, when considering the development over a longer period of time, the balance of power between the competing products.[390]

(a) Number of queries

(268) According to the (daily) number of queries, Google held a quasi-monopoly on the national market for general search engine services vis-à-vis search users (without differentiating between mobile and stationary) in 2020, with a share of queries of [90-100]%. The second largest competitor Microsoft/Bing only achieved a share of less than 10% when considering an overall market (stationary/mobile). In Germany, various smaller search engines are also active in the market, each of which achieves a share of less than 5%. The shares for the year 2020 are shown in the following table:

Table 3: Market shares in the German market for general search engine services vis-à-vis search users (2020)

	Stationary	**Mobile**	**Total**
Google	[80-90] %	[90-100] %	[90-100] %
Bing	[10-20] %	[0-10] %	[0-10] %
Yahoo!	[<5%]	[<5%]	[<5%]
DuckDuckGo	[<5%]	[<5%]	[<5%]
Ecosia	[<5%]	[<5%]	[<5%]
1&1	[<5%]	[<5%]	[<5%]
Ströer	[<5%]	[<5%]	[<5%]

387 https://www.android.com/choicescreen (accessed 20 August 2021).

388 So also European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping),* para. 275.

389 Bundeskartellamt, Decision of 6 February 2019, B6-22/16, paras. 403 seq. – *Facebook*.

390 *Fuchs* in Immenga/Mestmäcker, 6th ed. 2020, GWB § 18 para. 123.

(269) Google's market share is consistently high. According to the results of the investigations, it was [80-90] % of the total German market[391] for general search engine services vis-à-vis search users (stationary and mobile) in 2016 and [90-100] % in the years 2017 to 2020.

(270) Google also has consistently high market shares beyond the German market. According to the results of the investigation, they were always above 90% in the EEA overall market in the years 2016-2020.

(b) Number of daily active users (DAU)

(271) Google Search's reach is also high. In 2020, almost [80-90]% of internet users in Germany used Google Search at least once a day.[392]

(c) Based on publicly available sources

(272) The market shares determined on the basis of publicly available sources are also high. For stationary devices (desktop), StatCounter shows market shares of over 80% nationwide, in the EEA and worldwide; for mobile devices, the market shares are over 90%. The market share gap to the next largest competitor Bing is a maximum of 96 percentage points (mobile devices, EEA) and a minimum of 75 percentage points (stationary devices, Germany). StatCounter measures how often web pages contained in the observed group of more than 2 million web pages are called up after being forwarded by a search engine (so-called "page views"). For this purpose, StatCounter uses tracking codes that are integrated into the respective web page.[393]

391 I.e., stationary and mobile devices combined.

392 See in regard to the assumptions and potential inaccuracies in the best possible approximation of the number of users in details paras. 205 seqq.

393 https://gs.statcounter.com/faq#methodology (accessed 20 August 2021); and specifically on the background for page views https://gs.statcounter.com/faq#page-views-uniques (accessed 20 August 2021).

(273) The market shares determined by StatCounter according to page views[394] have remained constant in Germany and worldwide for more than 10 years:

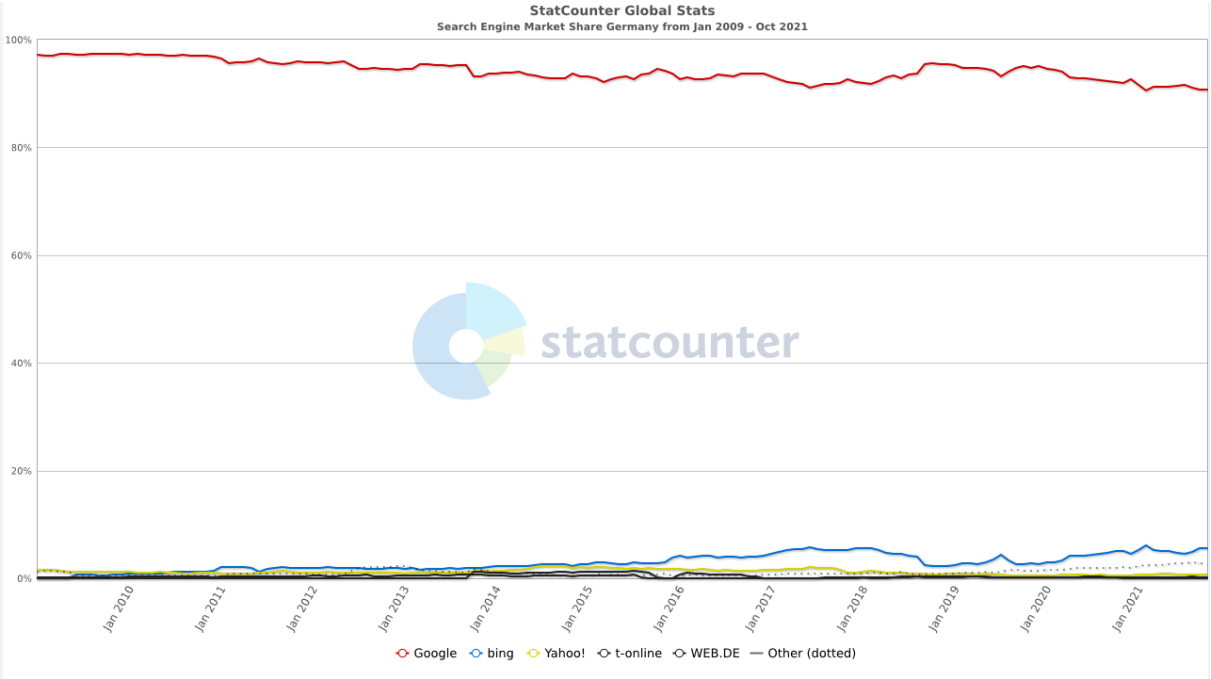


Figure 4: Shares of search engines by page views (StatCounter) in Germany

394 See https://gs.statcounter.com/faq#page-views-uniques (accessed 16 November 2021).

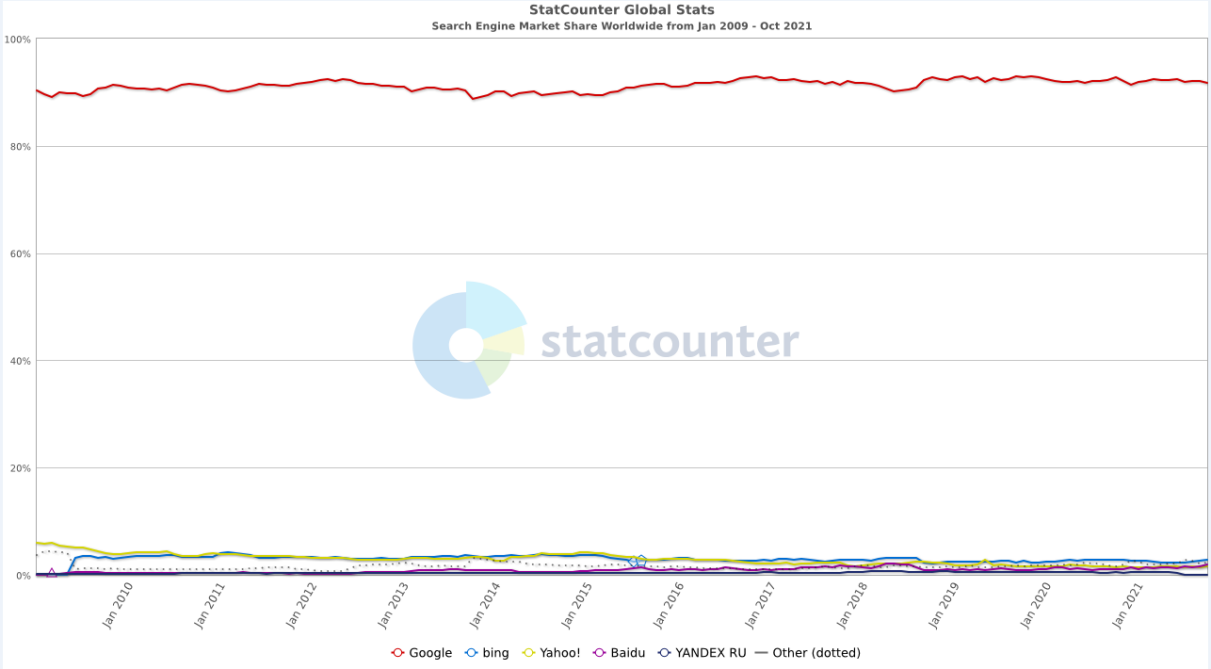


Figure 5: Shares of search engines by page views (StatCounter) worldwide

(274) Wikipedia data reports current market shares of Google for Germany and worldwide of over 90%.[395] This data shows how often the respective search engine has referred users to Wikipedia.

(2) Network effects and economies of scale, Section 18(3a) no. 1 and no. 3 GWB

(275) The self-reinforcing positive direct network effects and Google's resulting economies of scale in the market for general search services vis-à-vis search users as well as indirect network effects in search-based advertising suggest that Google dominates the market.

(276) Network effects refer to effects that occur between different users or user groups of a product. They concern the relationship between the number of users of a product or service and their benefit. Network effects are positive if the benefit for the individual participant increases as the number of participants increases, assuming that the general conditions remain the same. While direct network effects occur between users of a uniform group, in the case of so-called (positive) indirect network effects different user

395 Cf. https://wiki-search-referrals.wmcloud.org (accessed November 3, 2021).

groups of the offered intermediation service of a platform benefit from each other unilaterally or reciprocally.[396]

(277) Google Search's market position/position of power is secured by the considerable lead Google enjoys due to the very high number of queries relative to its competitors (the number of all queries on Google in 2020 was more than ten times that of Bing). As the number of queries increases, possibilities to optimize search algorithms improve. The more queries a general search engine processes, the faster and better its ability to detect change patterns in user behavior based on the observed click-and-query data, and to adjust and improve the relevance of the search results it displays accordingly.[397] This relationship between the number of users and the quality of search results can be described as a positive direct network effect.[398] Even if Google's competitors in the current market environment could induce users to switch search engines, the volume of queries would be too small to sustainably improve the relevance of the search results.[399]

(278) They are particularly effective in the context of the correct interpretation of rare searches (so-called long-tail queries[400]) as self-reinforcing positive direct network effects. These queries are only comparatively rare and often contain several words. Due to their rarity, there is less data compared to frequent queries that the self-learning search algorithm can access for self-optimization. Thus, the marginal benefit of analyzing (being able to

---

396 The government's statement of legislative intent to Section 18(3a) no. 1, Bundestag printed paper, 18/10207, pp. 49 seq.

397 Microsoft's response to question D.12 of the RFI of 28 July 2021; DuckDuckGo's response to question C.10 of the RFI of 28 July 2021; European Commission, Decision of 27 June 2017 AT.39740. – Google Search (Shopping), para. 287; CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, paras. 3.64 seqq.; see also in this respect Google's response of 2 August 2021 to question 24 of the RFI of 7 June 2021, para. 24.10.

398 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, para. 3.64; DuckDuckGo's response to question C.10 of the RFI of 28 July 2021.

399 Microsoft, Response to Question F.2 of the RFI of 28 July 2021.

400 The European Commission makes a terminological distinction between the query and the search, which can consist of several queries, and speaks in this respect of "tail queries": European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping),* para. 288. In the present case, however, the term search is used uniformly, including tail searches or rare searches. [**Note**: The German version uses only the term Search, whereas the translation uses the language of the European Commission]

analyze) another rare query is higher than that of a frequent query.[401] Google also has considerably more data in the area of long-tail queries than its only relevant competitor[402] in this respect, Bing. This can also be proven quantitatively. For example, an analysis of Google and Bing queries in the UK conducted by the CMA showed that of the queries that Google observed once or twice during the observation period, 1% were also observed by Bing, while conversely, of the queries that Bing observed once or twice, 31.5% were also observed by Google. In particular, for queries with local relevance, Google has much more data.[403] The output of less relevant search results for long-tail queries also affects users' overall rating of the search engine, according to the Commission's investigation. The greater the volume of rare queries processed by a general search engine, the more relevant not only the long-tail search results, but also the more users would attribute to the search engine the trait of providing more relevant search results overall.[404]

(279) Google's economies of scale and service-related network effects are further enhanced: Due to the large number of services it offers, which are also characterized by relevant synergies on the supply side[405] and thus harmonize well,[406] Google is generally in a position to encourage users of one service to use other Google services. This can keep

---

401 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, para. 3.76.

402 The other operators of general search engines obtain their search results from Google or Bing. Brave, with its own web index, obtains search results for the long section from third parties and currently only offers a beta version of its search engine (see Brave's response of 23 August 2021 to questions C.2 and C.6 of the RFI of 7 June 2021, para. 5.18).

403 Cf. (3).

404 European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping)*, para. 288. Even if the benefits are reduced once the volume of searches reaches a certain level, it is in any case necessary for a general search service to receive a certain minimum number of searches, see ibid. para. 289.

405 These follow, for example, from the modular design of individual services, the use of standardized interfaces within the ecosystem and the possibility of accessing data generated across services as "shareable input".

406 For example, Google itself says in regards to its Google Mobile services (GMD) apps, "*These apps work together seamlessly to ensure your device provides a great user experience right out of the box."* https://www.android.com/intl/en_en/gms/ (accessed 7 September 2021).

the user in Google's ecosystem. Google has therefore increased access to user data,[407] which it can use to improve the quality of its search results.

(280) Indirect network effects on the advertising side raise barriers to entry and further increase barriers to expansion in the market for general search services vis-à-vis search users.

(281) There are positive indirect network effects for advertisers, as they benefit from a high number of users in Google Search. The reach of the search engine is a significant element for the attractiveness of the search-based advertising space. Due to the very wide reach of Google Search of [90-100]% of the total internet users in Germany in 2020, the advertising space marketed by Google ("owned and operated") on Google Search is at least partially indispensable for advertisers.[408]

(282) For the competitive relevance of the positive indirect network effects in attention platforms[409] it is irrelevant that these can be asymmetric, i.e., intensified advertising does not necessarily also represent an advantage from the user's point of view.[410] In any case, positive feedback effects occur insofar as the advertising revenues that increase with higher user numbers can be used to improve the service and thus in turn attract more users.[411] The larger the number of users of the general search service, the more likely it is that a keyword selected by (potential) advertisers can be assigned to a query, which triggers an auction process regarding this query. This increases the number of advertisers and thus the number of ads available for selection by the matching algorithm. Due to the increase in both users and queries on the one hand, and advertisers,

---

[407] See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

[408] Cf. IV. 2. b), VII. 2. e).

[409] See on the concept of "attention platform" and on the classification of Google Search as such: Bundeskartellamt, Decision of 8 September 2015, ref. B6-126/14, para. 127 – Google/VG Media; Bundeskartellamt, Working Paper Market Power of Platforms and Networks, June 2016, p. 27.

[410] Bundeskartellamt, working paper p. 25; Bundeskartellamt, Decision of 8 September 2015, ref. B6-126/14, paras. 120 seqq. "Google/VG Media"; Bundeskartellamt, Decision of 6 February 2019, B6-22/16, para. 442 – *Facebook*.

[411] Cf. European Commission, Decision of 27 June 2017, AT.39740, *Google Search (Shopping)*, para. 296.

ads and keywords on the other, it also becomes more likely that a user can be matched to a search ad relevant to their query.[412]

(283) The decisive consequence of this is that sustainable market entry is already more difficult at the outset for an advertising-financed platform product due to the economies of scale and the indirect network effects. This is due to the fact that providers must basically enter the market successfully on at least two sides, namely on the user market for general search services and on a market encompassing search-based advertising.[413] Search services not financed by advertising have so far hardly been successful and are of only marginal importance. Only Neeva was mentioned in the market investigation as having a business model based exclusively on monetization through user fees.[414] Due to the indirect network effects, monetization through advertising in turn requires reaching a critical mass of users that constitutes an attractive target group for advertisers. However, reaching such a critical mass is made more difficult by direct network effects.[415]

(3) Access to data relevant for competition, Section 18(3a) no. 4 GWB

(284) Google's position in its search service is also strengthened by its access to data relevant for competition.[416]

(285) First, Google has the most extensive access to click-and-query data, particularly in the area of long-tail queries necessary to optimize the search algorithm. Due to the large

---

412 Cf. European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping)*, paras. 293 seqq.; European Commission, Decision of 20 March 2019, AT.40411, paras. 250 seq. – *Google Search (Adsense)*.

413 See Bundeskartellamt, Decision of 6 February 2019, B6-22/16, paras. 442 seq. – *Facebook*; note on conversation with DuckDuckGo on 8 July 2021.

414 Note on conversation with DuckDuckGo on 8 July 2021. Neeva describes itself as the only ad-free search service, see https://neeva.com/ (accessed 12 August 2021). Neeva launched in June 2021 and claims to have about 10,000 users as of August 2021, see Hercher, Can These Search Engines Do The Impossible – Peel Market Share From Google?, https://www.adexchanger.com/online-advertising/can-these-search-engines-do-the-impossible-peel-market-share-from-google/ (accessed 27 August 2021).

415 See Bundeskartellamt, Decision of 6 February 2019, B6-22/16, paras. 442 seq. – *Facebook*.

416 See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

number of services it offers, Google is also able to personalize the output of search results with personal, usage and/or location-related data collected by Google in other services.

(286) Google accordingly stated[417] on request that if a user is signed in to their Google account and has additionally activated the option “Personalized results”, a query for:

- films can take the activity of the user on YouTube into account,
- restaurants can take ratings and reviews of the user in Google Maps into account,
- a navigation home can take an address stored in Google Maps or Google Search into account,
- local results (such as a café) can take the location history of the user into account,
- hotels can take the user’s booking history as seen from booking confirmations received in Gmail into account.

(287) In addition, under the same conditions Google’s suggestions:

- in the “Discover feed” of Google Search can take the user’s YouTube activity and browsing history in Chrome into account,
- for potential search terms in the Google Search (so-called automatic completion function) can take a previously started and canceled query in Google Maps into account for predicting the intended query in Google Search.[418]

(288) This cross-service access to a wide range of personal, usage or location data is of particular competitive relevance, as it gives Google a prominent position across all markets.

---

417 Google’s response of 2 August 2021 to question 24 of the RFI of 7 June 2021, para. 24.4.

418 Google’s response of 2 August 2021 to question 24 of the RFI of 7 June 2021, para. 24.4.

(289) In addition, Google has the largest web index and thus has the most comprehensive database of content available on the internet. Bing's web index is significantly smaller, while Brave's web index is so far only a fraction of the size of Google's web index.[419] The other general search engines do not even have their own web index. One circumstance that contributes, at least in part, to the particular size of Google's web index is Google's advantages in crawling.[420] As part of setting up their web page, many website operators only allow Google's web crawler, the so-called "google-bot", to crawl their web pages, at least initially. Brave has stated that the biggest obstacle in building a web index is the web crawler's access to web pages, because often non-Google web crawlers are disadvantaged.[421] If there is initially no approval from the website operator, this can be obtained on request. However, this involves additional effort.[422] Cliqz, before ceasing operation of its search engine in 2020, had argued to the CMA that the costs in this regard were considerable.[423] In the CMA's view, the lack of access to crawling of already less popular websites may hinder a search engine's ability to deliver high quality search results for certain queries.[424]

(290) As regards local queries, i.e., queries relating to an object in the physical world where the location of the object searched for is relevant to the user, Google has advantages in terms of the overall amount of data available to it to answer local searches (hereinafter "local data"). The importance of such local queries and the availability of local data has increased steadily in the past, in parallel with the spread of mobile devices. Users expect to receive location information immediately when searching locally for a service or a

---

419 Google's response to question 38 of the RFI of 23 July 2021 as supplemented by email dated 8 October 2021, Bing's response to question C.18 of the RFI of 28 July 2021, Brave's response to question C.15 of the RFI of 28 July 2021.

420 See the findings of the CMA in: Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, pp. 89 seqq. (paras. 3.53 seqq.).

421 Brave's response to question C.14 of the RFI of 28 July 2021.

422 CMA in: Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, para. 3.59.

423 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, para. 3.61.

424 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, para. 3.62.

business, for example.[425] About […] of all queries in Google's search engine are local queries.[426] Google has access to location data through its operating system-independent applications. In Germany, for example, […] million users of Google Search on Android mobile devices and […] million users of Google Search on iOS mobile devices transmit at least IP address-specific location data to Google on a daily basis.[427] In addition, Google has access to even more precise location data, particularly through applications on Android and iOS devices. The location data available to Google is so up-to-date, precise and numerous that Google can, for example, provide additional information on the number of visitors in individual local stores in real time and at peak times on the search results page. Microsoft (Bing), Google's only competitor with its own infrastructure, relies heavily on the IP address due to its focus on stationary devices, but on the basis of this IP address it is regularly only possible to determine the location less precisely than with the location data from the operating system of mobile devices.[428] In addition, Google also has more local data than its competitors, in particular due to its broad user base. For example, around […] million companies in Germany use Google My Business to make information about their location, opening hours, contact details and photos available to users of Google Search or Google Maps.[429]

(4) Hardly any multi-homing, Section 18(3a) no. 2 GWB

(291) A parallel use (multi-homing) of several search engines hardly takes place in practice.

(292) Multi-homing can influence the self-reinforcing effects of network effects and mitigate the tendency to "tipping".[430] As long as users typically use several platforms in parallel,

[425] Ströer's response to question 13 of the RFI of 4 August 2021.

[426] Google's responses to questions 34 and 57(a) of the RFI of 23 July 2021.

[427] Google's response to question 55 of the RFI of 23 July 2021 (sum of mobile phones and tablets respectively).

[428] Microsoft's response to questions C.4 and C.15.d of the RFI of 28 July 2021.

[429] Google's response to question 40 of the RFI of 23 July 2021.

[430] The government's statement of legislative intent to the 10th amendment of the GWB, Bundestag printed paper 18/10207, p. 50.

high market shares are not necessarily an expression of particular market power or an indication of market tipping.[431]

(293) Switching to an alternative search engine is usually not possible across devices with a single click. If a search engine is set as default throughout the operating system, the effort can be considerable.[432] Another argument suggesting that there is hardly any multi-homing is that search engines are often used as a general starting point for accessing web content and users usually do not want to choose between the available search engines again each time they retrieve web content. Differentiation by type of query is also unlikely and, in any case, would not be widely practiced. After a conscious decision in favor of a search engine, e.g., on the basis of search quality or specific preferences for the protection of personal data, users – as has been observed at present and in the past – tend to stick with this choice.

(294) So far, multi-homing has only been discernible to a limited extent. Quantifications depend on the intensity of use of the service required to determine the significance of multi-homing. A 2011 study used by the Commission, which defined a multi-homer as a user who carried out at least 5% of their queries on two different search engines, found that in Germany only 9% of users who used Google as their main search engine met these criteria. In contrast, significantly more users of Bing and Yahoo! were multi-homers (70% and 72% respectively).[433] The CMA concludes that in one month, 41% of Google Search engine users used Bing and 20% used Yahoo!. It puts these proportions into perspective by saying that this does not allow any statement to be made about the actual intensity of the respective use.[434] A study commissioned by the European Commission focuses

---

[431] Barcevicius, Caturianas, Leming, Skardziute, Analytical Paper 7: Multi-homing: obstacles, opportunities, facilitating factors, March 2021, https://platformobservatory.eu/news/analytical-paper-multi-homing-obstacles-opportunities-facilitating-factors/ (accessed 27 August 2021), p. 38 seq.

[432] DuckDuckGo, “Dear Google: We Agree Search Competition Should Be “Only 1 Click Away” – So Why Is It 15+ on Android?”, 14 October 2020, https://spreadprivacy.com/one-click-away/ (accessed 12 August 2020).

[433] European Commission, Decision of 27 June 2017, AT.39740 – *Google Search (Shopping),* paras. 307 seqq.; see for a more detailed discussion by the Commission of Googles criticism of this finding, ibid paras. 310 seqq.

[434] CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix C, paras. 49 seqq.

on the high user figures for Google Search and concludes from this that multi-homing is hardly practiced.[435] According to this study – irrespective of the exact extent – the effort involved in switching is only worthwhile for a minority of users, a large proportion of whom, however, also use Google in addition.

(295) The Commission sees a possible reason for this in the fact that alternative search engines are not in a position to offer equivalent quality, particularly in the case of rare queries. This consideration is supported by the above-mentioned higher quality due to the larger web index and due to the paramount access to data. Google's brand recognition is also likely to be relevant in this respect. For example, various studies and internal Google documents cited by the Commission suggest that users trust Google to deliver relevant results because of Google's brand. They also suggest that it is unlikely that a significant proportion would switch even if Google reduced the quality of its search engine.[436]

(296) Analyses of user behavior carried out by Bing support this assessment. In the period from 7 July 2021 to 31 August 2021, Bing observed 3.5 million devices on which the Edge browser is installed and whose users are located in Germany. 117,000 devices (approx. 3%) were found to switch between search engines. 2.5 million devices (approx. 70%) sent queries to only one search engine.[437]

(5) Actual and potential competition, Section 18(3) no. 7 GWB

(297) Finally, Google's scope of action is not sufficiently disciplined by actual or potential competition (Section 18(3) no. 7 GWB). There are no indications of innovative pressure from actual or potential competitors (Section 18(3a) no. 5 GWB). Disciplinary pressure from current or potential competitors in the area of general search engines is already largely

---

435 Barcevicius, Caturianas, Leming, Skardziute, Analytical Paper 7: Multi-homing: obstacles, opportunities, facilitating factors, March 2021, https://platformobservatory.eu/news/analytical-paper-multi-homing-obstacles-opportunities-facilitating-factors/ (accessed 12 August 2021).

436 See European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping)*, para. 312. See also generally on the perception of Googles brand CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, para. 3.36.

437 Microsoft's response to question C.20 of the RFI of 28 July 2021.

ruled out by very high barriers to expansion and market entry.[438] The other search engines active in the market for general search services vis-à-vis search users have so far not been able to achieve any practical relevance. Also, a merely potential entry by Apple into the market for general search services is not sufficient in this respect. Unlike Google's other current competitors in the area of general search services (with the exception of Bing), it would be technically possible for Apple to set its search engine as default at various access points in its services (such as iOS/iPadOS, Safari, macOS, Apple Watch, Siri), which could considerably facilitate market entry. In all other respects, however, Apple would face essentially the same barriers to entry and expansion as Google's other current competitors. Notably, however, setting its own search engine as the default would come with a loss of the payments Apple receives from Google for preinstalling Google Search. Google paid a total of EUR […] billion in 2020 to third parties for preinstalling or setting Google apps as default on non-Android devices or third-party services.[439] The launch of its own search engine would therefore not only be associated with high investment costs, but additionally with the loss of these revenues as opportunity costs. According to estimates by market participants, market entry is unlikely, at least to the extent that an own web index is established.[440] Alternative current or potential search engine operators which, unlike Bing or Apple, do not have their own relevant access channels (Bing: for example, Edge browser on the desktop; Apple: for example, iOS/iPadOS, Safari, MacBook, Apple Watch, Siri) on which they could set their search engine as default, are not at all in a position to exert any current or potential relevant competitive pressure due to the barriers to market entry and barriers to expansion. This is because the default search engine is only changed by a small proportion of users.[441]

---

438 Cf. (7).

439 Google's response to question 54 of the RFI of 23 July 2021.

440 Cf. Brave's response to question F.5 of the RFI of 28 July 2021 (with explicit reference to the payments made by Google for preinstallations or default settings), from 1&1 to question F.5 of the RFI of 4 August 2021, from Ströer to question F.5 of the RFI of 4 August 2021. DuckDuckGo points to the market entries in the past, where no own web index was built up (response of DuckDuckGo to question F.5 of the RFI 28 July 2021). Ecosia points to Brave and the acquisition of the web index from Cliqz (Ecosia's response to question F.5 of the RFI dated 26 July 2021).

441 Cf. in particular CMA, Online Platforms and Digital Advertising, Market Study Final Report, Appendix H, pp. 19 et seq. and CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, paras. 3.112 seqq.

(6) Access to users, Section 18(3) no. 4 GWB

(298) Google's strong market position/position of power, which is difficult to challenge by its competitors, is also supported by the fact that the Google search engine has so far been preinstalled or set as default by the most used browsers by far such as Google Chrome, Apple Safari and Mozilla Firefox in the desktop area[442] and in the mobile area on iOS/iPadOS and Android devices[443]. In 2020, Google paid EUR […] billion for preinstallation of its apps or default setting on Android devices and EUR […] billion on non-Android devices or third-party services.[444]

(299) For the UK market, the CMA found that Google Search held the default position on almost all (around 94%) mobile devices (including tablets) in February 2020. On desktop, Microsoft/Bing accounted for 68%, while Google Search held a close third.[445] The CMA found strong positive correlations between the market share of a general search engine on the one hand and its default setting on the other. The CMA attributes the stronger correlation between default settings and market share on mobile devices compared to stationary devices in part to Google's position as the market leader. But it also sees evidence that the willingness to change default settings is lower when using mobile devices. In the CMA's view, the willingness of search engine operators to make considerable payments for default settings is an important indication that default settings are of considerable significance for the market position of search engines. Default settings[446] have also been attacked by the DoJ – among other exclusivity measures at so-called "search access points" – with its lawsuit against Google for the US market.[447]

---

442 According to StatCounter, the browsers currently (October 2021) have the following market shares by page views in Germany: Chrome 50.1%, Safari 9.7%, Firefox 18.7%, together about 78.5%.

443 Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.7.

444 Google's response to question 54 of the RFI dated 23 July 2021.

445 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, paras. 3.97 seqq. Bing is often set as default on Windows devices (with the Edge browser), Google is essentially set as the default on Apple devices in the Safari browser. Default settings have a strong influence on the choice of search engine.

446 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, paras. 3.101 seqq.

447 DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 dated 20 October 2020, pp. 28 seqq., paras. 42 seqq.

Especially for mobile devices, where Google Search holds particularly high shares in the default position (approximately 94%[448] and at least 90% respectively[449]) in the respective relevant general search markets according to both the CMA's and the DoJ's investigations, users' willingness to switch is low, which Google has also confirmed in an internal strategy paper provided to the DoJ.[450] Google's competitors have also confirmed to the Decision Division that default settings are a significant factor for the market position of search engines, while pointing to the high payments for default settings.[451]

(300) In response to the European Commission's 2018 Android decision,[452] Google announced on 18 April 2019 that it would introduce a Choice Screen on both new and existing Google Android end devices in Europe in the short term.[453] The Choice Screen initially displayed a selection menu with three additional search engines when the Google Android end device was set up. The search engines that were displayed to the user on the Choice Screen during each quarter were determined by auctions in which interested search engine operators submitted bids to Google for inclusion in the Choice Screen. Since September 2021, Google has operated a modified version of the Choice Screen.[454] There is no longer an auction for the allocation of spots in the Android Choice Screen. Instead, Google lists up to 12 general search engines for free in a single scrollable list during the first set up of a new Google Android end device. The Choice Screen appears once during the initial setup of new Google Android end devices. The search engine selected by the user in the Choice Screen will be set as the default on the home

---

448 CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, para. 3.100 Figure 3.5.

449 DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 dated 20 October 2020, pp. 28 seqq., para. 46.

450 Google's 2018 policy paper states that "*people are much less likely to change [the] default search engine on mobile*", see DoJ et al, Case1:20-cv-03010 – *Google LLC,* Document 1 dated 20 October 2020, pp. 28 seqq., para. 46.

451 See, for example, Microsoft's response to question F.1 of the RFI dated 28 July 2021.

452 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android*.

453 See https://blog.google/around-the-globe/google-europe/presenting-search-app-and-browser-options-android-users-europe/ (accessed 1 September 2021), where the notice of 18 April 2019 states "*The screens are rolling out over the next few weeks and will apply to both existing and new Android phones in Europe*", referring to this also Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.4.

454 See https://www.android.com/choicescreen/ (accessed 2 November 2021).

screen and in Chrome. Preinstallations and default settings of the Google Search app based on agreements with device manufacturers are not modified by the Choice Screen, but the user's selection of a search engine in the Choice Screen takes precedence.[455] The following graphic shows the Choice Screen:

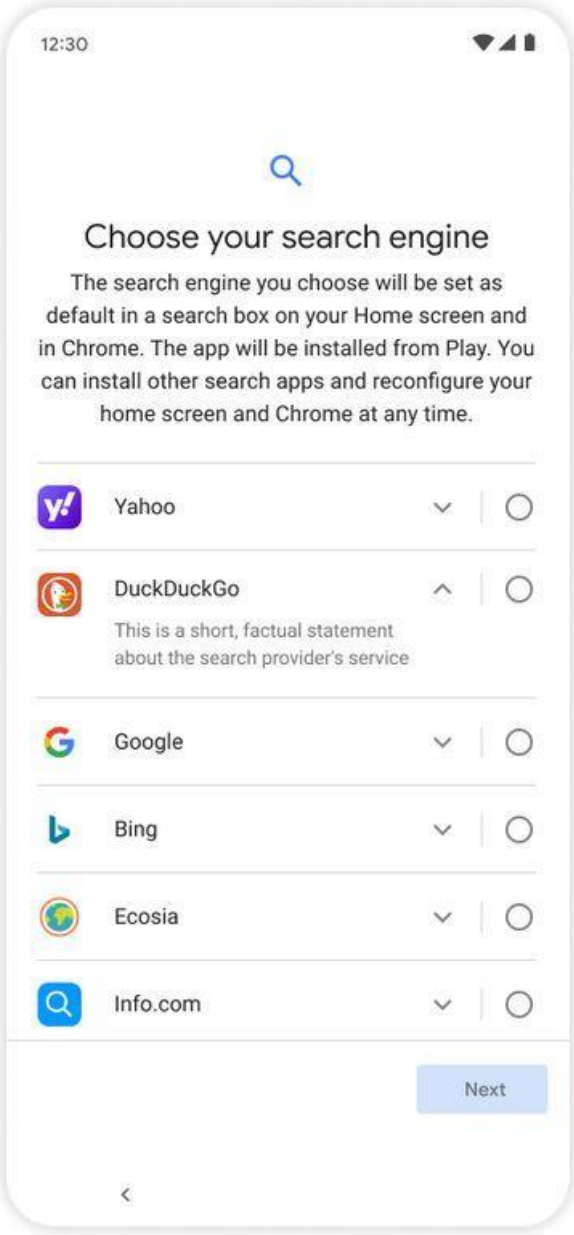


Figure 6: Choice Screen, Source: https://www.android.com/choicescreen/ (accessed 6 September 2021).

[455] Google's response of 2 August 2021 to question 9 of the RFI of 7 June 2021, para. 9.4.

(301) The selection of the general search engines shown is based on the market shares determined by StatCounter in the respective country and includes on the one hand the five general search engines with the highest share (including Google Search) in random order ("top 5 options") and a random selection of up to 7 further general search engines ("further options").[456] For the period from September 2021 to August 2022, Google showed on this basis for Germany among the "top 5 options" Bing, DuckDuckGo, Ecosia, Google and Yahoo! and among the "further options" Ask.com, Fairsearch, GMX, info.com, Mail.ru, MetaGer, Mojeek, Nona, Norton Safe Search, OceanHero, Panda Search, Presearch, Quendu.com, Qwant and Yandex as search engines.[457]

(302) Default settings in the Chrome browser that cannot be determined via the Choice Screen on Android devices (e.g., on desktop devices) and Google Search preferences on iOS/iPadOS devices (Apple) are not affected by the Choice Screen.

(7) Barriers to market entry and expansion, Section 18(3) no. 6 GWB

(303) In addition to the aforementioned factors, the very high investment in time and money also act as barriers to market entry or expansion, Section 18(3) no. 6 GWB. For example, the development and maintenance of an own web crawler, of a web index, and of the search algorithm, which requires large amounts of data to enable self-learning, especially for long-tail queries,[458] are very cost-intensive (in terms of time and money)[459]. However, it should be noted that due to the necessity of obtaining permission from the website operators to mechanically crawl their websites, even high investments do not ensure that sufficient data can be obtained to be competitive with Google. Therefore, all competitors, with the exception of Bing and partly Brave, do not use their own search technologies for generic search results, but those of Google or Bing.[460] However, when

---

[456] Cf. in detail https://www.android.com/choicescreen/ (accessed 6 September 2021).

[457] https://www.android.com/choicescreen-winners/ (accessed 2 September 2021).

[458] Cf. (2).

[459] European Commission, Decision of 27 June 2017 AT.39740 – *Google Search (Shopping)* para. 286; European Commission, Decision of 20 March 2019, AT.40411, para. 243 – *Google Search (Adsense*); confirmed to the Decision Division e.g., by Microsoft, response to question C. 16 b of the RFI of 28 July 2021.

[460] Cf. DuckDuckGo, White Paper on the Search Engine Market, Features and Competitive Landscape, March 2021, pp. 4 seq.

syndicating generic search results in this way, contractual provisions limit the possibilities of action and thus also the potential for competition of the syndicating search engine operators. For example, it is not possible to change the order of the search results.[461]

(304) The dependence on Google or Bing as the only alternative also exists on the market side of search-based advertising due to the multi-sidedness of the market. Market entry or expansion is particularly complicated by the fact that (with the exception of Bing and, in the future, partly Brave) all relevant competitors have to syndicate not only the search technology but also (with the exception of Bing) the search-based advertising, the so-called "AdFeed", which serves to monetize the general search service. According to market participants, establishing their own AdFeeds would also involve very high costs in terms of time and money.[462]

cc) Particular significance because a core area of business is affected

(305) The market for the provision of general search services vis-à-vis search users in Germany is a core area of Google's business. With search-based advertising on Google Search, Google generated approximately EUR […] billion worldwide in 2020, which was approximately [50-60] % of its worldwide total turnover. In Germany, the position of Google Search within the Google Group is even more prominent. Here, with around EUR […] billion the share is probably higher. Based on the total revenue from Google services in Germany[463], the share was around [70-80] %.[464]

---

461 CMA, Online Platforms and Digital Advertising, Market Study Final Report, para. 3.85.

462 Cf. 3. a).

463 According to the categorization in the 2020 Financial Statements, Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2020, p. 33. (available at https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf?cache=b44182d), Google Services excludes revenue from Cloud, Other Bets, hedging activities, and other Alphabet Services; see also Google's 31 August 2021 response to question 50 of the RFI of 23 July 2021, para. 50.1.

464 See Google's revenue data in USD in the Excel spreadsheet accompanying Google's 31 August 2021 response to Question 50 of the RFI of 23 July 2021. The conversion into EUR was based on the annual average exchange rate for 2020 of 0.8768 USD to EUR, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.en.html (last accessed 14 October 2021); worldwide, the corresponding share would be around [50-60] %, see also III. 2. c) aa).

(306) The fact that Google's dominant position relates to a core area of its business and concerns markets as defined in Section 18(3a) GWB particularly contributes to Google's paramount significance across markets. A dominant position in this area shows the potential of the company and the potential threat to competition particularly with regard to the special protective purpose of Section 19a GWB.

3. Strong market position/position of power of Google in other fields of activity

(307) In addition to general search, Google has a large number of other services with strong market penetration, including on markets within the meaning of Section 18(3a) GWB. This concerns in particular Google's position in search-based advertising (a)), the Android operating system and the related Play Store (b)), the Chrome browser (c)) and the YouTube video platform (d)). Whether Google is dominant in the aforementioned areas, can be left open in the present case. Google's existing strong market position/position of power further supports the finding that Google is of paramount significance for competition across markets both in the context of the criterion of Section 19a(1) sentence 2 no. 1 GWB as well as in the context of the necessary overall assessment. Again, these are areas that are of considerable significance for Google's ecosystem, for example because they are important revenue drivers (such as search-based advertising) or because they are important for the distribution of Google's services (such as the Android operating system). The assessment of the strong position in the respective market areas set out below is based on findings in proceedings of the European Commission and current market data. There is no evidence to suggest that Google would no longer have at least strong market positions or power at present.

a) Search-based advertising

(308) In any event, Google enjoys a strong position in search-based advertising in Germany.[465] Whether, in addition, Google is (still) dominant in a national market for search-based advertising can be left open in the present case.

[465] See A. I. 2. on Google's product portfolio.

(309) The recent practice of other competition authorities regarding market definition in search-based advertising supports the finding of at least a separate market segment for search-based advertising.

(310) In *Google Search (AdSense)* (2019), the European Commission concludes that Google has been dominant in the German market for search-based advertising from 2006 to 2016.[466] In *Google/Fitbit* (2020), it found that market conditions have not changed materially and that Google continues to be dominant in the national markets for search-based advertising (including the German market).[467]

(311) In its 2020 market investigation, the CMA states with regard to the advertising side that general search services are in competition with each other in terms of the advertising delivered on their search results pages. In contrast, there is little competitive pressure exercised by the offer of advertising space by specialized search services or by non-search advertising space, especially on websites. The CMA concludes that Google has market power in search-based advertising and also uses it.[468]

(312) The DoJ assumes a market for search-based advertising and a market for search-based text-based advertising contained therein (each limited to the United States), on each of which Google holds a monopolistic position.[469]

(313) If we look at the area of search-based advertising in Germany, taking into account Section 18(3) and (3a) GWB, Google's high shares in particular would suggest that Google continues to have a dominant position. In any case, Google has a strong position of power here with considerable uncontrolled scope of action. The Commission found Google's market shares in the German market to be in the range of 70-100% from 2006

---

466 European Commission, Decision of 20 March 2019, AT.40411 – *Google Search (AdSense)*, paras. 228 seqq.

467 The European Commission has established the market shares for search-based advertising in 2018 and 2019 (90-100% in each case) and assumes a continuing dominant position of Google in connection with the assessment of horizontal effects due to the acquisition of Fitbit by Google, see European Commission, Decision of 17 December 2020, M.9660, *Google / Fitbit*, paras. 340, 427.

468 CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 5.49 seqq. 5.63 seqq.

469 DoJ et al, Application of 20 October 2020, paras. 97 seqq., 108 seqq.

to 2016.[470] According to a recent Statista market analysis and forecast, Google has a market share of 80% in Germany.[471]

(314) The Bundeskartellamt's investigations have also shown that Google's scope of action is not sufficiently controlled by competitive pressure exerted by its actual or potential competitors (Section 18(3) no. 7 GWB) in the area of search-based advertising. Bing is the only competitor of Google that even has a comparable ad-supported business model, where the Search is monetised via its own advertising network (AdFeed). All other competitors syndicate their ads from Google or Bing meaning that a significant portion of their advertising revenue remains with Google or Bing.[472] Because of their business model, which is dependent on Google or Bing, the remaining competitors are not in a position to exert disciplining competitive pressure on Google or Bing from the outset. However, Bing is also not in a position to do so, considering its market share both in the market for general search services vis-à-vis search users of [0-10] % in 2020 in Germany, and in the market segment of search-based advertising of [0-10] % in 2020 in Germany. Furthermore, with products such as SA 360, Google has widely used products important for advertisers designing and managing their campaigns with search-based advertising. These tools also support campaigns on third-party platforms, but Google has the ability to optimize them for its own search engine. The CMA also believes that Google has such capabilities, contributing to Google's economies of scale and increasing barriers to entry.[473]

(315) Google's market position/position of power on the advertising side, in particular vis-à-vis Bing, is just as secure as on the user side, if one also takes into account the high barriers to market entry and expansion standing in the way of establishing and expanding a search engine as an essential service-aspect of the multi-sided market, as well as

---

[470] European Commission, Decision of 20 March 2019, AT.40411 – *Google Search (AdSense)*, Table 3 (following para. 234).

[471] Statista, Digital Advertising Report 2021, p. 53.

[472] See response from Ströer to question E.2 of the RFI of 2 August 2021, from Ecosia to question E.2 of the RFI dated 26 July 2021, from 1&1 to question E.2 of the RFI of 4 August 2021, from Verizon (Yahoo!) to question E.2 of the RFI of 2 August 2021, and DuckDuckGo to question E.2 of the RFI of 28 July 2021.

[473] See CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, p. 240, paras. 5.107 seqq.

the practically unassailable position Google occupies in the market for general search services vis-à-vis search users in Germany[474]. In this regard, due to the indirect network effects described above,[475] Google's strong position in the market for general search services vis-à-vis search users therefore has a foreclosing effect on the market for search-based advertising.[476] In particular, the entry of new competitors on the advertising side would require very high investment not only in the development of a "matching algorithm" between the queries entered by users on the search page and the advertisers' keywords,[477] but also in the very cost-intensive establishment, maintenance, and servicing of a trading platform and infrastructure for advertising that is to be displayed.[478] According to the Commission's investigation, this would include, inter alia, real-time bidding technology, an auction mechanism, and click data measurement technologies[479].[480]

(316) Trading platforms with product search functions such as Amazon or the providers of display advertising pursue a different business model, so that they are not direct competitors in any case. In addition, a possible competitive pressure by Amazon on Google in the area of search-based advertising would be limited a priori to the sub-area of product-related advertising.[481] From the relevant perspective of the customers, i.e., the advertisers, the search-based advertising space on Google Search is at most interchangeable in a sub-segment for product sales with the advertising space on Amazon or other

---

474 Cf. 2.

475 Cf. 2. b) bb) (2).

476 More details on the significance of Google's strength in Google Search: European Commission, Decision of 20 March 2019, AT.40411, paras. 252 seqq. – *Google Search (Adsense)*.

477 European Commission, Decision of 20 March 2019, AT.40411, para. 244 – *Google Search (Adsense)*.

478 Note on conversation with DuckDuckGo on 8 July 2021; DuckDuckGo, White Paper on the Search Engine Market, Features and Competitive Landscape, March 2021, pp. 5 seq.

479 Click data is necessary, because, under the widespread "cost per click" fee model, the event triggering payment is the "click" when displaying search-based advertisement. Even under automated bidding strategies that are linked to predefined successes ("conversions"), the "click" and the "cost per click" metric play a decisive role.

480 European Commission, Decision of 20 March 2019, AT.40411, paras. 245 seqq. – *Google Search (Adsense)*.

481 See CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, pp. 88 seq., para. 3.50: the retail sector accounts for around 19% of revenues from search-based advertising.

platforms. Unlike Amazon, search-based advertising on Google covers a large number of other advertising areas (such as travel, services, insurance, cars, etc.) that are not (and cannot be) advertised on Amazon.

b) Android operating system

(317) In the area of the Android mobile operating system and the associated Play Store app store, Google also has a strong market position/position of power in core areas of its business activities.

(318) On a worldwide (excluding China) market for the licensing of operating systems for smart mobile devices to OEMs, the European Commission[482] found Google dominant since 2011 and identified market shares of 96.4% for the Google-Android[483] smartphone operating system in 2016.

(319) In any case, Android is by far the most widespread operating system for mobile devices. Since November 2016 until May 2021, the share of Android in terms of internet usage with mobile phones worldwide was above 70% in every month according to data from StatCounter (minimum: 71.18% November 2020, maximum: 77.32% July 2018 and 72.44% September 2021)[484] and in Germany since July 2013 until September 2021 always above 60% (minimum: 60.31% July 2013, maximum: 73.73% July 2019 and 63.18% September 2021).[485] In 2020, around […] million DAU and about […] million MAU used Android (mobile phones as well as tablets), corresponding to roughly […] % or respectively […] % of all internet users in Germany.[486]

(320) In addition, the Commission also found Google dominant in the worldwide (excluding China) market for Android app stores since 2011 and identified market shares for

---

482 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android*, paras. 440, 446.

483 That is, especially without Android forks.

484 https://de.statista.com/statistik/daten/studie/184335/umfrage/marktanteil-der-mobilen-betriebssysteme-weltweit-seit-2009/ (accessed 2 November 2021).

485 https://de.statista.com/statistik/daten/studie/184332/umfrage/marktanteil-der-mobilen-betriebssysteme-in-deutschland-seit-2009/ (accessed 2 November 2021).

486 On the assumptions and possible inaccuracies of the best possible estimation of these user numbers see paras. 206 seqq.

Google of 90-100% based on the number of app downloads.[487] In 2020, […] German-based developers (individuals or legal entities) made at least one app available for download from the Google Play Store.[488] The Google Play Store has approximately […] million DAUs and approximately […] million MAUs in Germany.[489]

(321) With the Android operating system and the Play Store linked to it, Google is also active on markets within the meaning of Section 18(3a) GWB.[490]

c) Chrome

(322) Compared to other providers, Google has a very broad user base for browsers on stationary and mobile devices. According to StatCounter, Chrome has a global share of 64% (desktop 67%, mobile 62%). In Europe, Chrome has a share of 59% (desktop 62%, mobile 55%), in Germany 49% (desktop 50%, mobile 49%).[491] This calculation also includes Apple's Safari browser, which is preinstalled on Apple devices. In the year 2020, the Chrome Browser had around […] million DAU and around […] million MAU, representing approximately [40-50] % and [90-100] % of all internet users in Germany.[492] Chrome's user share has steadily increased after its launch and has maintained a high level over the past few years. It has risen from less than 4% in 2009 to 64% worldwide and from around 2% to over 49% in Germany.

d) YouTube

(323) With regard to video platforms, Google also has a strong position of economic power through YouTube. In 2020, YouTube had approximately […] million DAU and approximately […] million MAU, representing approximately [50-60] % and [70–80] % of all

---

487 European Commission, Decision of 18 July 2018, AT.40099 – *Google Android*, paras. 590, 598.

488 Google's response to question 45 of the RFI of 23 July 2021.

489 Google's response of 31 August 2021 to question 33 of the RFI of 23 July 2021.

490 Cf. III. 4. a).

491 Cf. https://gs.statcounter.com/browser-market-share (accessed 23 February 2021 and 18 March 2021, respectively).

492 On the assumptions and possible inaccuracies of the best possible estimation of these user numbers see paras. 205 seqq.

internet users in Germany, respectively.[493] The average daily active user time or playback time per user was approximately […].[494] In 2020, Google generated approximately EUR 17.3 billion worldwide from online advertising on YouTube, which represents around 11.7% of its total global revenues.[495] In a survey conducted by Statista covering the period from the fourth quarter of 2015 to the third quarter of 2019, between 70.3% (Q.4 2015) and 81% (Q.2 2021) of respondents reported using YouTube as a provider of online videos, with increasing tendency.[496]

VII. Relevance of Google's activity for third-party access to supply and sales markets and its related influence on the business activities of third parties (Section 19a(1) sentence 2 no. 5 GWB)

(324) Google's activities, particularly with respect to Google Search, YouTube, Android as well as its Play Store, Chrome, and its advertising services, each have considerable significance individually and across markets for third-party access to supply and sales markets and the related influence on the business activities of third parties (Section 19a(1) sentence 2 no. 5 GWB); and also contribute to Google's paramount significance across markets.

---

493 On the assumptions and possible inaccuracies of the best possible estimation of these user numbers see paras. 205 seqq.

494 Google's response to question 39 of the RFI of 23 July 2021.

495 See Google's revenue figures in USD in the Excel spreadsheet accompanying Google's 31 August 2021 response to Question 50 of the RFI of 23 July 2021. The conversion into EUR was based on the annual average exchange rate for 2020 of 0.8768 USD to EUR, see https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-usd.en.html (accessed 14 October 2021).

496 Source: Seven.One Media GmbH, ViewTime Report 2021 (conducted by forsa. Gesellschaft für Sozialforschung und statistische Analysen mbH, : https://www.sevenonemedia.de/documents/924471/2568866/View+Time+Report+2021.pdf/8ae8af7c-3403-f495-0dad-https://www.sevenonemedia.de/documents/924471/2568866/View+Time+Report+2021.pdf/8ae8af7c-3403-f495-0dad-5895a3095062?version=1.1&t=1635159233520 (last accessed 3 November 2021). Around 1,500 people aged between 14 and 69 were surveyed in Germany during the quarter.

1. Purpose of the condition

(325) The significance of the economic activity for third-party access to supply and sales markets and its related influence on the business activities of third parties are mentioned in Section 19a(1) sentence 2 no. 5 GWB as particularly relevant aspects when determining a company's paramount significance for competition across markets. Dependencies on the part of other market participants can be a major characteristic of the status as addressee of Section 19a GWB because of the possibilities resulting from these dependencies allowing to shape the competitive process according to one's own ideas or to distort it to one's own advantage.[497]

(326) The condition focuses on the (potential) business customers of an addressee of the provision and aims in particular to include a company's so-called "intermediation power"[498] or "power to set rules"[499] as an aspect of significance across markets. The concept of intermediation power is originally derived from the factor for the assessment of market dominance described in Section 18(3b) GWB for multi-sided markets, but it is to be understood in a broader, cross-market sense for the purposes of Section 19a(1) sentence 2 no. 5 GWB. This condition, too, thus primarily aims to reflect the risk that individual digital corporations may expand their range of products and services or create their own ecosystems and thus become "gatekeepers" that control access to their users.

(327) An intermediation activity can generally exist in quite different forms. As with trading platforms or booking portals, it can consist in mediating specific transactions. However, in the run-up to such a transaction, the activity can also consist in the communication of information or the attraction of attention, as is the case with search engines or advertising platforms. A characteristic feature of these platforms is that the intermediary may select or prioritize the offers and information and determine the framework for their

---

497 Cf. Bundestag printed paper 19/23492 p. 73.

498 The government's statement of legislative intent to the 10th amendment of the GWB, see Bundestag printed paper 19/23492, p. 75.

499 See resolution for a recommendation regarding the 10th amendment of the GWB, Bundestag printed paper 19/25868, p. 115 on the theory of harm of Section 19a(2) sentence 1 no. 2 GWB, which is based on the wording of Section 19a(1) sentence 2 no. 5 GWB.

presentation. If this activity is sufficiently important, the company may thus exert a significant influence on the visibility of third parties' offers or their access to customers.

(328) If third-party companies are dependent on access to these users, for example for marketing their products, e.g., because the users exclusively or at least predominantly use the ecosystem or the company's range of products and services, these digital corporations have considerable power vis-à-vis the third-party providers and may dictate the terms of access to them.[500] In addition, the sovereignty over the design and presentation of the offer and the superior information from comprehensively collected data regularly result in a wide range of possibilities for influencing and directing user behavior. On the part of the third-party companies dependent on access, this may lead to a significant reduction in the scope for action and competition, and to an increasing shift of value creation to the ecosystem.

(329) "Power to set rules" therefore refers first and foremost to the ability to dictate the conditions under which companies may use the ecosystem's offerings. In addition, however, setting rules can also be understood as "regulation" of the markets that the platforms have created within the ecosystem and the competition that takes place there. This is because significant markets that are indispensable for companies can emerge within the system – e.g., on large trading platforms or within a proprietary operating system – whose framework and conditions of participation, including, for example, the characteristics of the products, their visibility or certain sales strategies, have been set from the outset by the ecosystem and its different areas.

2. Google's intermediation power and power to set rules in individual services

(330) The significance of Google's activity for third-party access to supply and sales markets, and Google's related influence on the business activities of third parties, is evident in many instances in Google's activity. This will only be outlined for the following relationships of Google with third parties: Google Search with website operators (a)), YouTube with video publishers (b)), Android and the Play Store with app publishers (c)), Chrome with providers of advertising services (d)) and finally Google's advertising services with

---

500 *Federal Ministry for Economic Affairs and Energy* (ed.), Ein neuer Wettbewerbsrahmen für die Digitalwirtschaft; Report of the Competition Law 4.0 Commission, p. 20.

advertising customers (e)). Google's possibilities to influence third parties, as exemplified in each of these areas of activity, also have effects across markets within its ecosystem, since they influence and reinforce each other (3.).

a) Google Search and website operators

(331) Google has a significant influence on the access of website operators to users of Google Search via Google Search, both in the area of displaying generic search results (a)) and in the placement of text ads (b)) on the search results page. This enables Google to exert to a significant extent influence on the business activities of website operators.

aa) Generic search results on the search results page

(332) Google Search is highly significant for the market access of website operators, that use the internet as a channel to reach their customers. This means that Google has considerable influence on the general conditions under which these companies may allow customers to find their websites and thereby their products and services via the internet.

(1) Importance of Google Search for website operators

(333) Search engines are essential for finding information and offers on the internet. For internet users, they are important for filtering out the content serving their respective needs from the variety of available web content. They have emerged as the internet has grown to enable internet users to find the information available on the internet. In the meantime, they have assumed a central function in diverse business models. The information provided via the internet on the type, scope and quality of offers as well as on the reliability of and experience with transaction partners has become increasingly significant. Selections or purchase decisions are made easier for potential customers through the selection or periodization of the available alternatives through search engines.

(334) With this in mind, taking the opposite perspective, search engines are also of substantial significance for website operators, so they can be found by customers. This is particularly true – even if not only – for the websites of website operators whose exact name or web address (URL) is not or not yet familiar to customers, which is likely the majority

of websites, and whose customers therefore do not (or cannot) access the website directly by entering the address in the browser. But even if a website is known, search engines are increasingly used to access it, to avoid entering the full web address (URL), which is perceived as more cumbersome. In particular, the integration of search engines in the address bar of browsers (Google's so-called Omnibox[501]) continues to favor this behavior and leads to a learned behavior of consciously and unconsciously using the search engine as a central medium to access internet content.

(335) The use of search engines is the most widespread online activity of internet users in Germany. The following chart shows the use of different online services in Germany in March 2021. Accordingly, in a survey of internet users, over 90% of respondents stated that they had used search engines during the survey period.[502]

[501] https://support.google.com/chrome/answer/95426?hl=de&co=GENIE.Platform=Desktop (accessed 21 October 2021).

[502] The figures show the result of a survey on the topical focus of online usage in Germany in March 2021. The proportion of respondents that frequently or occasionally use search engines was 92.6 percent at the time of the survey, according to agof.de. The question was asked using the following wording: "Do you use these topics and offerings frequently, occasionally, rarely, or never?" Only the answers "frequently" or "occasionally" were taken into account in the study. The top 10 of a total of 26 topics are shown. The number of respondents and their age group is not precisely specified. However, it can be seen from the annotations to the study that the study took 279,781 cases of users of stationary and/or mobile services aged 16 and over in the last 3 months in the survey period March 2021 into account; see Statista, Thematische Schwerpunkte bei der Online-Nutzung in Deutschland im November 2020, PowerPoint presentation pp. 2 and 8.

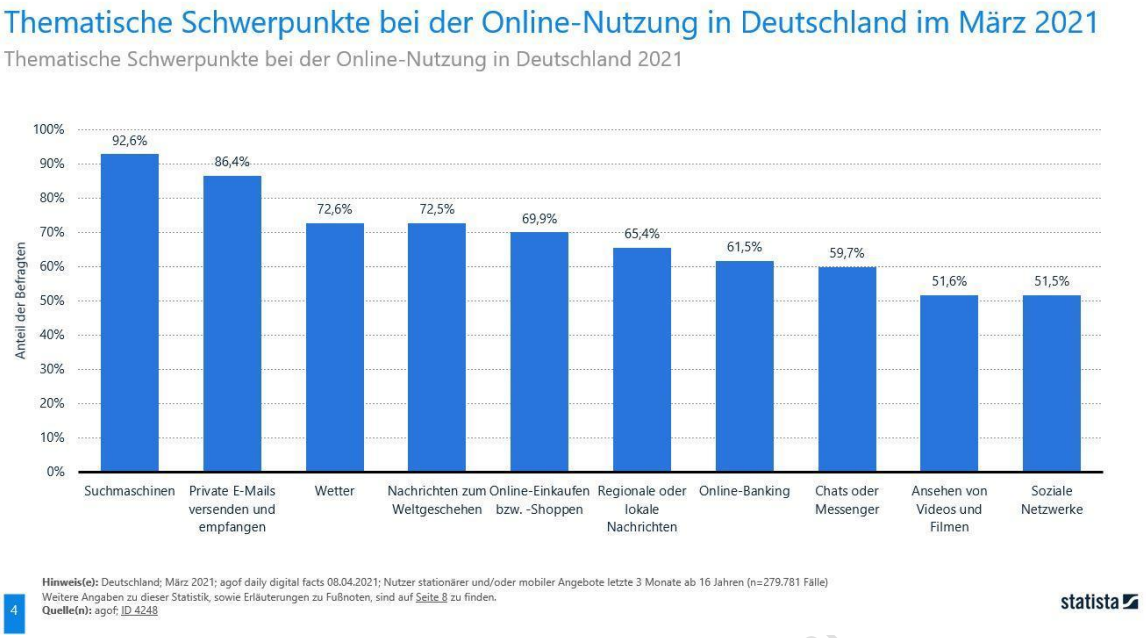


Figure 7: Thematic focus of online usage in Germany in March 2021

(336) Accordingly, search engines also play a significant role as a source of information about products that the information seeker intends to purchase. More than 60% of Germans use search engines to obtain specific information about such products.[503]

503 This data on sources of information for new products shows results of the Statista Global Consumer Survey in Germany in 2021. Around 64 percent of respondents answered the question "How do you specifically search for information about a product you want to buy?" with "Search engines (e.g., Google)". In the survey periods 6 April to 14 June 2021, 7 January 2021 to 15 March 2021 and 22 July 2020 to 20 August 2020, Statista surveyed a total of 3098 people in the age group 18 to 64 years as part of the Statista Global Consumer Survey for this purpose. See Statista, How do you specifically search for information about a product you want to buy? Germany: Sources of information for new products 2021, PowerPoint presentation pp. 4 and 8.

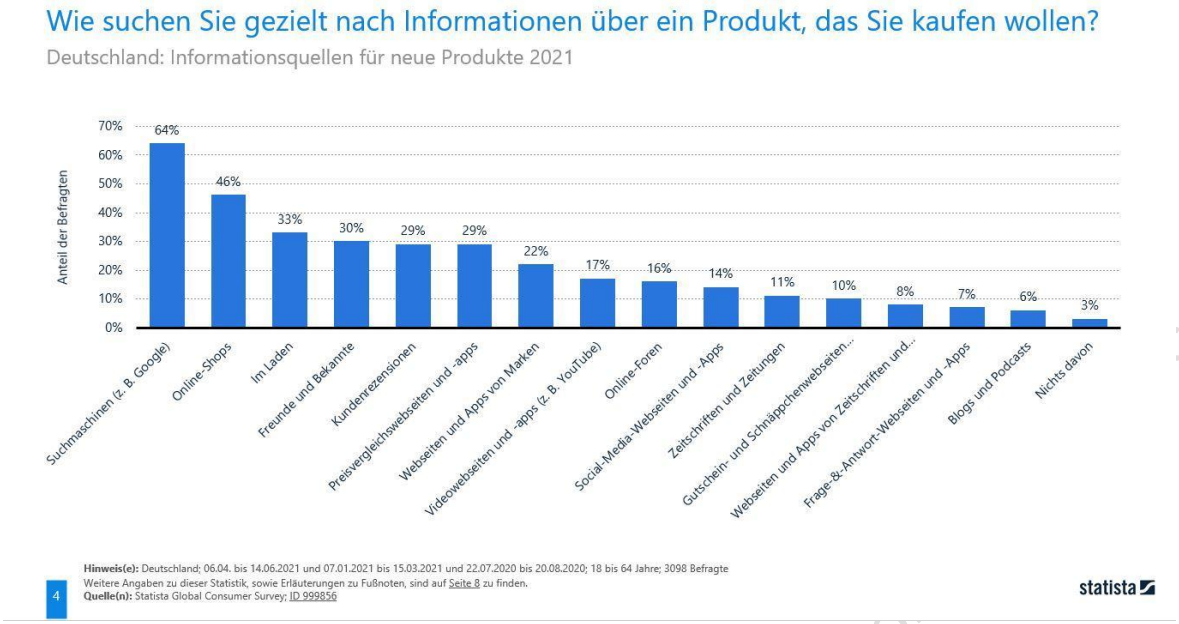


Figure 8: Search for information about products

(337) Google Search also plays a central role for publishers and other providers of news content in the distribution and marketing of their online offers. As a result of digitization, there have been fundamental changes to the way information and media are used over the last twenty years. Publishers have responded by expanding their online offers, which were initially largely financed through advertisement and freely accessible but have increasingly become paid subscriptions ("paid content") in recent years. Regardless of the funding model, the success of these offers depends to a considerable extent on the referral of users by third parties ("referral traffic"). The necessary reach can only be achieved and, more importantly, new readers and subscribers can only be gained through such referrals to the publisher's offers by search engines, news aggregators or social media providers.

(338) The share of referrals of all page visits differs depending on the type of offer and the prominence of the brand. However, on a rough average, public web statistics[504] and different decisions and studies indicate that at any rate more than half of user traffic is based on referrals by third parties.[505] In detail, there are also considerable differences

504 Cf. e.g., the information at www.similarweb.com (last accessed 17 November 2021).

505 For example, 61% of total traffic related to four European countries in 2015-2017 according to Deloitte's study commissioned by Google, The Impact of web traffic on revenues of traditional

between different online offers with regard to sources of the referrals. However, a survey of publishers in the proceeding V-43/20, which is also directed against Google, revealed that Google's services and, in particular, Google Search[506] are regularly by far the most important third-party source of user traffic for publishers' offers.[507] For some offers, Google Search alone is responsible for more than a third of the visitors. Google also recognizes the function and economic significance of Google Search for press publishers and other news providers. In its public relations work, for example, Google points out that users in Europe click more than 8 billion times every month on results in Google Search and Google News and are thus referred to the websites of publishers.[508] As a result, Google's offer has considerable significance for publishers' access to the increasingly important digital markets for newsreaders.

(2) Google's ability to influence the framework for the access of website operators to customers of their website offer

(339) In particular, the wide reach of Google Search on the user side and the limited space for the relevant presentation of search results on the search results pages mean that website operators must largely follow the rules defined by Google for the optimal design of web pages for findability by Google's search algorithms, to be visible with their advertising (see below (a) on the significance of Google's guidelines and then (b) on the significance of the criteria used by Google's search algorithms).

(340) Google Search is already of considerable significance for finding websites on the internet due to its high market share of more than 80% worldwide and in Germany in 2020[509]

---

newspaper publishers, September 2019, p. 11; available at https://www2.deloitte.com/content/dam/Deloitte/es/Documents/financial-advisory/The-impact-of-web-traffic-on-revenues-of-traditional-newspaper-publishers.pdf (last accessed 17 November 2021).

506 In addition, referrals are also made through the Google Discover and Google News services.

507 See also already Bundeskartellamt, 8 September 2015, B6-126/14, Google/VG Media, paras. 35 et seq.; Autorité de la Concurrence, Décision n° 20-MC-01 du 9 avril 2020, paras. 222 seqq.; CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, p. 305, paras. 5.362 seqq.

508 https://blog.google/intl/de-de/produkte/suchen-entdecken/nachrichten/#ueberblick (last accessed 17 November 2021).

509 Cf. VI. 2. b) bb) (1) (a).

as well as due to its reach of almost [80-90]% of all internet users in Germany in the same year.[510] In contrast, Bing, Microsoft's search engine and Google's next largest competitor, only plays a significantly smaller role across all areas and, in particular, is barely present in the growing area of mobile internet use, with market shares of [0-10] %.[511] Due to the high and unsurpassed reach of Google Search, it is economically necessary for website operators to design their website in such a way that it can be found there. The criteria defined by Google for the display and ranking of websites are not only decisive for the findability via Google Search as such, but also via those search engines that syndicate their search results from Google (such as t-online [Ströer], web.de, gmx.de [1&1] or Startpage).

(341) Furthermore, it is not only important for website operators that Google's search algorithms display the (generic) link to their websites. Rather, it is crucial that it is visible as high up on the search results page as possible. Users tend to avoid the effort associated with scrolling down the first search results page or calling up further search results pages and regularly retrieve only the content listed first.[512] Therefore, the space available for this on the search results page is limited a priori, even if the search results page was, theoretically, fully covered with generic links only. In addition, the generic search results compete for display in this limited space with, among others, advertisements (such as text and product ads) and (also) Google's own content (such as info boxes).[513] The decisions on the placement, type and size of the display of the individual search result categories on this limited space of the search results page and on the criteria used for this are solely made by Google.

---

510 Cf. VI. 2. b) bb) (2) (b).

511 Bing has market shares of [10-20] % in the area of desktops and [0-10] % on the mobile market and overall, cf. VI.2 b) bb) (1) (a).

512 See the studies listed by the European Commission in Google Shopping, Decision of the European Commission of 27 June 2017, AT.39740, Google Shopping, paras. 454 seqq.; see also Bundeskartellamt, Sector inquiry into comparison websites, Report, April 2019, p. 79.

513 Cf. on the other possible contents on the search results page, Facts A. I. 2. a) aa).

(a) Significance of Google's policies

(342) Related to the limited space for displaying generic search results as described above, Google has published several guidelines that provide recommendations for designing web pages so they can be found via Google Search.[514] In addition to guidelines for webmasters,[515] these include general guidelines, content-specific guidelines, and quality guidelines.[516] The guidelines for webmasters in the narrow sense contain a number of technical recommendations to make it easier for Google to find the website. These include limiting the number of links on a page and instructions on how to get Google to crawl the site.[517] The general guidelines represent best practices for ensuring that a web page is optimally displayed. These include, for example, compatibility with popular browsers.[518] Content-specific guidelines contain rules for the display of specific forms of content such as images or videos on web pages.[519] Among other things, the quality guidelines describe practices that Google considers manipulative and that may lead to a lower ranking of the web page in question on the search results page. This includes, for example, the display of automatically generated content or the participation in link-buying programs, in which a website links to another website for a fee to influence the PageRank[520].[521] In addition, the quality guidelines also contain content-related criteria for the ranking of web pages. For example, web pages with a high proportion of content

---

514 Cf. https://developers.google.com/search/docs/advanced/guidelines/overview?visit_id=637255697889292376-1678909868&rd=2 (accessed 28 July 2021).

515 In its response, Google uses the term webmaster guidelines as a generic term for all the guidelines referred to below, see Google's response of 5 July 2021 to question 26 of the RFI of 7 June 2021, para. 26.4.

516 https://developers.google.com/search/docs/advanced/guidelines/overview (accessed 26 May 2021).

517 https://developers.google.com/search/docs/advanced/guidelines/webmaster-guidelines (accessed 26 May 2021).

518 https://developers.google.com/search/docs/advanced/guidelines/overview (accessed 26 May 2021).

519 https://developers.google.com/search/docs/advanced/guidelines/overview (accessed 26 May 2021).

520 Cf. A. I. 2. a) aa).

521 Google's response of 5 July 2021 to question 26 of the RFI of 7 June 2021, paras. 26.4 seq.

from other web pages are typically displayed with a lower rank on the search results page.[522] There are special guidelines in this respect for news content.[523]

(343) Even if the guidelines for website operators provided by Google may serve Google's legitimate interests, insofar as they can improve and safeguard the quality of the search engine, they nevertheless represent a framework for suppliers that market their services and products via the internet and must be largely observed by them if they want to be successful in this respect. In this context, Google takes a position as a "rule setter".

(b) Significance of the criteria used by Google's search algorithms

(344) The website operator's compliance with the aforementioned guidelines has an effect on how easy a website can be found, as Google's search algorithms[524] take into account the compliance of the websites with the aforementioned criteria in the context of quality signals. The quality signals are based on the standards developed by Google for the usefulness of a website with regard to a specific query.[525] Web pages that are deemed to be of higher value according to Google's standards receive a higher rank on the search results page. Google does not make transparent all the quality signals that are significant for the ranking. Therefore, service providers have specialized in trying to track these criteria and advise website operators on their web presence so that they meet these criteria if possible (so-called "Search Engine Optimization, SEO"). The existence of this entire range of services downstream from the search engines shows how important it is for website operators to meet Google's quality criteria and that being found in Google Search is elementary for them.

(345) The fact that changes in Google's search algorithms have a direct impact on the ranking of websites in Google Search can be illustrated by two major updates to Google's search

---

522 https://developers.google.com/search/docs/advanced/guidelines/scraped-content (accessed 27 May 2021).

523 https://developers.google.com/search/docs/advanced/guidelines/scraped-content (accessed 27 May 2021).

524 See A. I 2. aa). In addition to algorithms, Google also uses manual measures in which human reviewers detect violations of the quality guidelines and lower the rank of the affected webpage on the search results page or remove it from the search results page altogether.

525 Google's response of 5 July 2021 to question 27 of the RFI of 7 June 2021, paras. 27.3 seqq.

algorithms. In February 2011, Google released the so-called Panda update which decreased the ranking of websites whose quality Google considered low.[526] The Panda update impacted approximately 12% of all search queries (approximately 133 billion queries)[527] to a "significant degree" not further specified by Google.[528] In April 2012, Google released the so-called Penguin update. This update was intended to decrease the ranking of websites that violate Google's quality guidelines, for example through excessive inclusion of keywords (so-called "keyword stuffing") or through the inclusion of irrelevant links. This update affected about 3% of English- and German-language queries, and in some cases higher proportions in languages where spam is particularly prevalent (i.e., more than 36 billion queries),[529] to a degree that Google said "a regular user might notice".[530] The European Commission's findings in the *Google Shopping* case also illustrate the significance of Google's search engine and any changes to its search algorithms for third-party market entry. In these proceedings the Commission found a possible decline in the visibility of price comparison services competing with Google Shopping as a result of changes to the search algorithm through the introduction of, among other things, the Panda update.[531] It should be expressly noted at this point that the assessment of Google's conduct under competition law in the aforementioned Commission proceedings is not relevant in the context of the assessment of Section 19a(1) GWB. In the present case, the only decisive factor is that Google's activities as a provider of a general search service have the potential to considerably impact the

---

526 Amit Singhale, Google Fellow, and Matt Cutts, Principal Engineer, Finding more high-quality sites in search, 24 February 2011, https://googleblog.blogspot.com/2011/02/finding-more-high-quality-sites-in.html (accessed 27 May 2021).

527 See https://www.internetlivestats.com/google-search-statistics/#ref-2: 1,109,486,600,000 searches in 2011 (accessed 4 November 2021).

528 Matt Cutts, Distinguished Engineer, Another step to reward high-quality sites, 24 April 2012, https://developers.google.com/search/blog/2012/04/another-step-to-reward-high-quality (accessed 18 October 2021).

529 See https://www.internetlivestats.com/google-search-statistics/#ref-2: 1,216,373,500,000 queries in 2012 (accessed 4 November 2021).

530 Matt Cutts, Distinguished Engineer, Another step to reward high-quality sites, 24 April 2012, https://developers.google.com/search/blog/2012/04/another-step-to-reward-high-quality (accessed 18 October 2021).

531 European Commission, Decision of 27 June 2017, AT 39.740, *Google Shopping*, paras. 361 seqq.

access by third parties (in this case competing price comparison services) to supply and sales markets and on their business activities, as shown by this example.

bb) Text ads on the search results page

(346) Google's offer of advertising space for search-based advertising in Google Search is also of considerable importance for the business activities and access of website operators to this advertising space as well as for the users of Google Search as recipients of text-based advertisements (text ads). Text ads are essentially structured and designed like ordinary generic results. Unlike generic results, however, they are paid, because Google receives a fee from the advertiser if the recipient clicks on them. Google currently places a maximum of four text ads at the top of the search results page. Up to four additional text ads can be displayed at the bottom of the search results page.[532] The fee is determined in an auction organized by Google.[533]

(347) Through the Google Search platform, advertisers can target users whose interest can be narrowed down very precisely through their query, possibly in conjunction with other personal information. As a result, targeted advertising with comparatively high relevance can be delivered to these users. Google has established guidelines that contain specifications for permissible advertising.[534] For certain products or services, Google does not allow advertisement. For example, citing a prohibition in its policies to exploit sensitive events with significant social, cultural or political impact for advertising purposes, Google declared on June 15, 2020 that it would not allow advertising for masks which may be essential for the exercise of health-related jobs during the Corona pandemic.[535]

---

[532] Google's response of 5 July 2021 to question 4.1. of the RFI of 7 June 2021.

[533] Google's response of 5 July 2021 to question 7 of the RFI of 7 June 2021, para. 7.14.

[534] See https://support.google.com/adspolicy/answer/6008942?hl=de (accessed on 28 July 2021). The guidelines refer to Google Ads, through which, in addition to advertising on Google Search, it is also possible to place ads on YouTube or the advertising spaces of third parties, insofar as they participate in Google's advertising network.

[535] Communication dated 15 June 2020, modified on 4 March 2021, see https://support.google.com/google-ads/answer/9811449 (accessed on 28 July 2021).

(348) Access to the advertising space of the text ads currently predominantly[536] takes place via Google's own AdTech (in particular SA 360 and Google Ads),[537] which shows Google's capacity to influence access and its conditions (for example via the specific design of the advertising services). Furthermore, the decision on the "whether" and the "where" of the placement of text ads on the search results page is up to Google. Google uses the text ad's "Ad Rank", which it determines based on its own criteria, to select the text ad to be displayed. The Ad Rank takes into account the website operator's willingness to pay and a "Quality Score" assigned by Google.[538] Google thus evaluates the web pages linked by an ad. To be displayed, the website operators must adapt these websites to Google's specifications and accordingly observe the basic conditions set by Google for the design of their websites.

(349) Alternative platforms have a significantly lower significance for search-based advertising. The only platform that is at least to some degree comparable to Google Search is Microsoft with Bing. However, its significance lags behind that of Google Search. Its share of the revenues from search-based advertising in Germany was below [0-10] % in 2020.[539] The other search engine operators do not offer their own search-based advertising, but syndicate the so-called "AdFeed" from Google or Bing to place advertising in their search services.

b) YouTube and video providers

(350) Google's activities relating to YouTube[540] are of considerable importance for the business of video publishers and their access to the attention of YouTube users both as

---

[536] In particular, for smaller advertisers, Google Ads is the main access to advertising space on Google Search, see CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, p. 281, para. 5.267.

[537] In particular, for smaller advertisers, Google Ads is the main access to advertising space on Google Search, see CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, p. 281, para. 5.267.

[538] https://support.google.com/google-ads/answer/1752122?hl=en (accessed 11 November 2021).

[539] Cf. VI. 3. a).

[540] On the significance of YouTube on the basis of user numbers and reach, cf. V. 3. a) aa) (1).

audience of their videos and as recipients of advertisements for the monetization of their videos.

aa) Posting of videos

(351) First of all, a video publisher must comply with Google's specifications when posting their videos on YouTube. For this purpose, they must use a Google account and create their own channel on which all videos posted by the video publisher can be viewed by users.[541] When posting videos, video publishers must comply with YouTube's "best practices for creators" and other guidelines, some of which implement or clarify statutory obligations, such as those regarding spam and misleading practices, sensitive content, content that glorifies violence or is dangerous, on goods that are subject to statutory restrictions, and misinformation.[542] Violations of these policies may result in Google removing a video publisher's videos and warning the channel. For serious or repeated violations, Google may also restrict or even terminate the channel.[543] Google therefore also has the power to set rules.

(352) Moreover, also for YouTube, Google's search and recommendation algorithms[544] constitute important basic conditions under which providers may allow their customers to find and view their videos via the internet. Accordingly, Google also has considerable possibilities to influence their distribution channels.

bb) Monetization by the video publisher and Google

(353) The monetization of videos by the video provider is also subject to Google's rules and the video provider can only engage in monetization if certain conditions are met and only after certain thresholds have been reached. To be able to embed advertising in the

---

[541] Cf. A.I 2. a) cc).

[542] https://support.google.com/youtube/topic/2803176?hl=de&ref_topic=6151248 (accessed 20 October 2021).

[543] https://support.google.com/youtube/answer/7650329?hl=de&ref_topic=9282435 (accessed 20 October 2021).

[544] See https://www.youtube.com/intl/ALL_de/howyoutubeworks/product-features/search/: Google takes particular account of the factors of relevance, user interactions and quality in YouTube Search.

videos on its channel for monetization purposes, a video publisher must become a member of the YouTube Partner Program (YPP). This requires, among other things, that the channel on which advertising is to be placed has achieved a valid[545] playback time of more than 4,000 hours with public videos in the last 12 months and has more than 1,000 subscribers. The channel must also be linked to an AdSense account[546].[547] Only if these conditions are met, the owner of the channel participates in the advertising revenue via the YPP.[548] In addition, the video publisher must continuously comply with the guidelines for the monetization of YouTube channels. In the event of a violation, Google may disable ads for the video provider's content, exclude the video provider from the YPP, and block or terminate the video provider's YouTube channel.[549]

(354) Until 2020, it was up to each video provider to decide whether they wanted to monetize their channel with advertising. At the end of 2020, Google reserved itself the right to monetize every video, initially in the USA.[550] As of now, Google may also place advertising in YouTube videos in Germany, regardless of the decision and revenue share of the video publisher.[551] This example illustrates without any (legal) assessment that Google may, in relation to the video publishers, (at least de facto) unilaterally implement changes relevant for their business activities.

---

545 Not all playback times count towards the minimum limits for inclusion in the YouTube Partner Program. Only playback times of videos that the creator has posted "publicly" are counted, see https://support.google.com/youtube/answer/72851?hl=de#zippy=%2Cwas-wenn-ich-die-mindestgrenzen-nicht-erreiche%2Cwas-bedeutet-g%C3%BCltige-wiedergabezeit-von-%C3%B6ffentlichen-videos (accessed 27 August 2021).

546 AdSense is a Google advertising service through which Google displays advertisements on websites outside its own offerings (cf. IV. 2. b) bb)).

547 https://support.google.com/youtube/answer/72851?hl=de (accessed 27 August 2021).

548 In addition, there are other ways to earn money through the YPP: Channel Memberships, Merchandise Shelf, Super Chat and Super Stickers as well as a share of YouTube Premium Revenues, see https://support.google.com/youtube/answer/72857?hl=de (accessed 27 August 2021).

549 https://support.google.com/youtube/answer/1311392#zippy= (accessed 20 October 2021).

550 https://www.googlewatchblog.de/2020/11/youtube-videos-kanaele-werbung/ (accessed 27 August 2021).

551 https://support.google.com/youtube/answer/72851?hl=de#zippy=%2Cich-nehme-nicht-mehr-am-ypp-teil-oder-war-noch-nie-in-diesem-programm-und-habe-trotzdem-anzeigen-in-meinen-videos-verdiene-ich-mit-diesen-anzeigen-geld (accessed 27 August 2021).

c) Android, Play Store and app publisher

(355) With Android and its app store, the Play Store, Google may partly exert considerable influence on the access of third parties to supply and sales markets, and thus also on the business activities of third parties. Specific examples of Google's possibilities to influence publishers of third-party apps will be shown below.

aa) Possibilities to exert influence due to Google's key position with regard to Android

(356) Google has a key position with regard to Android, which is expressed, inter alia, in its possibilities to conclude agreements on preinstallations and default settings of Google apps[552] with original equipment manufacturers (OEMs) on Google Android end devices. This preinstallation of Google apps may in turn de facto indirectly limit the possibilities of comparable third-party services/apps to access the users satisfied via the Google apps. In general, it can be observed that preinstallations and default settings, even if users can change them, have significant importance for the selection of the respective app.[553] As such, they may have a negative impact on the business opportunities of third-party app publishers and their access to users.

(1) Possible impact of the option to preinstall the Play Store on alternative app stores

(357) A central access point is Google's Play Store, which, as an app store,[554] in turn enables app publishers but also Google to access users. The Play Store is a platform for the distribution of Google and third-party apps. Through it, users of Google Android devices may access and download a variety of Google and third-party apps. App stores are designed for the respective operating system of the mobile device and are only available for this operating system. Through agreements that are concluded in connection with

---

552 Apps are software programs that are optimized for mobile devices.

553 See on default settings of the search engine in the browser, European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* paras. 972 seqq. and generally on the importance of default settings for search engines CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, para. 3.92.

554 The term app store is used herein as a generic term and is not limited to Apple's app store.

the distribution of Android, the Play Store is typically preinstalled as part of the GMS apps.[555] The Play Store can be used free of charge after the user has signed in to their Google account on the Google Android end device. The download of individual apps, on the other hand, may be subject to payment.

(358) At least also due to the common preinstallation on Google Android devices, the Play Store may be perceived by users as an integral part of Android, which may negatively impact the business opportunities of alternative app stores. In fact, the Play Store is by far the most important app store available on Android as regards the distribution of Google and third-party apps developed for the Android operating system. According to the European Commission's findings in *Google Android,* over 90% of all Android apps were downloaded through the Play Store between 2011 and 2016.[556]

(2) Potential impact of preinstallation and default setting possibilities of additional Google apps on alternative third-party apps

(359) In addition, Google benefits from the fact that through agreements concluded with what Google claims are hundreds[557] of original equipment manufacturers (OEMs) different Google services are preinstalled and set as default on Google Android devices. In the EEA, this includes the GMS apps Google Drive, Duo, Gmail, Google TV, Google Maps, Google Photos, Google Play and YouTube via the European Mobile Application Distribution Agreement ("EMADA"), and the apps Google Search, Google Assistant and Chrome via separate licensing agreements. Through preinstallations or default settings Google has the possibility to preinstall or set as default not only apps that already have a strong user reach and are in demand, but also new Google apps. With regard to preinstalled and default Google apps, some users do not see any need, to a relevant extent,

555 A. I. 2. a) dd) (2).

556 European Commission, Decision of 18 July 2018, AT.40099, *Google Android,* para. 597 and Table 5.

557 See the listing of each OEM: https://www.android.com/intl/de_de/certified/partners/#tab-panel-brands (accessed 1 September 2021).

to additionally search for comparable apps from other providers (such as a search engine, a browser, a map service or an email program).[558] This has a negative impact on the ability of publishers of alternative third-party apps to access these users, regardless of the sales channel (such as Play Store or alternative app stores).

bb) Google's influence as operator of the Play Store

(360) Google has a considerable influence on the activities of a large number and variety of app publishers as the operator of by far the most important Android app store, the Play Store. Due to its reach and infrastructural character, it is essential for app publishers to be present in the Play Store to be able to widely reach users. In 2020, approximately […] app publishers registered in Germany made at least one app available for download in the Google Play Store at any given time.[559] The Google Play Store has approximately […] million daily and approximately […] million monthly active users in Germany.[560]

(361) The app publishers must comply with rules set by Google, some of which implement or specify statutory requirements, but some of which originate from Google. Google sets detailed specifications that the apps must fulfill. These include restrictions on content, the prohibition of misleading information about the person of the app developer, the protection of intellectual property and data protection, the presentation in the app store, specifications on how and where the user may be asked to rate an app, minimum specifications regarding the functionality of the app, the prohibition of the use of malware, the prohibition of the installation of software considered to be harmful on end devices, further specifications and measures in relation to unwanted software and particular specifications for apps aimed at children.[561] In addition, app publishers must also comply

---

[558] See DuckDuckGo, White Paper on the Search Engine Market, March 2021, https://stat-iccdn.duckduckgo.com/press/DuckDuckGo-White-Paper-on-search_March-2021.pdf (accessed 23 November 2021).

[559] Google's response of 31 August 2021 to question 45 of the RFI of 23 July 2021.

[560] Google's response of 31 August 2021 to question 33 of the RFI of 23 July 2021.

[561] See the overview on https://play.google.com/intl/de/about/developer-content-policy/ (accessed on 21 October 2021) and Google's response of 5 July 2021 to question 30 of the RFI of 7 June 2021, paras. 30.2 seqq.

with policies on monetization and advertising that shape their ability to offer paid content, in-app products, subscriptions, and ad-based monetization models,[562] and mandate the use of Google Play's billing system in all cases.[563] Since these specifications directly affect the monetization of the apps or respectively the possibilities to amortize, among other things, any development costs of the app publishers, Google may unilaterally influence the business opportunities of the app publishers in their distribution of apps to users (for example, by determining Google's revenue share in the form of so-called service fees[564]).

(362) Google subjects apps and app updates to individual reviews. If apps violate Google's policies, such as those related to monetization and advertising, Google may take action to enforce the policies. This may include refusing to list the app in the app store, removing it from the app store, blocking the app, and limiting the app's visibility in the app store. In the event of repeat violations, Google reserves the right to terminate the developer account with the consequence that all apps assigned to this account will be removed from the app store and no new apps can be published in the app store.[565] Particularly given the reach and market significance of both Android and, within Android, of the Play Store, any restrictions of an app publisher's activity in the Play Store, or even their exclusion, may have significant economic consequences for the app publisher. Google therefore also has a position to set rules here.

(363) Finally, Google's search and recommendation algorithms again represent important basic conditions under which publishers may allow customers to find and view their apps via the internet. This also provides Google with considerable possibilities to exert influence on their distribution channels.

---

562 https://support.google.com/googleplay/android-developer/topic/9857752 (accessed 21 October 2021).

563 https://support.google.com/googleplay/android-developer/answer/9858738?hl=de&ref_topic=9857752 (accessed 21 October 2021).

564 https://support.google.com/googleplay/android-developer/answer/112622?hl=de#:~:text=15%20%25%20Servicegeb%C3%BChr%20f%C3%BCr%20die%20ersten,1%20Million%20%24%20(USD) (accessed 21 October 2021).

565 Cf. https://support.google.com/googleplay/android-developer/answer/9899234 (accessed 5 August 2021).

d) Chrome and advertising or tracking service providers

(364) The Chrome browser is of considerable importance for market access and thus the business of the providers of software and services that build on it.

(365) In particular, also due to Chrome's market strength and reach,[566] it is of substantial importance for third-party providers that their solutions are compatible with Chrome, to the extent that their software and services need to access browsers.

(366) The significance of Google's decisions on the specific design of Chrome for such third-party providers can be exemplified by Google's considerations regarding a possible future inadmissibility of so-called third-party cookies[567] in Chrome. Third-party cookies are cookies that are set by a domain other than the one that the user is currently visiting. Third-party cookies are a widely used method of tracking the user across different sites. They are mostly used by advertising or tracking service providers to monitor the user's behavior to be able to deliver targeted advertising to them.[568]

(367) In January 2020, Google announced its intention to discontinue support for third-party cookies in Chrome within two years; as of now, a "phase out" is planned for the end of 2023.[569] Insofar as these plans are addressed here, it should be noted that the subject matter of the comments within the scope of Section 19a(1) GWB is neither the legal assessment of a possible discontinuation of third-party cookies nor of any hypothetical effects. The only relevant point is that Google has the possibility to exert a considerable influence on the access of advertising or tracking service providers to supply and sales markets and their business activities, with the possibility of abolishing third-party cookies in Chrome.

---

566 Cf. V. 3. a) aa) (1) and VII. 2. d).

567 Cf. V. 2. c) bb).

568 Cf. CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix G, paras. 24 seqq.

569 https://www.heise.de/newsticker/meldung/Google-will-Werbe-Cookies-abschaffen-4637749.html (accessed 23 November 2021), https://www.theverge.com/2021/6/24/22547339/google-chrome-cookiepocalypse-delayed-2023 (accessed 23 November 2021).

(368) Such product decisions by Google may significantly impact the business models of advertising or tracking service providers, insofar as they rely on the data collected via third-party cookies, for example, to observe the user's behavior and to be able to deliver advertising tailored to him. Without third-party cookies, advertisers or providers of advertising space will no longer be able to track users in this way.

e) Google advertising services and advertising customers

(369) Through its wide reach activities on the side of advertisers as well as users, both in search-based advertising and on all levels of the supply chain for non-search-based advertising, Google has a significant influence on the access of advertisers and ad space providers to each other and to users of Google and of third-party services as recipients of advertising, and thus on the overall business activity of advertisers. The following description is limited to an overview based on publicly available sources.

(370) In terms of access to Google's own advertising space, in addition to the advertising space in Google Search already mentioned, access to advertising space on YouTube is particularly important. With its reach of [50-60] % of the total internet users in Germany in 2020[570] and more than two billion monthly users worldwide (registered alone),[571] this service represents a significant access channel for advertisers to recipients of advertising. To the extent that advertisers can currently access this advertising space exclusively via Google's own AdTech stack (in particular DV 360 and Google Ads), at least in the context of the programmatic placement of advertisements,[572] this reflects Google's ability to influence access and its conditions (for example, via the concrete design of the advertising services). In addition, Google significantly influences the access of advertisers and advertising space providers to each other and to the users of Google and third-party services as recipients of advertising by bringing together supply and demand. In

---

570 Cf. VI. 3. d).

571 https://www.youtube.com/intl/de/ads/how-it-works/ (accessed 20 October 2021).

572 See CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Appendix M: intermediation in open display advertising, paras. 410 seqq.

this respect too, Google's activity is of considerable significance for the business of advertising customers that rely on Google's advertising services for the placement of advertising space and attention of recipients.

(371) This applies first to the placement of search-based advertising. In Google AdSense, for example, the European Commission concludes that Google is unrivaled in terms of its unique reach, both in terms of potential recipients of advertising and advertisers in the placement of online search advertising.[573]

(372) But Google also holds a significant position in the open display advertising segment, whose economic significance is also high, with global revenues in 2019 and 2020 of approximately USD 52 billion annually.[574] In its sector investigation, for example, the CMA describes Google as a significant provider on all levels of the supply chain.[575] Accordingly, Google's decisions on the design of the auction process for the allocation of advertising space in the open display segment are of substantial significance for all protagonists.[576]

3. Specific interdependencies of the services concerned

(373) The previous statements already show that Google's activities, in particular in Google Search, YouTube, Android as well as its Play Store, Chrome and its advertising services, are each of considerable significance for the access of third parties to supply and sales markets and have a related influence on the business activities of third parties (Section 19a(1) sentence 2 no. 5 GWB) and thus contribute to Google's paramount significance for competition across markets. At the same time, the aforementioned significance and the related influence are not limited to the individual activities, but rather they are already accompanied by an effect extending across markets insofar as they

---

[573] European Commission, Decision of 20 March 2019, AT.40411 – Google Search (AdSense) para. 276.

[574] Cf. IV. 2. b) aa).

[575] CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, paras. 5.212 seqq.

[576] Cf. for the development CMA, Online Platforms and Digital Advertising, Market Study Final Report, 1 July 2020, Appendix M: intermediation in open display advertising, Appendix M, paras. 22 seqq.

have an influence on the business activities of a large number of heterogeneous protagonists operating in different economic sectors.

(374) In addition, Google's interaction with its own other services or advertising services is significant beyond the individual service or advertising service and, to this extent, significant across markets within the meaning of Section 19(1) sentence 2 no. 5 GWB. In particular, when considering its AdTech stack overall, advantages across markets arise in relation to third-party advertising services due, among other things, to the wide reach of its advertising services, their exclusive access to its own advertising space with a wide reach and the time and data-related advantages[577] resulting from vertical integration when they interact with each other. In particular, to the extent that the use of individual Google advertising services is accompanied by the advantage of better access to other wide-reach Google advertising services (e.g., due to time- and data-related interaction advantages), already Google's position to set the rules in the individual Google advertising service (e.g., due to exclusive access to its own advertising space) may extend to Google's AdTech stack as a whole. This is particularly likely if, as in the case of YouTube or Google Search, the advertising space in question is on Google's own services with a wide reach, which are subject to Google's overall control. In this respect, Google may exert influence on the access of advertising customers to these services across markets and thus on their business activities by setting rules at various points in its ecosystem, in particular its AdTech stack, which has a wide reach on the advertising customer side, but also the services with a wide reach on the user side, such as Google Search and YouTube, which resembles infrastructure from the point of view of bringing together its own and third-party advertising spaces, advertising customers and recipients of advertising.

VIII. Financial strength, access to other resources, Section 19a(1) no. 2 GWB

(375) In addition to the resources and "shareable inputs" already mentioned above, Google's other resources also contribute to its paramount significance for competition across markets, because Google has financial strength and access to other resources in a way that enables it not only to successfully secure the position it has attained in the future,

[577] Cf. IV. 3.

but also to expand it even further, and which may thus affect the innovative power of competition.

1. Purpose of the condition

(376) Taking into account the special protective purpose of Section 19a GWB, Section 19a(1) no. 2 GWB deals with the question of the extent to which a company has financial strength or other resources which can be used across markets and which can confer a competitive advantage, i.e., the extent to which the use of financial strength or other resources is possible in individual cases and suitable for contributing to the expansion and/or safeguarding of an ecosystem and thus (as a reinforcing element) to its systemic importance. Ultimately, the factors “financial strength” and “other resources” are intended to capture all the capabilities available to a company, in particular its potential for innovation.

(377) These factors are also taken into account because of the self-reinforcement effect associated with their use, which poses a threat to competition: On the one hand, the high financial strength of large digital corporations results from the multiple uses of certain resources, as this in particular lowers the costs of market entries for the company. This enables increasingly better access to resources and ultimately an increase in financial strength. On the other hand, the market entry barriers for competitors that have yet to acquire the relevant resources continue to rise, at least in relative terms, so that a competitive advantage can arise that can no longer be caught up on.

(378) Within the framework of digital business models, financial resources can be generated on a large scale due to the often high scalability of the business models as well as the low marginal costs with an established market position. Such an advantage creates the possibility to buy out innovative competition through high investments or high-priced acquisitions.

(379) Moreover, the mere presence of large digital corporations in certain markets can already weaken access to financial resources for other companies,[578] creating so-called "kill zones" in which no one wants to invest. This may increase the barriers to market entry for third parties and lead to a reduction in the innovation dynamic, which is increasingly limited to defensive innovations by the addressee of the provision to protect the business model and, if necessary, to (merely) complementary offers by third parties.[579]

2. Google's resources

(380) Google has outstanding financial (a)) and other (b)) resources.

a) Financial resources

(381) Google's financial resources are substantial, as shown by different business ratios such as revenue, profit, cash flow and stock market value.[580] The resulting financial strength opens up wide-ranging possibilities for Google to raise equity and debt financing. An overview of the development of revenue, profit, cash flow, capital expenditures (capex) and research and development (R&D) expenses taken from Google's balance sheets is provided in the following table.

---

578 Federal Ministry for Economic Affairs and Energy, A new competition framework for the digital economy – Report of the Competition Law 4.0 Commission, 2019, p. 65 with further references in para. 174.

579 See Stigler Center, Stigler Committee on Digital Platforms – Final Report, 2019, p. 75; M. Bourreau, A. de Streel, Digital Conglomerates and EU Competition Policy, 2019, p. 21 with further references.

580 Cf. The government's statement of legislative intent, Bundestag printed paper 19/23492, p. 75.

Table 4: Google's business ratios in USD billion[581]

Year	2016	2017	2018	2019	2020
Sales ("Revenue")	90.272	110.855	136.819	161.857	182.527
Profit ("Net income")	19.478	12.662	30.736	34.343	40.269
Operating cash flow ("Net cash provided by operating activities")	36.036	37.091	47.971	54.52	65.124
Capex ("Capital expenditures")	10.212	13.184	25.139	23.548	22.300
R&D ("Research and development expenses")	13.948	16.625	21.419	26.018	27.573

(382) Over a period of five years, Google was able to significantly increase the value of all of these ratios, in some cases more than doubling them. This is illustrated in the following graph. Revenue is shown on the left vertical axis, the other ratios on the right vertical axis.

581 Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2018, pp. 24, 33, 37, 81; Form 10-K for the Fiscal Year Ended 31 December 2019, pp. 26, 36, 40, 88; Form 10-K for the Fiscal Year Ended 31 December 2020, pp. 29, 39, 43, 44, https://abc.xyz/investor (accessed 4 November 2021).

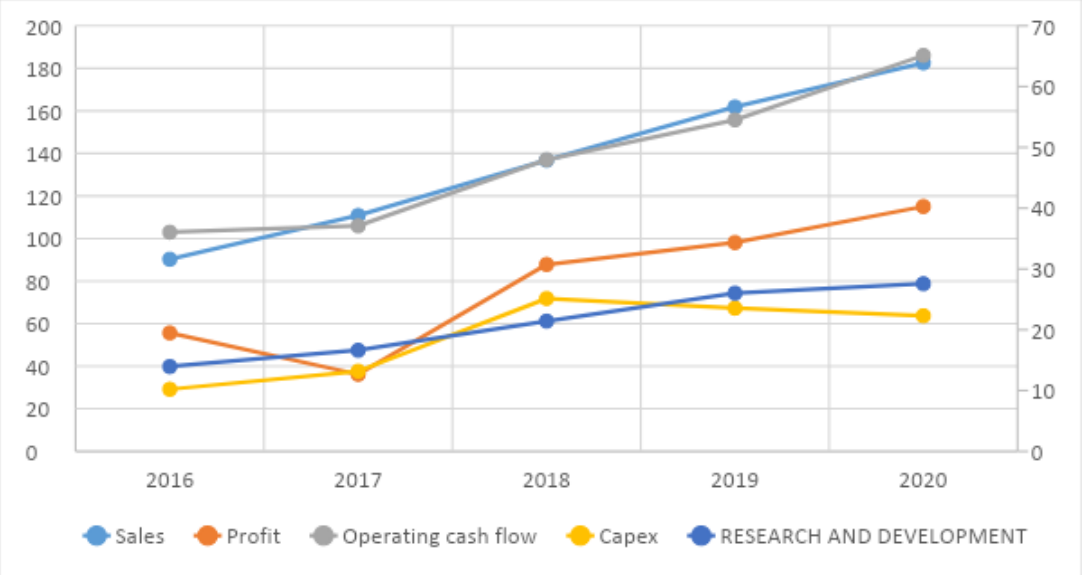


Figure 9: Development of business ratios in USD billion

(383) The absolute amount of a company's turnover and its development, especially in combination, are an indication of its financial strength within the meaning of Section 19a(1) no. 2 GWB. For example, the absolute amount of Google's worldwide group turnover and its development, doubling within a period of five years to USD 182.5 billion, indicates the particular financial strength of the company. Alphabet is the 21st largest company in the world in terms of revenue.[582]

(384) Other relevant indicators for the financial strength of a company are the amount of profit and its development.[583] Alphabet's profit is high and has increased considerably in recent years. It has doubled from USD 19.5 billion in 2016 to USD 40.3 billion in 2020, also over a five-year period. In 2019, Alphabet was the 8th largest company globally by profit with a profit of USD 34 billion.[584]

[582] Financial Times, 10 August 2021, The 100 largest companies in the world ranked by revenue in 2021, at Statista https://www.statista.com/statistics/263265/top-companies-in-the-world-by-revenue/ (accessed 29 October 2021).

[583] Cf. for merger control Düsseldorf Higher Regional Court, Decision of 30 July 2003, WuW/E DE-R 375, 377 – BASF/NEPG, para. 16 (juris).

[584] Fortune, 31 July 2020, Ranking the world's largest companies by profit in fiscal 2019/2020, at Statista https://de.statista.com/statistik/daten/studie/164673/umfrage/profitable-unternehmen---top-50-unternehmen-weltweit-nach-gewinn/ (accessed on 4 November 2021).

(385) The cash flow, which is also mentioned in the legislative intent to the Act as a suitable criterion for determining[585] financial strength in the digital sector, depicts the entire flow of financial resources moving within the company. A distinction is made between operating cash flow, cash flow from investing activities and cash flow from financing activities. Operating cash flow includes cash flow from the ordinary activities of the company and is an indicator of liquidity and internal financing capability, that is, the ability to finance itself from its own operations without funds from outside. Alphabet's operating cash flow has increased 80% from USD 36.0 billion in 2016 to USD 65.1 billion in 2020. This demonstrates Google's large and steadily increasing scope for internal funding.

(386) In addition to the ability to raise internal financing, the ability to raise external financing must also be taken into account when measuring financial strength. One indicator of this is free cash flow. It is used by both debt and equity capital providers to assess earnings power. Free cash flow is calculated as the difference between operating cash flow and capital expenditures. It indicates the funds actually available to a company to pay out the claims of creditors and equity holders. Creditors and shareholders use it to check creditworthiness or to assess the scope for redemptions, dividend payments, capital buybacks or mergers and acquisitions. Google's free cash flow has been consistently positive over the five-year period under review, increasing 66% from USD 25.8 billion in 2016 to USD 42.8 billion in 2020.[586]

(387) Latest figures show that Google's successful development continues unabated. In the current fiscal year up to and including September 30, 2021, Google was able to increase its revenues by 85% to USD 182.3 billion compared to the first nine months of the previous year, and its profit by 121% to USD 55.4 billion.[587]

(388) Finally, a meaningful indication of the financial strength of a company that can be expected in the future is the stock market value. The stock market value (also market

---

[585] Cf. the government's statement of legislative intent, Bundestag printed paper 19/23492, p. 75.

[586] Calculated from information in the 2020 Financial Statements, Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2020, p. 29. (available at https://abc.xyz/investor/static/pdf/20210203_alphabet_10K.pdf?cache=b44182d).

[587] Press Release, 26 October 2021, Alphabet Announces Third Quarter 2021 Results, https://abc.xyz/investor/static/pdf/2021Q3_alphabet_earnings_release.pdf?cache=f1ba3f6, pp. 5 and 6 (accessed 17 November 2021).

capitalization) is the arithmetical total value of the shares in circulation of a listed company. It reflects investors' expectations of a company's future success. The stock market value of Alphabet Inc., Google's parent company, was nearly two trillion USD at the beginning of November 2021. Alphabet Inc. is thus one of the top 10 most valuable companies in the world, together with Amazon, Apple, Meta and Microsoft, among others.[588]

b) Other resources

(389) Beyond Google's financial strength, its access to other resources also contributes to its paramount significance across markets. These include its user base and the Google and YouTube brands.

(390) Google has an extraordinarily strong user base worldwide and in Germany. In Germany, Google Search reaches approximately […] million users every day. Approximately […] million use Android daily via a mobile phone, approximately […] million via a tablet. YouTube reaches approximately [..] million users daily and approximately […] million monthly. Approximately […] million active users access a Google navigation and mapping service at least once a month.[589] […] million respectively use Gmail and the Google Play Store at least once a month.[590] It can be assumed that Google has an equally strong user base in most countries around the world, with the exception of China. One indication of this is the overwhelming market share that Google Search has in four of the five most populous countries in the world. Apart from China, with a share of well

---

[588] https://www.google.com/finance/quote/GOOGL:NASDAQ or analogous subpages for the other companies mentioned (accessed 16 November 2021).

[589] On the assumptions and possible inaccuracies of the best possible estimation of these user numbers see for more detail paras. 205 et seq. and on the user figures of Google's navigation and map services see Google's response of 5 July 2021 to question 8 of the RFI of 7 June 2021, Annex Q33.

[590] Google's response of 5 July 2021 to question 8 of the RFI of 7 June 2021, Annex Q33.

under 5%, in India, Indonesia and Brazil the share is over 95%, and in the U.S. the share is over 90%. In Europe, the market share is also above 90%.[591]

(391) A broad user base, the significance of which is explicitly mentioned in the legislative intent,[592] is particularly relevant in view of Google's cross-service activity. It allows Google to expand its activities because current users of existing services can be more easily targeted and recruited for extensions or for entirely new services. New products, which often tie in with existing services, can quickly gain reach as a result. The broad user base also provides Google with broad and deep data[593] about the users of its services and their behavior.[594]

(392) Google, in particular with its 'Google' brand, but also with the 'YouTube' brand, has a significant asset, the importance of which also supports the assumption of a paramount significance for competition across markets. A strong brand can serve several functions. Among other things, it serves as an orientation for the consumer within a large range of offers, differentiates one's own offer from that of the competition, offers the consumer additional information (e.g., about quality), represents an emotional anchor, creates trust and thus offers the possibility of customer loyalty.[595] Brands can thus have a far-reaching influence on the awareness and the purchasing behavior of customers.

(393) According to several market studies, the Google and YouTube brands have been among the most valuable and popular brands in the world for several years. In a ranking of the market research company YouGov,[596] Google ranks first among the best brands

---

591 Source for world's most populous countries: https://de.statista.com/statistik/daten/studie/1722/umfrage/bevoelkerungsreichste-laender-der-welt/ (accessed 3 November 2021), Source for Google search market share: https://gs.statcounter.com/search-engine-market-share/all/china (and other country endings) (accessed 3 November 2021).

592 Government draft, GWB Digitisation Act, Bundestag printed paper 19/23492, pp. 75 seqq.

593 See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

594 On the importance of access to data relevant for competition, see in detail V above.

595 Gabler Wirtschaftslexikon, "Marke", Prof. Dr. Franz-Rudolf Esch, online: https://wirtschaftslexikon.gabler.de/definition/marke-36974 (accessed 4 November 2021).

596 YouGov, The Global Best Brand Ranking by YouGov 2020, https://yougov.de/news/2020/11/19/das-global-best-brand-ranking-von-yougov-2020-nive/, (accessed 3 November 2021).

worldwide, the YouTube service finds itself in third place in this ranking. In the BrandZ ranking of the 100 most valuable brands in the world (company names only), Google was one of the ten most valuable brands in the world in 2020, with an estimated brand value of USD 323.6 billion, alongside Amazon, Apple, Microsoft and Facebook (Meta), among others.[597] Google and YouTube also find themselves in the top positions in other brand studies.[598] In many languages, a verb derived from the brand name Google is used as a synonym for searching the internet. In Germany, "googeln" has been in the dictionary since 2004.[599]

3. Use of resources

(394) Google's financial strength and its access to other resources contribute to Google's paramount significance for competition across markets. In particular, Google can use the funds at its disposal for large investments such as research and development in different (new) business areas as well as for high-priced company acquisitions. Overall, this also allows Google not only to successfully secure its achieved position in the future, but also to expand it even further, thus affecting the innovative power of competition.

(395) Investments in research and development are of particular importance in digital markets, which are characterized by innovation. For example, successful investments in research and development promote the further development of existing products and business areas to secure and expand an existing market position. If appropriate innovations result from research and development, new markets can also be opened up.

(396) Google invests extensively in research and development, as shown in the research and development spending listed in Table 4. Google's R&D spending nearly doubled from USD 13.9 billion in 2016 over a five-year period to USD 27.6 billion in 2020. This is a significant commitment of financial resources to research and development, even on a

---

597 Kantar, BrandZ 2020 [...], 30 June 2020, online: https://www.kantardeutschland.de/brandz-2020/ (accessed 3 November 2021).

598 For example, Ranking the brand, "Rankings per brand", online: https://www.rankingthebrands.com/Brand-detail.aspx?brandID=1 (accessed 3 November 2021).

599 https://www.duden.de/rechtschreibung/googeln (accessed 3 November 2021).

cross-comparison basis. According to Strategy&'s Global Innovation 1000 Study, Alphabet ranked third and second in 2017 and 2018, respectively, among the companies that invest the most money in research and development globally.[600] Google ranked first or second in the annual innovation rankings of the world's 50 most innovative companies by strategy consulting firm Boston Consulting Group (BCG) in both 2019 and 2020.[601]

(397) In addition to research and development of existing services, Google invests heavily in the development of new business fields. For example, Google has been investing large amounts in the development of its own cloud services for several years. Google Cloud realized a loss of USD 4.3 billion in 2018, a loss of USD 4.6 billion in 2019, and a loss of USD 5.6 billion in 2020. Other business fields under development that promise possibilities for profits are summarized as "Other Bets". Other Bets realized a loss of USD 3.6 billion in 2018 and a loss of USD 4.8 billion in each of 2019 and 2020.[602] Both business fields also generated losses in the first three quarters of 2021, for which figures are available so far.[603] These examples illustrate that Google has the financial resources and is using them to offset the losses of entire business fields over several years. Google uses financial resources to enter new markets and position itself in promising areas.

(398) Furthermore, Google has used its financial resources in the past to make extensive company acquisitions. Google has acquired […] companies for a purchase price of at least EUR 10 million since January 1, 2010 until mid-2021.[604] In the period from 2016

---

600 https://www.strategyand.pwc.com/gx/en/insights/innovation1000.html (accessed 29 October 2021).

601 This is the conclusion of the study "The Most Innovative Companies 2019 – The Rise of AI, Platforms, and Ecosystems", p. 16, for which BCG asked more than 2,500 top managers worldwide about their perceptions of innovation and analyzed innovation indicators of the companies. https://image-src.bcg.com/Images/BCG-Most-Innovative-Companies-2020-Jun-2020-R-4_tcm9-251007.pdf (accessed 4 November 2021).

602 Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2020, p. 40.

603 Alphabet Inc., Alphabet Announces First / Second / Third Quarter 2021 Results, p. 2 each.

604 Google's reply of 5 July 2021 to question 8 of the RFI of 7 June 2021 (only acquisitions of undertakings with acquisition of control within the meaning of the ECMR and a purchase price / consideration of more than EUR 10 million).

to 2020 alone, Google has spent a total of over EUR […] billion on company acquisitions.[605] The U.S. House of Representatives has identified a total number of over 250 company acquisitions from publicly available sources alone.[606] These include the acquisition of Android and YouTube. Acquisition activity also focused on mapping services, online advertising, robotics, smart home, artificial intelligence and cloud services.

(399) The acquisition of Android for an estimated USD 50 million in 2005 was the basis for the development of the operating system of the same name.[607] Today, this operating system is the most widely used operating system for mobile devices.[608]

(400) The video platform YouTube was acquired in 2006 for approximately USD 1.65 billion. It has become a major revenue generator for Google. In 2020, Google generated revenues of USD 19.772 billion from advertising on YouTube, over 10% of its total revenue.[609]

(401) In the area of map services, the companies Where 2 Technologies, Keyhole and ZipDash, which were acquired in 2004, formed the basis for the map service Google Maps, which was first offered in 2005.[610] Where 2 Technologies was an Australian start-up that developed web-based dynamic maps. Keyhole was an American company that used satellite imagery and aerial photography for digital maps. ZipDash was a provider of real-time traffic information via GPS. In 2013, Google acquired Waze. Waze users submit real-time traffic data, including traffic incidents in particular.[611]

---

605 Cf. Google's reply to question 52 of the RFI of 23 July 2021.

606 U.S. House of Representatives, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Majority Staff Report and Recommendations, 2020, pp. 431 seqq. (Appendix).

607 U.S. House of Representatives, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Majority Staff Report and Recommendations, 2020, p. 212.

608 Cf. VI.

609 Alphabet Inc., Form 10-K For the Fiscal Year Ended 31 December 2020, p. 66.

610 U.S. House of Representatives, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Majority Staff Report and Recommendations, 2020, p. 231.

611 Cf. https://www.waze.com/de/waze (accessed 11 August 2021).

(402) Google has also acquired a number of companies in the placement of online advertising in the AdTech segment. Of the […] companies acquired since 2010 for a purchase price of at least EUR 10 million, […] alone are attributable to the "Ads" business segment.[612] These acquired companies include DoubleClick in particular, which Google paid around USD 3.1 billion to acquire[613] and which forms the basis for Google's Publisher Ad Server and for AdX. Both services are now part of Google's AdManager. In 2009, Google acquired AdMob, through which ads are delivered in apps. This was followed in 2010 by the acquisition of InviteMedia, which was integrated into Google's demand side platform DV 360. In 2011, Google acquired AdMeld, a supply side platform that was integrated with AdX. Acquired in 2014, Adometry has since become part of Google Analytics.[614]

(403) In addition, Google has repeatedly acquired companies at short intervals that can be assigned to a product or business field that is being newly established. In 2013, for example, Google acquired seven companies in the field of robotics within six months.[615] In 2014, it made three acquisitions in nine months that were used to build Google Nest for the smart home space, including the acquisition of Nest Labs for about USD 3.2 billion.[616] Since 2009, Alphabet has acquired several companies involved in artificial intelligence.[617] Most notably in 2004 was the acquisition of DeepMind Technologies, a startup specializing in artificial intelligence programming. DeepMind developed WaveNet,[618] a technology through which machine applications communicate using human languages. It is used in Google Assistant, a software for voice control of services, among other applications.[619] Acquisition deals are currently underway that are related to

---

612 Google's response of 5 July 2021 to question 8 of the RFI of 7 June 2021, Annex Q8.

613 U.S. House of Representatives, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Majority Staff Report and Recommendations, 2020, pp. 208 seq.

614 Cf. CMA, Online platforms and digital advertising, Market study final report, 1 July 2020, Box 5.1.

615 https://www.nytimes.com/2013/12/04/technology/google-puts-money-on-robots-using-the-man-behind-android.html (accessed 10 August 2021).

616 https://www.forbes.com/sites/aarontilley/2014/10/24/googles-nest-acquires-smart-home-hub-maker-revolv/ (accessed 2 November 2021).

617 Google has allocated a total of 5 of the companies acquired since 2010 to AI, see Google's response of 5 July 2021 to question 8 of the RFI of 7 June 2021, Annex Q8.

618 https://deepmind.com/research/case-studies/wavenet (accessed 11 August 2021).

619 https://assistant.google.com/intl/de_de/ (accessed 11 August 2021).

Google's goal of advancing the development of artificial intelligence and making it accessible to everyone, according to Google's own account.[620]

(404) Since 2010, Google has acquired […] cloud services providers.[621] Google paid USD 2.6 billion to acquire Looker, an operator of an enterprise data analytics platform.[622] This is in line with Google's strategy to expand in this area.[623]

(405) In addition to company acquisitions that directly serve to build up new products and business fields or to complement existing products, Alphabet also acquires companies that supply resources, e.g., in the form of patents. In particular, Motorola's patent portfolio played a significant role in its acquisition of Motorola in 2011 for USD 12.5 billion, which was its most expensive corporate purchase to date.[624] With its 2017 acquisition of parts of HTC's smartphone segment, Alphabet has acquired licenses for mobile hardware patents.[625]

IX. Overall assessment

(406) An overall assessment of all the relevant facts in Google's case establishes a paramount position of economic power across markets for Google, opening up a scope of action across markets that is not sufficiently controlled by competition. Google offers a broad

620 Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2020, p. 5 (accessed 3 March 2021).

621 Google's response of 5 July 2021 to question 8 of the RFI of 7 June 2021, Annex Q8.

622 Cf. Alphabet, press release, 6 June 2019, Google to Acquire Looker, https://abc.xyz/investor/news/releases/2019/0606/ (accessed 11 August 2021).

623 Alphabet Inc., Form 10-K for the Fiscal Year Ended 31 December 2020, p. 49.

624 FAZ, online: https://www.faz.net/aktuell/wirtschaft/unternehmen/google-kauft-motorola-handysparte-ein-handyhersteller-und-17-000-patente-11115160.html (accessed 5 March 2021) and Larry Page's blogpost of 15 August 2011, https://googleblog.blogspot.com/2011/08/supercharging-android-google-to-acquire.html (accessed 11 August 2021).

625 Heise, online: https://www.heise.de/newsticker/meldung/Google-Deal-mit-HTC-Patente-und-Smartphone-Experten-fuer-1-1-Milliarden-US-Dollar-3836861.html (accessed 2 November 2021).

variety of services[626] and advertising services[627] with a strong market position and wide reach. In offering and expanding these services, Google has the ability to profit from advantages of economies of scope, to set the rules vis-à-vis other undertakings across markets, to further consolidate, expand its position or otherwise use its position to its own advantage without sufficient competitive control.

(407) Google's significance for competition across markets is paramount, taking into account all the relevant circumstances in this case. In quantitative terms, this is already reflected in particular in the high numbers of users and advertising customers in Google's services and advertising services and in their considerable reach,[628] as illustrated by the following individual examples:

- Google Search is used by approximately […] million DAU in Germany.[629]
- The Android operating system is used on […] million devices in Germany.[630]
- The Chrome browser has about […] million DAU and about […] million MAU in Germany.[631]
- YouTube has about […] million DAU and about […] million MAU in Germany.[632] The average daily active user time or playback time per user is about […].[633]
- The Google Play Store has about […] million DAU and about […] million MAU in Germany.[634]

---

626 Cf. A. I. 2. a).

627 Cf. A. I. 2. b), B. IV. 2. b.

628 Cf. V. 3. a) aa) (1), B. IV. 2. b) cc).

629 Cf. V. 3. a) aa) (1) and on the assumptions and possible inaccuracies of the best possible estimation of these user numbers, paras. 205 seqq.

630 Cf. IV. 2. a) bb) and on the assumptions and possible inaccuracies of the best possible estimation of these user numbers. paras. 205 seqq.

631 Cf. V. 3. a) aa) (1) and on the assumptions and possible inaccuracies of the best possible estimation of these user numbers. paras. 205 seqq.

632 Cf. V. 3. a) aa) (1) and on the assumptions and possible inaccuracies in the best possible approximation of these user numbers. paras. 205 seqq.

633 Cf. V. 3. a) aa) (1).

634 Cf. VII. 2. c) bb).

- In particular, on Google Search, Google generates revenues of approximately EUR […] billion worldwide and approximately EUR […] billion in Germany from search-based advertising.[635]
- Furthermore, Google has a display network consisting of a group of over two million websites, videos and apps. Websites in the Google Display Network reach over 90% of internet users worldwide.[636]

(408) Google's high cash flow also contributes to its paramount significance for competition across markets, which is reflected in its enormous stock market value[637].

(409) Google's paramount significance for competition across markets is further supported by the variety of interconnected and complementary services, which are partly dominant (at least Google Search) and partly have at least a strong market position (in particular YouTube, Chrome, Android, Play Store) which also cover a considerable number of markets within the meaning of Section 18(3a) GWB. The fact that Google's dominant position in the search market also relates to a core area of its business activity notably contributes to the existence of Google's paramount significance across markets. A dominant position in this area shows the potential of the company and the potential threat to competition, particularly in view of the specific protective purpose of Section 19a GWB. In addition, Google can assume a position to set the rules across markets vis-à-vis its (potential) users and advertising customers at different points in its ecosystem, often in combination with its advertising services. Through its advertising services, Google not only markets its own wide-reach advertising space, in particular in Google Search and YouTube, on a largely exclusive basis, but also mediates third-party advertising space.[638] In addition, Google is represented in the area of open display advertising with a large number of different advertising services with a strong market position and wide reach on all levels of the supply chain.[639]

---

635 Cf. III. 2. c) aa).

636 Cf. V. 3. a) aa) (2).

637 Cf. VII. 2.a).

638 Cf. IV. 2. b).

639 Cf. IV. 2. b) bb).

(410) With this offering of a variety of different services and advertising services across markets, as well as their improvement and extension, Google can benefit from economies of scope. First, Google has the ability to cross-promote its services, to direct users using one service to its other services, and to enter new markets by offering service extensions and additions across markets or market levels. This possibility is favored by the fact that Google services that are particularly relevant from a competitive point of view often complement each other in terms of their functions from the user's perspective. For instance, Google not only offers Android, a very widely used mobile operating system, but also, as central Android apps in particular a search engine (Google Search), a browser (Chrome), a map and navigation service (Maps), a video platform (YouTube) and an email service (Gmail).[640] The reach of these services is secured and extended through agreements on the preinstallation and default setting of Google apps between Google and OEMs. In addition, Google provides the user with a cross-service sign-in option via the Google account, whereby in some cases individual Google services may not be used without signing in, or may not be used without limitations.[641]

(411) In addition to the economies of scope on the user side associated with the broad product portfolio, which may result in particular from the interconnected services with regard to content through functional supplements and extensions, cross-service personalization options and an increase in comfort, there are also considerable economies of scope for Google on the corporate side. On the basis of the variety of its services and advertising services, many of which have a strong market position and wide reach, Google has broad and deep access to data[642], especially user data.[643] The use of different identifiers[644] enables Google to allocate and combine the data generated in the respective services and advertising services to unique users, not only across services but to some extent also across devices. Taking into account its portfolio of services and advertising services and Google's possibilities to combine data across sources, its broad and deep

---

[640] Cf. IV. 2. a) bb).

[641] Cf. IV. 2. a) dd).

[642] See on the exclusive assessment of the potential to process data regardless of internal or legal requirements as well as contractual agreements in detail, paras. 161 seqq.

[643] Cf. V. 3. a).

[644] Cf. V. 2. c) bb).

access to data overall and in its specific form is of particular competitive relevance, as it gives Google a significant position across markets.

(412) Google's potential and corresponding competitive advantages resulting from this access to data are further strengthened by the fact that the data and other resources available to Google, such as its brand, can be used as "shareable input" across markets and reused as required. This further facilitates the operation, improvement, expansion and development of new services and advertising services through a value-adding combination of resources.

(413) Google's access to data also increases Google's ability to target users as recipients of advertising and at the same time improves its advertising-side monetization potential. In its AdTech stack, Google can benefit not only from data-related advantages in relation to third-party providers of advertising services, but also from other advantages due to the interoperability of its own services.[645] This is of particular importance to Google insofar as the advertising services serve as an excellent monetization of its largely advertising-supported business model, which in turn allows it, among other things, to cross-subsidize new business segments that are in development.[646]

(414) At different points in its "digital ecosystem", Google has significant influence on the access of third parties to its users and advertising customers (e.g., via Google Search, YouTube, Android, the Play Store or its advertising services). To that extent, it is possible to speak of an "infrastructural character" of these services and advertising services, because a variety of other services can largely only be provided via them or third parties rely on these services for the provision of their services. The specific significance of Google's service and advertising service for the business activities of third parties also has an effect across (advertising) services and, not least for this reason, across markets, because of the links between the services and advertising services and the aforementioned economies of scope. Thereby, Google partly "regulates" markets or market processes that arise or take place in the ecosystem by setting the basic conditions. Due to this role, it is often easier for Google as the operator of the ecosystem to expand into such a new market compared to (potential) competitors, because the company may be

---

[645] Cf. IV. 3.

[646] Cf. VIII. 3.

able to take its own needs, strengths and weaknesses into account when shaping the basic conditions.

(415) In addition, Google may influence user choices in favor of its services at different points in its ecosystem, for example through the possibility of preinstalling or setting its own services as default in other services of its own or in third-party services, and to secure its sales as well as to de facto limit access possibilities of comparable third party services/apps to users satisfied via Google services/apps.[647] In the case of Android in particular, Google has the possibility via agreements on preinstallation and default settings with original equipment manufacturers to preinstall and set as default on Google Android end devices not only Google services that are particularly important from a competitive point of view, such as Google Search, Chrome, YouTube, Maps and the Play Store, but also (still) less widespread and new Google services from the outset and with wide reach.[648] Furthermore, Google has access to considerable financial resources to, for example, have Google Search set as default in third-party browsers or third-party mobile operating systems.[649]

(416) With regard to Google's search engine in particular, it must also be taken into account in the context of the overall assessment of all relevant circumstances that its significance goes beyond merely economic aspects and extends into social life as a whole. This is because the internet allows almost anyone to provide information of almost any kind to billions of people and at the same time to access an almost unmanageable amount of content which other people have provided in this way. However, these possibilities only become practically usable through search engines. In this regard the findings of the German Federal Constitutional Court (BVerfG) that in all areas of life fundamental services for the general public are increasingly provided on the basis of extensive personal data collections and data processing measures by private, often powerful companies in the market, which have a significant influence on the formation of public opinion, the allocation and denial of chances, participation in social life or even elementary activities

---

647 Cf. IV. 2 and VII. 2. c) aa).

648 Cf. VII. 2. c) aa).

649 Cf. VI. 2. b) bb) (6).

of daily life, applies particularly to the operation of a search engine.[650] As by far the largest and most important search engine in the world, Google has a key role in this sense for social life in Germany and across the world. This was summarized early on in the following phrase, which is still valid today: "*In the world of the Web, esse est indicato in Google: to exist is to be indexed on Google.*"[651] Taking into account the additional issue of social participation in the context of the assessment under competition law is, for one thing, in line with the case law relating to Section 19 GWB handed down by the German Federal Court of Justice (BGH).[652] For another, such issues are also referenced in the legislative materials on Section 19a GWB.[653] They may therefore also be used for the overall assessment to determine a paramount market position within the meaning of Section 19a(1) GWB.

(417) Overall, the portfolio and cross-market coverage of Google's often interconnected services and advertising services with high user and advertising customer reach, Google's position across markets to set rules on various platforms and other markets, its broad and deep access to data and other resources, and its high stock market value reflecting this as a whole, thus establish Google's status as addressee of Section 19a(1) GWB.

X. Time limit

(418) The validity of the decision is to be limited to five years after it becomes final (Section 19a(1) sentence 3 GWB).

---

650 Federal Constitutional Court, Decision of 6 November 2019 – 1 BvR 16/13, NJW 2020, 300 para. 85 – *Right to be forgotten I*.

651 *Lawrence M. Hinman*, Esse est indicato in Google: Ethical and political issues in search engines, International Review of Information Ethics, Vol. 3 (2005), p. 19 (21), formulated in reference to the principle "esse est percipi" ("to be is to be perceived") formulated by the British philosopher and theologian *George Berkeley in* A Treatise on the Principles of Human Knowledge, 1710.

652 Federal Court of Justice, Decision of 23 June 2020 – KVR 69/19, WuW 2020, 525 para. 124 – *Facebook*.

653 Bundestag printed paper 19/25868, p. 7.

XI. Discretion

(419) The determination of the status as addressee of Section 19a(1) GWB vis-à-vis Google is made in the exercise of due discretion. It is proportionate and free of discretionary errors.

(420) Section 19a GWB aims to achieve a lasting, positive change in the competitive situation on the affected markets.[654] The determination of Google's status as addressee of the provision is a basic condition to be able to issue a decision pursuant to Section 19a(2) GWB. Such a decision will then address, if necessary, any concretely existing, corresponding competitive problems. In the present case there are indications that the actions and potential threats to competition described in Section 19a(2) GWB may be relevant for Google. Accordingly, the Bundeskartellamt has already initiated two proceedings against Google based on Section 19a(2) GWB (Ref.: B7-70/21; V-43/20). Against this background, the declaratory decision under Section 19a(1) GWB is suitable in the present case as a prerequisite for an intervention under Section 19a(2) GWB to achieve the purpose of the provision.

(421) Overall, Section 19a GWB allows the Bundeskartellamt to take more effective and targeted action against conduct which realizes the above-mentioned potential threats to competition. A milder, equally suitable means of intervention is not apparent in the present case. With regard to some of Google's conduct that can be captured under Section 19a(2) GWB, it may also be possible to issue decisions under Sections 19, 20 GWB or Articles 101, 102 TFEU with a similar regulatory content. However, an intervention under the latter provisions is not a milder means than an intervention under Section 19a(2) GWB. A fortiori, the present decision is clearly milder than a possible decision under the latter provisions as it does not initially impose any requirements regarding Google's conduct, but is limited to a mere determination of the status as addressee of Section 19a(1) GWB.

(422) Issuing the declaratory decision against Google is also proportionate, i.e., its intended purpose is not disproportionate to the gravity of the interference entailed by the decision. It is true that the declaratory decision constitutes an onerous administrative act for

---

654 Government draft 10th amendment of the GWB, Bundestag printed paper 19/23492, p. 75.

Google. However, since it does not itself contain a legal consequence, the direct interference is minor. In view of the lasting, positive change in the competitive situation on the affected markets that is ultimately intended, the intervention is also appropriate in the present case.

(423) In addition, pursuant to Section 19a(1) sentence 3 GWB, the validity of the decision is limited to five years from the date on which it becomes final. At present, it cannot be assumed that the competitive conditions described above will change significantly to the disadvantage of Google's power during this period without intervention by the competition authorities. Google has continuously expanded its portfolio of services and advertising services since it started its business with Google Search in 1998.[655] Google's growth, as measured by user numbers in key services[656] and various economic metrics such as revenue, profit and cash flow, has continued unabated since 2016.[657] The Corona pandemic has not impeded this growth; on the contrary, it has furthered it. Events that could significantly impact Google's operations over the next five years are not currently apparent. Should the competitive situation change in the long term, there is also the possibility of lifting or revoking the decision.

(424) Finding Google to be an addressee of Section 19a(1) GWB also corresponds to a dutiful exercise of the granted discretion. Google's economic power across markets as described above is the reason for the particular threats to competition in digital markets which Section 19a GWB is intended to address. The number of digital, often connected services, some of which have very high numbers of users and frequencies of use, its considerable activity on platform and other markets, which gives it a position to set rules vis-à-vis other companies, the breadth and depth of its access to data and other relevant resources, the importance of which is also reflected in its high stock market value, are matched in their entirety at best by only a few other companies.

(425) The urgency of a determination pursuant to Section 19a(1) GWB against Google in particular is also demonstrated by the proceedings which the Bundeskartellamt has already

---

655 Meanwhile, Google offers at least 68 services (see A. I. 2. a)) and, in addition, a large number of further advertising services (See IV. 2. b)).

656 Google's response to question 33 of the RFI of 23 July 2021, Excel spreadsheet F. 33.

657 Cf. VIII. 2. a).

initiated against Google on the basis of concrete suspicions that certain conducts fulfil the requirements of Section 19a(2) GWB. The Bundeskartellamt has received further complaints. In addition, the Bundeskartellamt is aware of proceedings by other competition authorities which relate to conduct by Google which may possibly exist in a comparable way in Germany and which may also be addressable under Section 19a(2) GWB. These suspicions and indications illustrate the particular threat of competition problems caused by Google's paramount significance for competition across markets.

(426) In the exercise of its discretion, the Decision Division addresses the decision to Alphabet Inc. and Google Germany GmbH. Alphabet Inc. is the parent company of the Google group and thus the appropriate addressee of the determination of the status as an addressee of Section 19a(1) GWB, which encompasses the entire group. In addition, it can exert influence on all subsidiaries and work towards compliance with the obligations associated with the status as addressee of the provision. Since Section 19a GWB is a national provision that has direct effects for the Alphabet group in Germany, the German subsidiary is particularly affected by the decision, so that it is appropriate to also address the decision to the German subsidiary.

C. Fees

(427) The decision on fees is based on Section 62(1) sentence 2 no. 2 GWB. Pursuant to Section 62(2) sentence 1 GWB, the amount of the fee is determined according to the personnel and material expenses of the Decision Division and the economic significance of the proceedings. Pursuant to Section 62(2) sentence 2 no. 2 GWB, the fee rates may not exceed EUR 25,000 in the case of Section 19a GWB. If the personnel or material expenses of the competition authority are exceptionally high in an individual case, taking into account the economic importance of the action subject to the fee, the fee may be doubled pursuant to Section 62(2) sentence 3 GWB. Pursuant to Section 62(2) sentence 4 GWB, the calculated fee may be reduced to one tenth for reasons of equity.

(428) Google's paramount significance for competition across markets results in particular from the cross-market coverage established by the variety of digital services and advertising services, some of which generate very high revenues, Google's position across markets to set rules on various platform and other markets as well as the parties' broad and deep access to data and other resources. In view of these circumstances and the fact that the activity on markets within the meaning of Section 18(3a) GWB forms the core area of Google's considerable economic activity, the economic importance of the proceedings must be qualified as considerably above average. Due to extensive market investigations by surveying Google, competitors and other market participants, the personnel and material expenses were correspondingly high. However, Google's acceptance of the depth of the reasoning in the hearing letter as sufficient also resulted in a certain reduction in the staff and material costs of the investigations; this circumstance was taken into account in the setting of the fee, as was the declaratory nature of the decision.

(429) The parties against whom the decision of the competition authority has been issued are liable for the fee pursuant to Section 62(6) sentence 1 no. 2 alt. 2 GWB in conjunction with Section 62(1) sentence 2 no. 2 GWB. Pursuant to Section 62(6) sentence 3 GWB, they are jointly and severally liable.

(430) The fee is due upon service of this decision and must be paid within one month of such service into the account of the Federal Cash Office

Bundeskasse – Trier office

Deutsche Bundesbank, Saarbrücken branch

IBAN: DE81 5900 0000 0059 0010 20

BIC: MARKDEF 1590

Please indicate the following cash reference number as the purpose of payment:

810600443711

(431) Please note that your payment cannot be processed without the cash reference number.

(432) If the fee has not been paid by the expiry of one month after the date of service, a late payment surcharge of one percent of the amount in arrears will be levied for each month of arrears or part thereof. Bank charges are generally incurred for transfers from abroad. In such cases it must be ensured that the Bundeskartellamt's account is credited with the full fee.

D. Glossary

(433) In the following, some frequently used terms are defined according to their use in the decision.

App publisher:	Legal or natural person that distributes an app under their name.
Creator:	Provider who posts video content on YouTube.
DAU (Daily Active User):	User who has accessed a service or advertising service at least once via a mobile or stationary device in the 24 hours prior to the time of measurement.
Display advertising:	Advertising on websites or apps outside of search engines and social media that is displayed in various formats (e.g., as banners).
Unique user:	User who is identified or identifiable within the meaning of Article 4 no. 1 GDPR (Regulation EU/2016/679).
Google:	Alphabet Inc. including all its affiliated companies pursuant to Section 36(2) GWB.
Google services:	All services offered by Google excluding Google advertising services.
Google advertising services:	All services offered by Google to advertising customers except the Google account.
MAU (Monthly Active User):	User who has accessed a service or advertising service at least once via a mobile or stationary device in the 30 days prior to the time of measurement.
User:	(as distinct from advertising customers:) Private or commercial, inactive or active, unique or anonymous user of a Google service.

Publisher:	Provider of advertising space.
Query:	Any valid query in a search engine without spam.
Search-based advertising:	Advertising displayed on the search results page.
Search user:	Person who uses the search function in a search engine.
Default setting:	Setting on the basis of which a certain service (e.g., a default search engine) starts automatically when a certain function is used (e.g., entering a query in the address line of a browser).
Preinstallation:	Installation of apps on mobile devices before or automatically during the initial setup of a device, which are available immediately (“out of the box”).
Advertising customers	Advertisers and providers of advertising space (“Publishers”).
Advertisers:	Customers of advertising space (“Advertisers”).

Information on the right to appeal

The decision is eligible for appeal. The appeal must be filed with the Bundeskartellamt, Bonn, within a period of one month beginning with the formal service of the decision. However, it is sufficient if it is received by the court of appeal, the German Federal Court of Justice, Karlsruhe, within this period.

The appeal must be substantiated. The statement of the grounds of appeal must be filed with the Bundeskartellamt or the court of appeal. The time limit for filing the statement of grounds of appeal is two months. It commences with the formal service of the contested decision and may be extended on application by the chairperson of the court of appeal. The statement of the grounds of appeal must contain a statement of the extent to which the decision is contested and its amendment or revocation is requested, and state the facts and evidence – including any new facts and evidence – on which the appeal is based.

The parties must be represented by a lawyer for the filing and substantiation of the appeal.

Dr. Krauß Dr. Locher Dr. Mehler

You are informed that the full text of the decision will be published on the internet. You are therefore requested to inform the Decision Division in writing, within seven days of formal service of this decision, whether the decision contains business secrets which must be deleted before publication. Please give reasons why any deletions you may wish to make are business secrets. If the competent Decision Division does not receive any message from you within seven days, the Bundeskartellamt will assume that this decision does not contain any business secrets and will publish it.