Autorità Garante
della Concorrenza e del Mercato

THE COMPETITION AND MARKET AUTHORITY

AT ITS MEETING of 27 April 2021;

Hearing the Rapporteur Professor Michele Ainis;

HAVING REGARD TO Article 102 of the Treaty on the Functioning of the European Union (TFEU);

HAVING REGARD TO Council Regulation (EC) No 1/2003 of 16 December 2002;

HAVING REGARD to Law No 287 of 10 October 1990;

HAVING REGARD TO Presidential Decree No 217 of 30 April 1998;

HAVING REGARD to its resolution adopted on 8 May 2019 by which an investigation pursuant to Article 14 of Law No 287/90 was opened against the companies Alphabet Inc., Google LLC and Google Italy S.r.l. (hereinafter, jointly Google), in order to ascertain the existence of possible violations of Article 102 TFEU;

HAVING REGARD to its resolution adopted on 29 April 2020 by which the deadline for closing the proceedings was extended to 30 May 2021;

HAVING REGARD to its resolution adopted on 1 July 2020 by which the deadline for the closure of the proceedings was brought forward to 31 March 2021;

HAVING REGARD to its resolution adopted on 23 February 2021 by which the deadline for closing the proceedings was extended to 30 April 2021;

HAVING REGARD TO the Notice of Investigation Findings, sent to the Parties on 11 February 2021;

HAVING REGARD TO the brief filed by Alphabet Inc., Google LLC and Google Italy S.r.l. on 24 March 2021;

Hearing at the final hearing on 29 March 2021, the representatives of Alphabet Inc., Google LLC, Google Italy S.r.l. and Enel X Italia S.r.l., who had requested it;

HAVING REGARD TO the procedural documents and the documentation acquired in the course of the investigation;

WHEREAS

I. THE PARTIES

1. Google LLC is a multinational company offering a wide range of *Internet-related* products and services including *online* advertising technologies, search tools, *cloud computing*, *software* and *hardware*. Google LLC is wholly owned and controlled by Alphabet Inc. (Alphabet) and represents by far its main *asset, given* that the turnover deriving from activities other than those attributable to Google LLC (collectively referred to as '*other bets*') is absolutely marginal in relation to Alphabet's consolidated turnover1. Google LLC is present in Italy through its subsidiary Google Italy S.r.l.. (Google Italy). In the following, the term Google will refer to all the companies mentioned above.

2. Google LLC is the *holding company* responsible for all the main products (with the exclusion of the activities indicated as '*other bets*') and, in particular, as far as it is concerned, Android, Android Auto, Google Play and Google Maps. Android is the operating system for *smartphones* and *tablets*, around which Google LLC has built an ecosystem that includes (inter alia) the Google Play *app store* and the Android Auto platform, which allows the display on the car screen and the use through the car controls (steering wheel, *display*, knobs) and voice commands (through the virtual assistant Google Assistant) of certain *apps,* in addition to call and message functions. In addition, Google has developed, and continues to develop, Google Maps, which

[1] More than 99% of Alphabet's consolidated revenue comes from Google (see Alphabet's Annual Reports for 2019 and 2020, available on the company's *website*).

makes available not only static information on places (maps) and indications on how to reach destinations of interest and/or points of interest (*then nt of i nterest*, such as commercial establishments and utilities present in a given area), but also information and functionalities relevant to the use of the services offered in the aforementioned destinations and/or points of interest.

3. Alphabet is a group with significant financial strength as evidenced by the level and increasing trend of turnover and profit2. In 2017, Alphabet achieved a consolidated turnover of $110.9 billion (approximately €98.3 billion) and a profit of $12.7 billion (approximately €11.2 billion)[3]. In 2018, consolidated sales rose to $136.8 billion (approximately €116 billion) and profit to $30.7 billion (approximately €26.1 billion)[4]. In 2019, consolidated sales rose further to $161.9 billion (approximately €144.6 billion) and profit grew to $34.3 billion (approximately €30.7 billion)[5]. In 2020, consolidated turnover reached $182.6 billion (approximately €160 billion) and profit $40.3 billion (approximately €35.3 billion)[6].

4. The Enel Group (hereinafter also referred to as Enel), headed by Enel S.p.A., is active worldwide mainly in the electricity sector. Enel S.p.A., is active worldwide mainly in the electricity sector. Enel is active in electric mobility through its subsidiaries Enel X Italia S.r.l. (Enel X Italia), which operates as a provider of electric mobility services to end customers, known as *Mobility Service Provi der* (MSP), and Enel X Mobility S.r.l., which operates as a manager/operator of charging points, known as Charging *Point Operator* (CP O).

5. Enel X Italia has developed the JuicePass *app* (formerly called Enel X Recharge), which offers several functionalities related to the charging of electric vehicles, *Battery Electric Vehicle* (BEV) and *Plug-in Hybrid Electric Vehicle* (PHEV). The JuicePass *app* has been available since May 2018 on Google's *app store* (Google Play). The *app in* question is not yet available on Android Auto.

[2] See Alphabet's 2019 Annual Report (available on the company's *website*).
[3] In 2017, the average dollar/euro exchange rate was 0.8840.
[4] In 2018, the average dollar/euro exchange rate was 0.8476.
[5] In 2019, the average dollar/euro exchange rate was 0.8934.
[6] In 2020, the average dollar/euro exchange rate was 0.8768.

II. PRELIMINARY INVESTIGATION

6. The investigation proceedings were initiated on 8 May 2019 against Alphabet, Google LLC and Google Italy, following the receipt of a report by Enel X Italia, received on 12 February 2019 and subsequently supplemented, most recently on 24 April 20197. In substance, Enel X Italy complained that Google did not allow the publication of a version of the JuiceP ass *app* (formerly Enel X Recharge) compatible with Android Auto.

7. The measure initiating the investigation was notified to Enel and Google Italy on 16 May 2019. On the same date, inspections were carried out at the Milan and Rome offices of Google Italy.

8. The initiating measure was notified to Alphabet and Google LLC on 27 September 2019, for both companies at Google's head office8. Previously, the notification at the registered office of Alphabet and Google LLC, which can be found in the public information9 , had been unsuccessful.

9. The notices of election of domicile in Italy on behalf of Google LLC and Alphabet were sent on 31 October 2019 respectively
and 15 November 201910.

10. On 17 July 2019, a request was received from Google Italy to extend the deadline for submitting commitments pursuant to Article 14-ter of Law No. 287/9011, a deadline that would have expired on 16 August 2019. This request was based, inter alia, on the need to carry out in-depth studies that would have involved various corporate functions of the group to which it belongs. The acceptance of the request and the setting of a new deadline for the submission of commitments (31 October 2019) were communicated to Google Italy on 2 August 201912.

11. On 25 October 2019, Google Italy received a second request for an extension of the deadline for submitting commitments13.

[7] See documents DC1, DC3, DC4, DC5, DC6 and DC7.
[8] See doc. no. 40. Google's headquarters are located at 1600 Amphitheatre Parkway, Mountain View, CA 94043. The notification was made with the cooperation of the Consulate General of Italy in San Francisco.
[9] From Alphabet's website (abc.xyz), and in particular from Alphabet's Certificate of Incorporation available there, it appears that the registered office of Alphabet and Google LLC is located at 2711 Centerville Road, Suite 400, City of Wilmington, County of New Castle, Delaware 19808.
On 6 June 2019, the Consulate General of Italy in Philadelphia had been requested to cooperate in the notification (see documents no. 28 and 29), which informed the non-delivery of the documents on 22 July 2019 (see document no. 30).
[10] See documents 51 and 55. Moreover, the special powers of attorney show that the registered office of Alphabet and Google LLC is different from that which can be inferred from the public information, being: 251 Little Falls Drive, Wilmington, DE 19808 (United States).
[11] See doc. no. 20.
[12] See doc. no. 30.
[13] See doc. no. 48.

The acceptance of this application was communicated to Google Italy on 30 October 201914 ; the deadline for submission was set at 30 November 2019.

12. On 29 November 2019, the final version of the form for the submission of commitments by Google [15] was received. This version was preceded by two drafts submitted on 24 October 201916 and 12 November 201917.

13. On 7 February 2020, Alphabet, Google LLC and Google Italy were notified of the decision to reject the commitments submitted pursuant to Article 14-ter of Law No. 287/9018. The decision is based on the interest in proceeding with the investigation of the infringement alleged in the initiation.

14. On 14 February 2020, Google submitted a request to set a deadline "*for the submission of a version of the Undertakings' Proposal supplemented with the necessary ancillary amendments in order to take into account the comments made by your Honourable Authority on the basis of the complainant's position* "[19] . The request was rejected because the comments contained therein were considered "*irrelevant to what has already been decided*"; the relevant decision was communicated to Google on 28 February 202020.

15. On 20 February 2020, Enel X Italia's petition for precautionary measures pursuant to Article 14-bis of Law no. 287/9021 was received, supplemented on 17 April 202022. The application was rejected and the relevant decision communicated to Enel X Italia on 7 May 202023.

16. In the course of the proceedings, the parties exercised their right of access to the file on several occasions24. Google Italy also exercised its right to be heard.

[14] See doc. no. 50.
[15] See doc. no. 61.
[16] See doc. no. 46.
[17] See doc. no. 52.
[18] See documents nos. 69, 70 and 71.
[19] See doc. no. 72.
[20] See doc. no. 74.
[21] See doc. no. 73.
[22] See doc. no. 81.
[23] See doc. no. 82. The Authority noted, in particular, that Google did not appear to be '*about to offer users of its mobility services additional functions to those already available*'.
[24] Google carried out access to the file on 14 June 2019 (doc. no. 8), 24 October 2019 (informal access, doc. no. 47), 13 January 2020 (informal access, doc. no. 67), 27 May 2020 (doc. no. 89), 5 August 2020 (doc. no. 136), 9 October 2020 (doc. no. 165) and 28 December 2020 (doc. no. 174).
Enel X Italia accessed the files on 1 July 2019 (document No 15), 31 July 2019 (document No 27), 8 August 2019 (informal access, document No 35), 12 September 2019 (document No 38), 21 November 2019 (document No 57), 27 November 2019 (informal access, document No 59), 2 December 2019 (informal

access, document No 62), 23 July 2020 (document No 127), 22 October 2020 (document No 168), and 25 March 2021 (document No 27).), 22 October 2020 (Doc No 168) and 25 March 2021.

hearing25 and submitted a statement of defence26. In the course of the proceedings, Enel X Italia submitted information relating to the investigation27.

17. Enel X Italia and Google were the recipients of several requests for information28 and were heard at hearings29.

18. Requests for information were also sent to third parties, and in particular to the developer and licensee of an *app* aggregating radio stations (Radioplayer)[30] and to the automotive groups producing four of the main electric models sold in Italy (Renault Zoe, Smart Fortwo, Volkswagen Up and Peugeot 208)[31] , as well as to FCA, which has a historical link with the Italian market and has recently launched electric models32. The Renault group (Renault and Dacia brands), the Mercedes-Benz group (Mercedes and Smart brands), the Volkswagen group (Volkswagen, Audi, Skoda and Seat brands), the PSA group (Peugeot, Citroen, Opel and DS brands) and the FCA group (FIAT, Jeep, Dodge, Lancia, Chrysler, Alfa Romeo and Maserati brands) account for around 70% of the total number of vehicles sold in Italy.

[25] The request to be heard was sent on 24 June 2019 (doc. no. 8). The relevant hearing took place on 16 July 2019 (doc. no. 23).

[26] Google Italy's statement of defence was received on 13 August 2019 (doc. no. 36).

[27] See doc. no. 49 (Enel X Italia's communication of 30 October 2019), doc. no. 169 (Enel X Italia's update note of 12 November 2020), doc. no. 173 (Enel X Italia's update note of 18 December 2020) and doc. no. 183 (Enel X Italia's update note of 29 January 2021).

[28] Requests for information from Enel X Italia were made at the hearing on 10 October 2019 (reply of 22 October 2019, doc. no. 44), on 6 March 2020 (pending assessment of the application for precautionary measures, reply of 16 March 2020, doc. no. 80), on 4 June 2020 (reply of 19 June 2020, doc. no. 95) and on 15 September 2020 (reply of 25 September 2020, doc. no. 157).

Requests for information were made to Google during the hearing of Google Italy on 16 July 2019 (reply of 30 July 2019, document no. 25), during the hearing of Google Italy and Google LLC on 13 November 2019 (pending the assessment of the commitment proposal, reply of 27 November 2019, document no. 60) and on 4 June 2020 (replies of 17 and 24 July 2020, documents no. 122 and 130).

[29] Enel X Italia was heard at hearings on 10 October 2019 (doc. no. 43) and 17 December 2019 (doc. no. 65).

Google (in particular, representatives of Google Italy and Google LLC) was heard at a hearing on 13 November 2019 (pending the assessment of the commitment proposal, doc. no. 56).

[30] A request for information was sent to Player Editori Radio S.r.l. on 4 June 2020 (reply of 1 July 2020, doc. no. 109). This request was extended to Radioplayer Worldwide Limited on 7 July 2020 (response dated 4 December 2020, doc no. 171). Player Editori Radio S.r.l. is a company founded by the main Italian radio broadcasting groups and by trade associations; it is the licensee of the Radioplayer *app*, developed by Radioplayer Worldwide Limited, which allows its members to listen to radio stations on various platforms, including Android Auto and Apple CarPlay.

[31] See Motus-e's monthly "*Market Analyses*" (at doc. no. 194) which consistently indicate that the four models mentioned in the text represent, together with Tesla Mod. 3, the best-selling ones. As is well known, Tesla has developed a proprietary *infotainment* system that is closed to *smartphone* and *tablet mirroring* platforms, so that it was considered that, in the present case, it was not necessary to take Tesla's point of view regarding the compatibility of its *infotainment* system with Android Auto and Apple CarPlay.

[32] Requests for information were sent on 25 June 2020 and 15 September 2020 to PSA Groupe Italia (replies of 29 July 2020, doc. no. 131, and 30 September 2020, doc. no. 163), Mercedes-Benz Italia S.p.A. (answers of 20 July 2020, doc. no. 125, and 15 October 2020, doc. no. 167), FCA Italy S.p.A. (answers of 21 September 2020, doc. no. 155, and 24 September 2020, doc. no. 156), Volkswagen Group Italia S.p.A. (answers of 3 August 2020, doc. no. 133, and 25 September 2020, doc. no. 161) and Renault Italia S.p.A. (replies of 4 August 2020, doc. No 135, and 29 September 2020, doc. No 162).

registrations in Italy33.

19. The Notice of Investigative Findings (CRI) was sent to the parties on 11 February 2021 and at the same time the intra-procedural deadline for the conclusion of the evidence acquisition phase was communicated. After the sending of the CRI, Google and Enel X Italia exercised their right of access to the documents, respectively on 12 February and 15 February 2021.

20. On 12 February 2021, Google submitted a request for an extension of the time limit for submitting pleadings and, consequently, of the intra-procedural time limit for concluding the phase for obtaining evidence. Google's request was partially granted and the new intra-procedural deadline was communicated to the parties on 26 February 202134.

21. On 26 February 2021, Google received an application for access to confidential information contained in certain documents in the investigation file, according to the so-called *data room* procedure. This request was rejected by notice of 5 March 2021, as the conditions for a *data room* procedure were not *met35*.

22. Google submitted a statement of defence pursuant to Article 14(4) of Presidential Decree No 216/9836.

23. On 29 March, the final hearing before the College of Commissioners of the representatives of Google and Enel X Italia37 took place.

III. FINDINGS OF THE INVESTIGATION

III.1 FOREWORD

24. This case concerns Google's refusal to make available on the Android Auto platform the JuiceP ass *app* (formerly called Enel X Recharge), developed by Enel X Italia to provide services related to the recharging of electric cars and, in particular, those for finding recharging points,

33 According to data from the source Unione Nazionale Rappresentanti Autoveicoli Esteri - UNRAE (in doc. no. 194), in the periods January-August 2020 and January-August 2019, the automotive groups surveyed accounted for 69.11% (559,521 out of 809,655) and 71.05% (941,865 out of 1,325,704) of registrations, respectively.

34 The application was reiterated on 26 February 2021 and rejected by the Authority on the grounds that there were no new elements of assessment in addition to those already assessed (decision of 3 March 2021, communicated on 5 March 2021).

35 In fact, the information referred to in the application was not the subject of processing and/or evaluation and, indeed, was not even reported in the IRC, with the exception of some specific data that were made accessible using ranges of minimum and maximum values. See the Commission's guidelines **on the** *data room* procedure ("*Best Practices on the disclosure ofinformation in data rooms in proceedings under Articles 101 and 102 TFEU and under the EU Merger Regulation*").

36 See Google's final submission of 24 March 2021.

37 See minutes of the final hearing of 29 March 2021.

navigation, booking of the charging session, management of the charging session (start, monitoring, end) and payment. In fact, Google defines the IT tools that allow *app* developers to create *apps* compatible with Android Auto and, in response to Enel X Italia's request, has not provided the appropriate IT solutions, thereby unjustifiably hindering and delaying the availability of Enel X Italia's *app* on Android Auto.

25. Android Auto is an extension of the Android operating system that serves to create an environment in which the functionalities of smart mobile devices (*smartphones* and *tablets*) and especially - what is of interest here - of certain *apps* are simplified and modified in order to make them suitable for use when the user is driving via the car's *infotainment* units, starting from the *display*. To this end, safety requirements and the limitation of distraction must be guaranteed, which can happen either because the *apps* are developed according to predefined models (*templates*) or because the characteristics of the *apps* are checked ad *hoc* (*custom apps*) or because the *apps* can only be used via voice commands (Actions-on-Google). In all three cases, Google's willingness to develop interoperability mechanisms is required, possibly also by establishing collaboration with third-party developers for the definition of customised solutions.

26. Android Auto is part of the Android operating system. An *app* that has been developed with the programming tools designed for Android Auto, when it is made available - published, according to the terminology that emerges from the preliminary evidence - on the Google Play *app store,* automatically becomes available on Android Auto, i.e. it is also published on Android Auto. Android, Google Play and Android Auto are Google products that are part of a single ecosystem that starts with mobile devices and extends to (inter alia) the car environment. This ecosystem is separate from the one centred on the iOS operating system, and when reference is made in the following to the iOS ecosystem it is to highlight the interest of *app* developers and car manufacturers in platforms that extend the use of mobile devices to the car environment.

27. Google's conduct should be seen in the context of the competitive relationship between the Google Maps app and the JuiceP ass *app* (formerly Enel X Recharge). In fact, there is an area of overlap between the navigation *apps* and the service *apps* connected to electric recharging with regard to search and navigation functions (actual competition); this overlap gives rise to a competitive confrontation that also concerns other activities connected to recharging, both

because navigation *apps* can also extend their functions to these activities (potential competition), and because the two types of *apps* compete for the relationship with end-users and the consequent flow of data that end-users generate through the use of the *apps* (competition for users and data). The Google Maps app offers search and navigation services for different points of interest, including electric charging stations, according to a generalist approach; the JuiceP ass *app* offers specific services for electric charging that include both search and navigation and other activities, such as booking, management and payment of the charging; in the future, Google Maps could expand the services offered with regard to electric charging stations, also through agreements with *Mobility Service Provi der.*

28. In the following paragraphs, the relevant markets in which Google holds a dominant position (licensed operating systems and *app stores* for the Android operating system) will be reviewed and the functioning and characteristics of Android Auto will be analysed. Subsequently, the *apps* for services connected to electric recharging will be described and the competitive relationship linking these *apps* to navigation apps will be analysed, as well as the characteristics of the *app* developed by Enel X Italia and of the Google Maps *app.* Then, Google's behaviour with respect to Enel X Italia's request to have its own *app* on Android Auto will be reconstructed.

III.2 THE RELEVANT UPSTREAM MARKETS AND THE COMPETITIVE SPACE DOWNSTREAM

The market for the licensing of operating systems for smart mobile devices and the market for application portals (app stores) for Android

29. In its decision in Case AT.40099 - Google Android, the European Commission defined a market for the licensing of operating systems for smart mobile devices (hereinafter also referred to as operating systems)[38] , in which Google is present through Android. Operating systems for intelligent mobile devices are *software applications* that control the basic functioning of devices and related *apps39* . This market excludes, in particular, operating systems that are not licensed but only used by integrated developers.

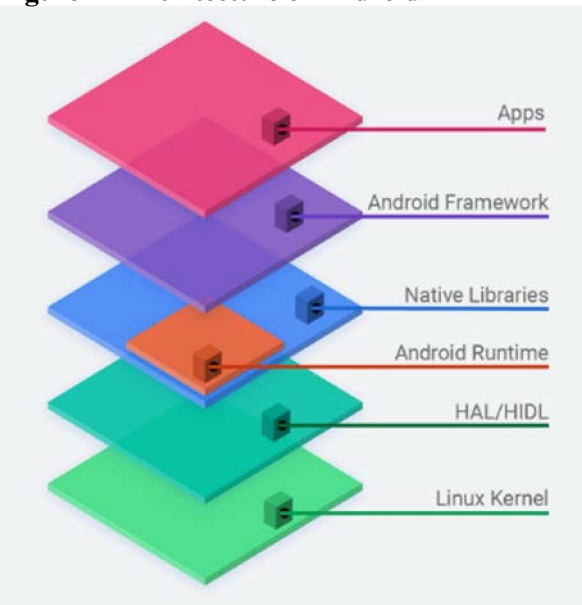
[38] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 218 and 219 (outline of assessment) et seq.
[39] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 79-82.

vertically, including, in particular, Apple's iOS40. The geographical dimension of the market has been defined as worldwide with the exclusion of China41.

30. In the aforementioned decision, the European Commission concluded that Google holds a dominant position in the market for the licensing of operating systems for smart mobile devices42. This conclusion is based, inter alia, on the market share held by Google (in 2016, 96.4% of sales of *devices* with a licensed operating system) and on the fact that operating systems for *smartphones and tablets that are* not licensed, and among these in particular Apple's iOS, do not exert sufficient competitive pressure to weaken Google's autonomous behaviour43.

31. Android is used by manufacturers of smart mobile devices to configure devices and manage their basic functions, and by *app* developers to create applications compatible with this operating system. Indeed, Android does not only manage the basic functions of the mobile device, but also creates the necessary structures for *apps* to work (see Figure 1).

Figure 1 - Architecture of Android



Source: https://source.android.com/ **(*Screenshot of* 9 September 2020)**

[40] See Commission decision of 18 July 2017 in case AT.40099 - Google Android, in particular paragraphs 238 et seq.
[41] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 403 et seq.
[42] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraph 440.
[43] See Commission decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 479 et seq.

32. In this sense, Android is a platform that connects smart mobile device manufacturers, *app* developers and smart mobile device owners/users. In particular, the Commission pointed out that, in order to compete in the mobile sector, Android needed the support of other players including *app developers*, in addition to mobile device manufacturers and telecommunication network operators. Google therefore ensures that *app* developers have incentives to create *apps* for Android as this creates a virtuous circle whereby the more *apps*, the stronger the attractiveness of Android for end users, the greater the interest of developers in Android44.

33. The Commission has indeed assessed that the Android platform is characterised by network effects: in particular, '*the more users use an operating system for mobile devices, the more developers develop applications for this system, which in turn attracts more users*'[45]. In particular, the Commission pointed out that network effects emerge because *app* developers, when deciding for which operating system (licensed) to create applications, take into account the possibilities of *downloading by* end users and, therefore, prefer operating systems that have a large user base. In this sense, the high popularity of Android constitutes a strong incentive for developers to focus their activity on this operating system: in fact, in most cases, developers have limited resources; moreover, the conversion of an *app* from one (licensed) operating system to another is costly and time-consuming; finally, no other (licensed) operating system reaches the level of usage of Android46.

34. The Commission also considered a study by an independent consultant which showed that indirect network effects, such as

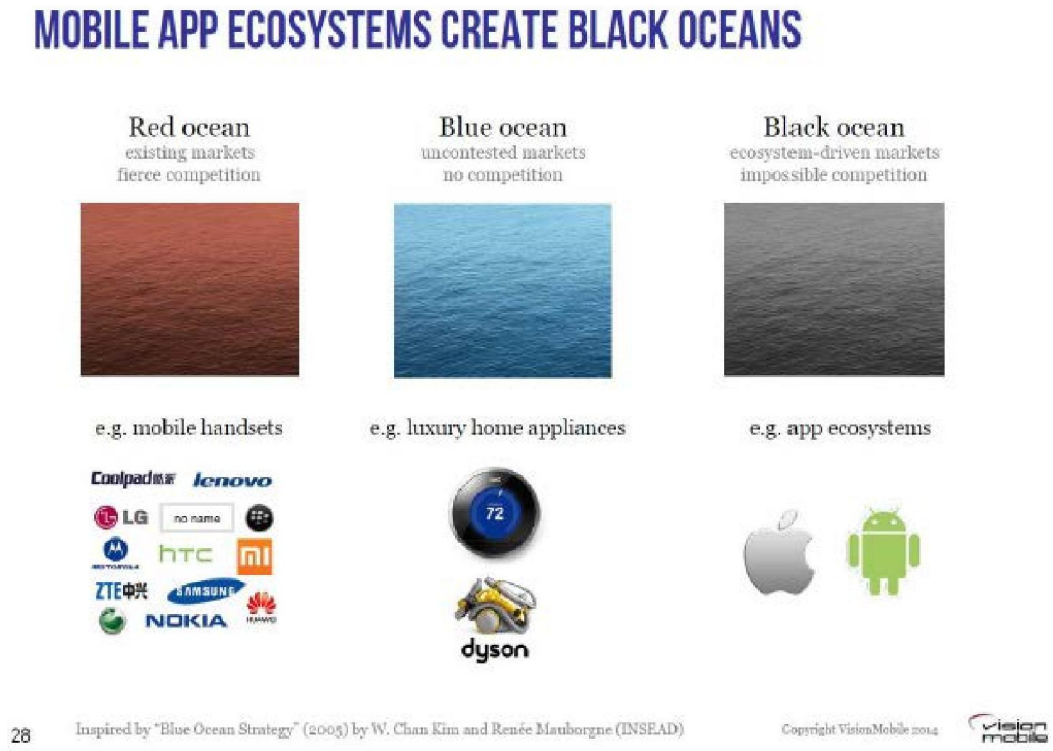
[44] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 148-151. The Commission referred to the *post* entitled "*The Benefits & Importance of Compatibility",* published on 14 September 2012 on the *Official Android Blog.* In that *post,* Andy Rubin, Senior Vice President of Mobile and Digital Content, explains that "*developers each contribute to making the platform better -- because when developers support a platform with their applications, the platform becomes better and more attractive to consumers. As more developers build great apps for Android, more consumers are likely to buy Android devices because of the availability of great software content ... As more delighted consumers adopt Android phones and tablets, it creates a larger audience for app developers to sell more apps. The result is a strategy that is good for developers (they sell more apps), good for device man ufacturers (they sell more devices) and good for consumers (they get more features and innovation). ... In economic terms, this is known as a virtuous cycle -- a set of events that reinforces itself through a feedback loop. Each iteration of the cycle positively reinforces the previous one*".

[45] See press release of 18 July 2018 by the European Commission '*Antitrust: Commission fines Google €4.34 billion for illegal practices concerning Android mobile devices aimed at strengthening the dominant position of Google's search engine*' (http://europa.eu/rapid/press-release_IP-18-4581_it.htm).

[46] See, also, Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, paragraphs 464-468.

those described with regard to *app* developers, create ecosystems47 against which competition is "*impossible*". Such ecosystems are referred to as "*black oceans*" to distinguish them both from markets that are contestable ("*red oceans*") and from those that are theoretically contestable but are in fact uncontested ("*blues oceans*") (see Figure 2)[48].

Figure 2 - *App* ecosystems create "black oceans".



Source: Commission Decision in Case AT.40099 - Google Android

35. Although Android is an *open source software*, Google decisively influences its development through investments, the *governance* system it manages, and decisions on the timing of the release of updates and new versions49. In addition, Google controls the licensing of the Android brand as well as the implementation of Android in smart mobile devices (through compatibility *testing*)[50].

[47] With reference to indirect network effects, the term ecosystem refers to a multiplicity of user groups that are united by economic relations (such as those linking the different platforms) that make it possible to look at these groups as a whole.
[48] See also Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, paragraph 469. The study cited is Vision Mobile "*Mobile Megatrends 2014*", 25 July 2014, in particular slide 28. A version of this study is available at < slideshare.net>.
[49] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, paragraphs 122-130.
[50] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, para 572.

36. Almost all smart mobile devices use either an Android or an iOS operating system. Therefore, since the iOS operating system does not belong to the relevant market for the licensing of operating systems for smart mobile devices, the relevance of the market share of Android highlighted in the European Commission's decision is certainly confirmed.
37. According to StatCounter's GlobalStats statistics51 , in the period August 2019-August 2020, worldwide, *smartphones* accounted for between 51% and 54% of devices (*smartphones*, *tablets* and *desktops*) while *tablets* accounted for between 2.8% and 3.8%. In Italy, in the period August 2019-August 2020, *smartphones* increased from 47.9% (August 2019) to 53.9% (August 2020), *tablets* from 4.1% to 2.7%.
38. StatCounter's data also shows that between August 2019 and August 2020, between 70.7% (April 2020) and 76.2% (August 2020) of smartphones worldwide were using the Android operating system. August 2020, between 70.7 % (April 2020) and 76.2 % (August 2019) of *smartphones* worldwide were using the Android operating system, rising to 74.2 % in August 2020; between 22.2 % (August 2019) and 28.8 % (April 2020) of *smartphones were* using the iOS operating system, rising to 25.1 % in August 202052. With regard to *tablets*, globally, those using the Android operating system rose from 28% in August 2019 to 41.2% in August 2020; in the same timeframe, *tablets* using the iOS operating system fell from 71.8% to 58.7%.
39. With specific reference to Italy, the same source gives an account of the fact that in the period August 2019-August 2020, the percentage of *smartphones with* Android operating system remained substantially stable around 74.8% and the percentage of smartphones with iOS operating system fluctuated around 24-25%. As for *tablets*, in the period August 2019-August 2020, the percentage of those with Android operating system increased from 31.1% (August 2019) to 49.9% (August 2020) and the percentage of those with iOS operating system decreased from 68.8% (August 2019) to 49.9% (August 2020).
40. In its decision in Case AT.40099 - Google Android, the European Commission also defined a market for sales portals for Android applications (Android *app stores*)[53] , in which Google is present through Google Play. App *stores* are (in turn) *apps* that constitute digital distribution platforms through which *smart phone* owners can access their devices.

[51] See <gs.statcounter.com>.
[52] As Android and iOS belong to different relevant markets, the percentages in the text cannot be interpreted as market shares.
[53] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 268 and 269 (outline of assessment) et seq.

devices can download, install and manage a wide range of applications54. The market in question excludes, in particular, *app stores* for licensable operating systems other than Android55 as well as *app stores* for operating systems that are not licensed56. The geographical scope has been defined as worldwide with the exclusion of China57.

41. In the recalled decision, the Commission concluded that Google holds a dominant position in the market for sales portals for Android applications (Android *app stores*)[58]. This conclusion is based, inter alia, on Google's market share (in 2016, Google Play was pre-installed on [90-100%] of smart mobile devices and [90-100%] of the *apps* downloaded on smart mobile devices with Android operating system were downloaded through Google Play), on the quantity and popularity of the apps available on Google Play, on the automatic *app* update functionalities, and on the fact that *app stores* for unlicensed operating systems, including in particular Apple's iOS, do not exert sufficient competitive pressure to undermine Google's autonomous behaviour59. *More than two million apps* are available on Google [Play60].

42. Google Play is thus a distribution platform that connects *app* developers, who are interested in having their apps downloaded and used by users, and users, who are interested in downloading and using *apps* on their Android-based mobile devices. Developers distribute *apps that* can be used on smart mobile devices running the Android operating system (mainly) via Google Play.

43. If an *app has been developed in such a way that it* is also compatible with Android Auto, i.e. developed using the Android Auto programming tools made available by Google, publication on Google Play implies that the *app* is

[54] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraph 86.
[55] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 284 et seq.
[56] See Commission decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 306 et seq.
[57] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 412 et seq.
[58] See Commission Decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 590 et seq.
[59] See Commission decision of 18 July 2017 in Case AT.40099 - Google Android, in particular paragraphs 652 et seq.
[60] See doc. no. 36 (Google Italy's submission of 13 August 2019).

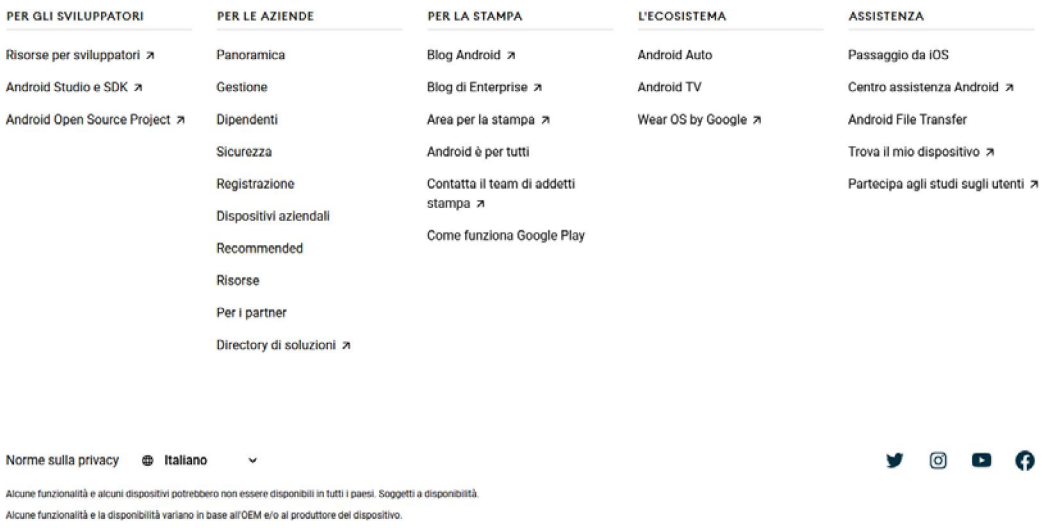
automatically usable on Android Auto61. Therefore, Google Play is the *app store* for the distribution of *apps* compatible with Android Auto. However, the distribution of an *app* through the Google Play *store* alone does not allow the publication of the same *app* on Android Auto, since it is also necessary for the *app to* be developed using the appropriate programming tools. In other words, distribution via Google Play is one of the two necessary conditions, which have to be fulfilled at the same time, for publication on Android Auto.

Android Auto

Introducing Android Auto

44. Around Android, Google has developed and is developing a real ecosystem that extends the use of Android to devices other than *smartphones* and *tablets and, in* particular, to *smart TVs* (Android TV), wearable devices (Wear OS) and, what is relevant for the present case, car *infotainment* units (integrated *displays* and controls) with Android Auto (see Figure 3)[62]. In particular, Android Auto allows to extend the use of (some of) the *apps that the* user has on his *smartphone,* together with the calling and messaging functions of the mobile phone, through the car *infotainment* units, including the car *displays.*

Figure 3 - *Screenshot* from https://www.android.com/



Source: https://www.android.com/ **(*Screenshot* from 8 September 2020)**

[61] See doc. no. 36 (Google Italy's submission of 13 August 2019).
[62] It is Google itself that speaks of an ecosystem. See *webpage* https://www.android.com/intl/it_it/ (*screenshot of* 8 September 2020, in doc. no. 194). An ecosystem here means a set of fully interoperable products and/or platforms aimed at satisfying a multitude of needs of all users.

45. Android Auto was launched in 2015 as an *app* and then integrated, as of Android 10, into the operating system63. Therefore, Android Auto, in addition to being an integral part of the Android ecosystem, is also an integral part of the Android operating system (from the most recent versions).

46. Android Auto was launched as a consequence of Apple's launch of CarPlay (in 2014) so that Android would keep pace with iOS, it being understood that iOS, not being licensed, does not belong to the same relevant market as Android64. After its launch, the main updates to Android Auto were: in 2016, the introduction of the possibility to use Android Auto directly from the *smartphone* screen and the integration with Google Assistant, resulting in the possibility to use voice commands on the Android Auto platform65; in 2018, the introduction of Android Auto Wireless, which allows Android Auto to be used without the need to connect the mobile device to the car's *infotainment* unit; in 2019, the update of the Android Auto user interface in order to facilitate its launch66.

47. Android Auto is a '*smartphone projecti on app'*, i.e. an *app* that projects the content of the mobile device's screen onto the car's *infotainment* unit and transmits *inputs* from the *infotainment* unit (via *touchscreen*, buttons, *etc.*) to the mobile device, which responds to these *inputs*. Therefore, Android Auto, like other *smartphone projecti on apps,* such as Apple CarPlay and MirrorLink, enables "*interoperability*" between the car's *infotainment* system and the *apps* on the user's mobile device that are compatible with Android Auto67.

48. Android Auto, as an extension of Android to the car environment, is itself a platform, which is chosen by car manufacturers and *app* developers to make available applications that are on users' mobile phones while they are driving. Car manufacturers have to choose whether to make their cars' *infotainment* systems compatible with Android Auto. Developers have to choose whether

63 See doc. no. 122 (Google's reply of 17 July 2020).

64 See doc. no. 23 (record of Google Italy's hearing of 16 July 2029) and doc. no. 36 (Google Italy's submission of 13 August 2019).

65 As explained by Google, Google Assistant is the product that carries out voice recognition while the set of instructions and/or activities that can be carried out through voice commands (and thus intermediated by Google Assistant) constitute the product called "Actions-on-Google" (see doc. no. 23, minutes of the Google Italy hearing of 16 July 2019, and doc. no. 122, Google's response of 17 July 2020).

66 See doc. no. 130, Google's reply of 24 July 2020.

67 See doc. no. 122 (Google response of 17 July 2020).

programming their *apps so* that they are compatible with Android Auto.

49. A closer look reveals that Android Auto not only connects (compatible) *apps* with the car's *infotainment* unit, but also modifies the *user experience* by simplifying the *apps*' graphics and functions. The intervention on the user experience is aimed at ensuring a smooth and safe use by users in order to limit distractions while driving: "*the objective of this product is to ensure a safe and seamless user experience* "[68].

50. In order to ensure user access to this modified experience, Android Auto can also be used directly from the screen of the mobile device69. Therefore, regardless of whether it is used through the car's *infotainment* unit or through the *smartphone* (and/or *tablet*) screen, Android Auto allows easy and safe use of compatible *apps* when the user is driving a car.

51. When the mobile device is connected to the car's *infotainment* unit, and Android Auto is activated, the user can use an *app* not on Android Auto "*by simply picking up the device and, if necessary, unlocking it*". In order to unlock the mobile device, the user must perform all the activities he or she has set, "for *example, activating the screen via facial recognition or fingerprint-based recognition, scrolling through the lock screen, entering the password, etc.* "[70].

52. Android Auto uses the data connection of the mobile device; in Google's words: '*Android Auto is designed so that it and all apps available on it use the mobile data connection provided by the smartphone to connect to the Internet*'[71]. The most recent

[68] See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
See also doc. no. 36 (memorandum of Google Italy of 13 August 2019) where it is stated: "*Android Auto is therefore an app that allows access to certain other apps available on the user's smartphone, modifying the "user experience" in order to minimise the risk of distraction*".
See also doc. no. 23 (minutes of the Google Italy hearing of 16 July 2019) where it is stated: "*The media apps are numerous and, as demonstrated by simulating their use on Android Auto, they all have very limited functionality compared to the version that can be used on the smartphone and they all have the same graphics*".

[69] '*The fundamental purpose of the Android Auto app is to enable a simpler, safer and more intuitive user experience. Users can make use of it in two ways: directly from the smartphone screen, or through the screen integrated in the dashboard of a 'car (which "reflects" the content of the phone screen)*'" (see doc. no. 36, Google Italy's submission of 13 August 2019).

[70] See doc. no. 122 (Google's reply of 17 July 2020).

[71] See doc. no. 122 (Google's reply of 17 July 2020).

car models are equipped with a data connection but its use seems to be limited to certain functionalities chosen by the manufacturers72.

53. On Android Auto, you can use your *smartphone*'s *apps*, calling and messaging functions via voice commands. Google explained that: 'Google Assistant is the product that enables access to voice-enabled features and apps via voice commands; "Actions-on-Google" is the development platform for Google Assistant, which allows programming actions that can be used by users via voice commands; because Actions-on-Google is enabled on Android Auto, third-party developers can program *apps* that use voice commands, within the limits of the actions supported by Actions-on-Google73.

54. *In* particular, the following categories of *apps* can be used on Android Auto via voice commands: ***(i)*** media and messaging apps, developed according to their *templates*; ***(ii)*** navigation apps, namely Google Maps and Waze (owned by Google) plus the Korean *app* "Kakao", developed in collaboration with Google (*custom app*); and ***(iii)*** "*apps based on voice interactions designed using the Application Programming Interfaces ('API') of Google Assistant (Actions on Google)* "[74]. In addition, the *template* for navigation *apps* that Google is developing will allow the use of voice commands.

The side of the car manufacturers

55. On the car manufacturers' side, Android Auto, as well as the similar Apple CarPlay and MirrorLink apps, requires that the cars' *infotainment* system supports Android Auto, or another *smartphone projection app.* This interoperability is negotiated between the car manufacturers, who decide on the *infotainment* system of the cars they produce, and the developers of the *apps in* question (Google for Android Auto, Apple for Apple CarPlay, Car Connectivity Consortium for MirrorLink).

72 PSA clarified that the data connection is only usable for *e-call* (SOS and assistance) and for integrated navigation while it is not usable for Android Auto, Apple CarPlay and MirrorLink (see doc. no. 163, PSA reply of 30 September 2020).
FCA has specified that the data connection modules allow connection to *service delivery* platforms (safety, *comfort*, navigation, driving style, usage and maintenance check, *etc.).*). See doc. no. 156 (FCA response of 24 September 2020).

73 See doc. no. 122 (Google's reply of 17 July 2020). See also doc. no. 23 (minutes of the Google Italy hearing of 16 July 2019) where it is stated: "*voice interactions are managed by Google Assistant, which is the product in charge of voice recognition. Voice commands can enable the execution of specific instructions or activities, what is called "Actions on Google*"'.

74 See doc. no. 122 (Google's reply of 17 July 2020).

56. Car manufacturers generally choose to make their *infotainment* systems compatible with Android Auto, as well as with Apple CarPlay. In fact, the websites of these platforms show compatibility with the main car brands, which represent almost all of the 45 brands for
for which the Unione Nazionale Rappresentanti Autoveicoli Esteri - UNRAE provides registration data: in particular, 40 brands are compatible with Android Auto, covering about 98% of registrations, and 37 brands are compatible with Apple CarPlay, covering about 94% of registrations75. During the investigation
car manufacturers FCA, Volkswagen, PSA, Renault and Mercedes-Benz explained their decision to make their *infotainment* systems compatible with Android Auto and Apple CarPlay by noting that these platforms are market *standards* and that interoperability is therefore intended to meet the needs of potential car buyers.
57. In particular, with regard to the compatibility of *infotainment* systems with Android Auto:
- PSA noted that '*Android* [Auto, ed.] *is one of the main operational systems for mirroring devices on the market and it was necessary to make sure that*
our infotainment systems were compatible with the Android Auto protocol with the aim of being in line with the offerings of competitors and meeting the needs of the PSA customer "[76];
- Renault explained that it chose to make its *infotainment* systems compatible with Android Auto "*to meet the needs of customers*". Indeed, "*Android Auto represents a market standard*" and according to data released by Google, in the third quarter of 2019, 15% of Android *smartphone* owners were using Android Auto on their car's *infotainment* system77;
- Volkswagen explained that it decided to make the *infotainment* systems in its vehicles compatible with Android Auto 'because *of the significant interest expressed by customers in staying connected via smartphone in the car (using well-known smartphone apps for the*

[75] The compatibility of car brands with Android Auto and Apple CarPlay was last checked on 17 September 2020 (doc. no. 194). On the basis of registrations in August 2020 compared with the same month in 2019, out of a total of 45 brands, only five were not compatible with Android Auto (Great Wall, Tesla, Dr Motor, Porsche and Mini) and only eight were not compatible with Apple CarPlay (Lada, Great Wall, Mahindra, Ssangyong, Tesla, Dr Motor, Smart and Dacia). Assuming, as a precautionary measure, that registrations not attributed to specific brands ("Others") are not compatible with either Android Auto or Apple CarPlay, brands not compatible with Android Auto account for 2.11% of registrations in the period January-August 2020 and 1.77% in the corresponding period of 2019; brands not compatible with Apple CarPlay account for 4.75% in the period January-August 2020 and 6.63% in the corresponding period of 2019.
[76] See doc. no. 131 (PSA reply 29 July 2020).
[77] See doc. no. 135 (Renault's reply of 4 August 2020).

navigation, streaming for music, etc.)', thus recalling the '*need to be competitive on the market with other manufacturers and to offer a product that meets customers' needs*'[78];
- FCA has chosen to offer interoperability with Android Auto "*in response to a consumer demand for more and more applications on their phones in the car* "[79];
- Mercedes-Benz explained that '[t]he *compatibility of the vehicle infotainment system is a feature of great interest to our customers. ... In order to meet the needs of our customers and to be competitive, it is strategic to ensure such compatibility*'; furthermore, '[b]*ecause of the poor reception of the DAB signal in many of the metropolitan areas and the small number of suppliers, it is expected that Android Auto and Apple CarPlay may be the only possible alternative for in-vehicle music listening*'[80].
58. The same assessments were made by the responding car manufacturers regarding the compatibility of *infotainment* systems with Apple CarPlay. Thus, Android Auto and Apple CarPlay are market *standards for the* projection of (compatible) *apps* on car *infotainment* units, for the Android and iOS ecosystems respectively.

The side of app developers

59. The attractiveness of Android Auto for *app* developers is evidenced by the number of *apps* that are present on this platform, or will be in the near future. More generally, it is clear that *app* developers are very interested in being present on the Android Auto (Android ecosystem) and Apple CarPlay (iOS ecosystem) platforms.
60. The number of *apps* on Android Auto is in the thousands (see the section on the comparison between MirrorLink and Android Auto). To date, Android Auto is not yet open to (third party) navigation and electric charging apps. Google is developing a new *template* that should allow the development of these types of *apps,* but this *template* is still in *beta* and therefore, by definition, incomplete and to be tested. That said, the attractiveness of Android Auto for developers of navigation and electric charging *apps* is evidenced by the fact that, by using

[78] See doc. no. 133 (Volkswagen's reply of 3 August 2020).
[79] See Doc. No. 155 (FCA reply of 21 September 2020).
[80] See doc. no 167 (Mercedes-Benz reply of 15 October 2020).

the *beta* version of the new *template*, six navigation app developers (2GIS Listings, Sygic, T Map, TomTom AmiGO, Flitsmeister and iNavi Air) and four electric charging app developers (PlugShare, ChargePoint, ChargeMap and EVMap) developed *beta* versions of their respective *apps*[81].

61. Navigation *apps* that are (also) integrated in the *infotainment* systems of some car models, such as TomTom or Sygic, are also present on Apple CarPlay (which already hosts third party navigation *apps*) and their developers are *partners of* Google in the development of a programming model (*template*), not yet available, for third party navigation apps[82]. Similarly, music *apps* that are (also) integrated in the *infotainment* systems of some car models, such as Spotify and Deezer, which have millions of users, are also present on Android Auto and Apple CarPlay.

62. Even car manufacturers, who also decide on the *infotainment* systems of their cars, when developing their own *apps* to offer services to customers, make them compatible with Android Auto: this is demonstrated by the numerous collaborations of Google with car manufacturers for the development of *apps* designed *ad hoc* for Android Auto (see *also the* so-called *custom apps*). The interest of this category of developers clearly indicates the relevance of Android Auto in reaching end-users: indeed, car manufacturers could develop native *apps* in their *infotainment* systems without having to negotiate with any party, and, moreover, they are interested in reaching subsets of potential end-users, i.e. those who own cars built by them.

63. The developer of the Radioplayer[83] *app*, an *app* that aggregates several radio stations, explained that it had developed versions for Android Auto, and similarly for Apple CarPlay, considering that the *app* should be easily accessible in these environments since car manufacturers had started to invest in the interoperability of their *infotainment* systems with Android Auto and Apple CarPlay. Moreover, Radioplayer explained that car manufacturers tend to keep control of their *infotainment* systems and, therefore, Radioplayer does not develop versions compatible with individual *infotainment* systems, but rather assists car manufacturers in implementing 'customised' versions of the *app*.[84]

[81] See Google's final submission of 24 March 2021.
[82] See *post* '*New ways to reach more drivers on Android for cars*' of 11 August 2020 on Google's *blog* (https://android-developers.googleblog.com/2020/08/android-for-cars.html, in doc. no. 194).
[83] Radioplayer Worldwide Ltd.
[84] See Doc. No. 171 (reply of Radioplayer Worldwide Ltd of 4 December 2020).

64. The interest of *app* developers appears to be to reach users through all platforms that represent a market *standard.* In this sense, Android Auto, and similarly Apple CarPlay, do not emerge as alternatives to integration in car *infotainment* systems but rather as complementary.
65. Therefore, for *app* developers, in particular of those most frequently used while driving, i.e. navigation and music *streaming*, Android Auto and Apple CarPlay do not emerge as alternative platforms with respect to integration in car *infotainment* systems. Moreover, Android Auto and Apple CarPlay perform the same function for separate ecosystems, Android the former and iOS the latter, and are therefore by definition not substitutable for each other.

Apps compatible with Android Auto

66. In order to develop *apps* compatible with Android Auto, developers use the programming tools made available by Google and could not use others. In other words, Google is the sole source of the programming tools needed to develop *apps* that can be published on Android Auto.
67. Google is therefore in the position of deciding which *apps* can be on Android Auto and which cannot, thus standing between developers and end users (*gatekeepers*). In this respect, Google stated that '*the development of Android Auto technology is, in fact, a Google prerogative since it is Google that has developed this product and is responsible for its evolution. That said, Google itself must be able to decide which and how many resources to allocate to the Android Auto product and which priorities to follow in the development of templates*'[85].
68. *In order to* publish Android Auto-compatible *apps on* Google Play (publishing *apps* on Android Auto), Google provides developers with '*scalable* solutions for *whole categories of apps rather than for individual apps*'[86]. These solutions include *Software Development Kits* (SDKs), guidelines and technical specifications, and define '*general application templates*' called *templates*. As Google itself explains, "[t]he *goal of the template is to govern and simplify the complexity and diversity of apps, to make them suitable for use while driving ... The Android Auto templates lead to a standardisation and*

[85] See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
[86] See doc. no. 36 (Google Italy's submission of 13 August 2019).

simplification of the design of the apps and, if necessary, a limitation of the functionalities offered (compared to the mobile version of the apps available on Google Play)'[87].

69. The categories of *apps* for which Google has made *templates* available are *media* (radio, *music streaming*, *podcasts*, audio books) and messaging apps. In addition, Google sometimes collaborates with third-party developers to develop specific *apps*, which are called custom *apps* [88]. Google mentions *media*, messaging and *custom app* categories in its developer *web* pages89.

70. As of 30 June 2020, Google had developed (in collaboration with third party developers) [*20-30]* * customised *apps*, of which *[20-30]* with car manufacturers and only one with a third party developer. This last case concerns the navigation *app* for South Korea called Kakao. Google explained that the development of *custom apps is* resource intensive and therefore the selection of *apps* to be developed as *custom apps* is made on the basis of '*the strategic nature of the app in these cases for the Android Auto platform (i.e., its potential relevance and usefulness to users) and the availability of Google's limited resources that can be allocated to Android Auto*'[90].

71. Android Auto also contains the Google Maps and Waze *apps,* which, as we know, belong to Google itself. These *apps* have not been developed on the basis of a *template* and, in fact, the guidelines do not mention the category of navigation apps91. The only other *app* of

[87] See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).

[88] See doc. no 23 (Google Italy hearing of 16 July 2019), doc. no 36 (Google Italy memorandum of 13 August 2019).

[89] During a hearing, Google showed '*the Android web pages that contain guidelines for programmers to develop apps compatible with Android Auto, highlighting that these guidelines are clearly divided into two categories, media and messaging. It also shows the page containing guidelines for app design on Android Auto, which confirms the two categories of media and messaging and indicates a third category called 'custom apps'. This concerns apps, other than media and messaging, whose Android Auto version is developed through a collaboration with Google*' (doc. no. 23, minutes of the Google Italy hearing of 16 July 2019).

In this version, some data are omitted, as they are considered to be confidential or secret information.

[90] See doc. no. 122 (Google's reply of 17 July 2020).

[91] "[D]espite *extensive testing to ensure their safety, Google has developed Android Auto-compatible versions of Google Maps and Waze (i.e., its two navigation apps). The latter do not constitute a third category of apps compatible with Android Auto and, not surprisingly, navigation apps are not even mentioned in the available guidelines*" (doc. no. 36, Google Italy's submission of 13 August 2019). "[A]t the *moment, Google Maps and Waze* [on Android Auto, ed.] *are not based on any template*" (doc. no. 122, Google's response of 17 July 2020). See also doc. no. 65 minutes of the hearing of Enel X Italia of 17 December 2019).

Navigation present on Android Auto is the aforementioned Kakao which is, as mentioned, a *custom app.*

72. In August 2020, Google announced the opening of Android Auto to new categories of *apps*, namely navigation apps (from third parties), parking apps and *apps* for recharging electric vehicles92. In particular, Google referred to collaboration with a number of *partners* for what it calls '*Expanding Android Auto's app ecosystem*': Sygic for maps, SpotHero for parking, and PlugShare and Charge P oint for electric charging93. On 15 October 2020, Google made available a *beta* version of the *template* for the new *app categories94*.

73. The documentation filed by Enel X Italia in support of its report shows that Google was already developing a *template* for navigation *apps in* January 201995. In the course of the proceedings, Google itself announced on several occasions that it was developing a *template* for navigation apps96. Finally, in July 2020, *Google* explained that '*Google's navigation template will in the future allow app developers to enable the booking and payment of electric vehicle charging sessions through their apps within Android Auto*'[97].

74. Once programmed according to the *template* developed by Google for a specific category, the *app* published on Google Play automatically becomes

[92] See *posts* "*New ways to reach more dri vers on Android for cars*" of 11 August 2020 (https://android-developers.googleblog.com/2020/08/android-for-cars.html) and "*Introducing the Android for Cars App Library*" of 15 October 2020 (https://android-developers.googleblog.com/2020/10/introducing-android-for-cars-app-library.html) on the Android Developers Blog, in doc. no. 194.
On the development of a *template* for third-party navigation *apps,* see also doc. no. 36 (Google Italy's submission of 13 August 2019), doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019) and doc. no. 122 (Google's reply of 17 July 2020).

[93] See *post* of 11 August 2020 cited above.
Sygic is a company that develops navigation *apps (see website* < sygic.com>), Spot Hero is an app that allows you to search for and book parking spaces (see website < *spothero*.com>), PlugShare is an app *that allows the search for charging points* for electric vehicles as well as the initiation of charging sessions (see website < plugshare.com>), Charge Point is an app that allows the search for charging points and the initiation of charging sessions (see website < chargepoint.com/en/drivers/mobile/>.

[94] See post "*Introducing the Android for Cars App Library*".
(https://android-developers.googleblog.com/2020/10/introducing-android-for-cars-app-library.html) on the Android Developers Blog, in doc. no. 194.

[95] See doc. DC5 (supplement to Enel X Italia's report of 3 April 2019) which contains (inter alia) the *email of* 18 January 2019 in which Google reiterates to Enel X Italia that the JuicePass *app* (formerly Enel X Recharge) cannot be published on Android Auto.

[96] "*Google is currently working on the development of a template for compatible third-party navigation apps, and believes that the same will be available during 2020.*" (doc. no. 36, Google Italy's submission of 13 August 2019). See also doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).

[97] See doc. no. 122 (Google's reply of 17 July 2020).

also available on Android Auto, without the developer having to perform any other activity. However, Google "*reserves the right to verify the actual compatibility of the app uploaded by the developer* "[98]. In fact, the preliminary evidence shows that, in the case of Enel X Italia and two other developers, Google refused to publish on Android Auto *apps* developed according to the *template* for messaging *apps* but pursuing purposes other than messaging99.

MirrorLink is not an alternative to Android Auto

75. MirrorLink is a *smartphone projection app* designed by a consortium of car manufacturers, *smartphone makers* and manufacturers of electronic equipment for cars (Car Connectivity Consortium) with the aim of creating a platform for interoperability between *smartphones* - theoretically for any operating system - and car *infotainment* systems. Apple's failure to join the MirrorLink project has meant that MirrorLink cannot work on iOS devices. Therefore, in theory, MirrorLink can only work on devices with the Android operating system - and thus represent an alternative to Android Auto - or with the remaining licensed operating systems.

76. As will be seen in the following paragraphs, the adhesion of car and *smartphone* manufacturers to the MirrorLink project has been decreasing over time and the platform does not appear to be of particular interest for *app* developers either. Moreover, from the *app developers' point of view*, the MirrorLink platform does not emerge as an alternative but rather as complementary to Android Auto, confirming the evidence that *app* developers pursue a strategy of presence on a plurality of platforms in order to make their *apps as* usable as possible for users. Therefore, MirrorLink is not in fact an alternative to Android Auto.

77. MirrorLink differs substantially from Android Auto and Apple CarPlay in that, in order to work, it requires not only that car manufacturers and *app* developers choose to make their respective *infotainment* systems and *apps* compatible, but also that, upstream, mobile device manufacturers make a similar choice. In contrast, Android Auto and Apple CarPlay are part of two ecosystems

[98] See doc. no. 36 (Google Italy's submission of 13 August 2019).

[99] The two other developers were *[Omissis]*, who develops *webinar* and teleconferencing applications, and the developer of a game *app* (see doc. no. 122, Google's reply of 17 July 2020).

built around the Android and iOS operating systems and are, indeed, integrated into these operating systems; therefore, mobile devices with Android or iOS operating systems are automatically compatible with Android Auto and Apple CarPlay. In essence, MirrorLink is a platform with a side, that of the manufacturers of smart mobile devices, which is implicit in Android Auto and Apple CarPlay as it is 'contained' in the two reference operating systems100.

78. On the car manufacturer side, 15 *brands* are compatible with MirrorLink: those of the Volkswagen group excluding Audi (i.e. Volkswagen, Skoda and Seat), those of the P SA group excluding Opel (i.e. Peugeot, Citroen and DS), those of the Mercedes-Benz group (Mercedes-Benz and Smart) as well as Buick, Chevrolet, Honda, Hyundai, Kia, Suzuki and Toyota [101.] Therefore, the FCA and Renault groups have not developed the interoperability of their respective *infotainment* systems with MirrorLink. Overall, car brands that are compatible with MirrorLink account for about 40% of cars registered in Italy [102.]

79. Moreover, the PSA group, which is also a member of the consortium that developed MirrorLink, is progressively abandoning MirrorLink compatibility in the most advanced versions of its *infotainment system*: MirrorLink compatibility has not been maintained in the most recent versions of the *infotainment system* and is not foreseen in the future *infotainment* system (to be produced from mid-2021). Out of 16 electric car models produced, 12 do not have MirrorLink compatibility. Out of 15 electric car models planned 12 do not have MirrorLink compatibility103.

80. For the sake of completeness, it should be noted that the *smartphone projection app* can also be used for car stereo devices that have developed the relative interoperability. Having said this, even looking at the choices made by car stereo manufacturers, it is confirmed that MirrorLink is not very attractive compared to Android Auto and Apple CarPlay which, also in this area, represent market *standards*: only one manufacturer (Pioneer) has developed a smartphone projection app.

100 A further side, that of owners of smart mobile devices, is implicit in each of **the** platforms indicated, namely MirrorLink, Android Auto and Apple CarPlay, as a direct consequence of the choice of device (MirrorLink compatible or not) or operating system (Android or iOS).

101 The compatibility of car brands with MirrorLink was verified on 23 September 2020 (in doc. no. 194).

102 The UNRAE survey on registrations released in September 2020 (in doc. no. 194), showed that in the period January-August 2019 MirrorLink-compatible car brands accounted for 38.79% and in the period January-August 2020 for 40.36%.

103 See doc. no. 163 (PSA reply of 30 September 2020).

developed the interoperability of their stereo equipment with MirrorLink104; 27 manufacturers have developed the interoperability of their stereo equipment with Android Auto105; 7 manufacturers have developed the interoperability of their stereo equipment with Apple CarPlay106.

81. On the mobile device manufacturer side, five *brands are* compatible with MirrorLink: Fujitsu, HTC, Huawei, LG and Sony107. Samsung, which is also a member of the consortium that developed MirrorLink, discontinued MirrorLink on 1 June 2020108. A car manufacturer and Enel X Italy also found that MirrorLink is not compatible with the latest *smartphone* models (see *below*).

82. On the *app* developer side, it is clear that the number of *apps* on Android Auto and Apple CarPlay is higher than MirrorLink. There are 45109 apps compatible with MirrorLink. Google Maps and Waze are not present on MirrorLink.

83. From the dedicated *webpage* it appears that there are 242110 apps available on Android Auto for which the following categories are indicated: music *apps*; sports, radio and live news; hands-free communication; audiobooks and *podcasts111*. However, in the course of the investigation, Google stated that the *apps* available on Android Auto are '*best aia*'[112]; indeed, in a *post* in August 2020, Google stated that on Android Auto were available

104 See https://mirrorlink.com/car%20audio. The compatibility of car stereos with MirrorLink was verified on 3 February 2021 (in doc. no. 194).

105 The compatibility of car stereo equipment with Android Auto was verified on 17 September 2020 (in doc. no. 194).

106 The compatibility of car stereos with Apple CarPlay was verified on 17 September 2020 (in doc. no. 194).

107 The compatibility of mobile device brands with MirrorLink was verified on 23 September 2020 (in doc. no. 194).

108 See article "*Samsung says goodbye to some in-vehicle services to make room for Android Auto*" on < tuttoandroid.net> (in doc. no. 194). See also doc. no. 157 (reply by Enel X Italia dated 25 September 2020).

109 See https://mirrorlink.com/apps. The verification was carried out on 3 February 2021 on the MirrorLink website (in doc. no. 194). Specifically, 48 *apps* are listed on the site, of which one is repeated twice (HTC Auto), one is discontinued (Car Mode which allowed compatibility with Samsung *devices*) and one (Rock Scout) allows the use of music and audio *apps* for Android devices (the individual music and audio *apps* accessible through Rock Scout were counted).

110 See https://play.google.com/store/apps/collection/cluster?clp=6gsmCiQKHnByb21vdGlvbl9hbmRyb2lkYXV0b19jYXRjaGFsbBBKGAM%3D:S:ANO1ljIBDG8&gsr=CinqCyYKJAoecHJvbW90aW9uX2FuZHJvaWRhdXRvX2NhdGNoYWxsEEoYAw%3D%3D:S:ANO1ljKrE0w&jsmode=du (webpage verified on 3 February 2021, in doc. n. 194).

111 See https://play.google.com/store/apps/editorial_collection/promotion_topic_3003388_androidauto_baselist?jsmode=du (*web* pages verified on 3 February 2021, in doc. no. 194). A group of *apps* is also indicated with the *slogan* "*Android Auto Essenti als. Browse our best apps*', which contains a selection of *apps from* the other categories.

112 See doc. no. 56 (minutes of the hearing of Google Italy and Google LL of 13 November 2019).

over 3,000 *apps* [113]. In August 2020, Google also announced the opening up of Android Auto to new categories of *apps*, namely navigation apps (from third parties) and *apps for* parking and charging electric vehicles (see *posts* of 11 August and 15 October 2020 on the Android Developers Blog)[114].

84. *The* number of *apps is* also very large on Apple CarPlay, which is a *benchmark* for assessing the attractiveness of MirrorLink, even though it belongs to a separate and distinct ecosystem from Android. The dedicated *web* page reads "Get *more apps on board. CarPlay is compatible with many of the apps you have on your iPhone, like texting, calling, and listening to music. You can also use it with new categories of apps from other developers, such as parking, charging electric vehicles, and ordering food. Even apps developed by car manufacturers are compatible, so you can manage even more car functions without leaving CarPlay. ... With so many tools and templates available to developers today to create new apps, there will be more and more smart and curious ways to use your iPhone in the car.* "[115] With specific reference to maps, in addition to Apple maps, CarPlay also offers Google Maps, Waze, TomTom and Sygic maps.

85. The attitude of *app* developers towards the MirrorLink platform can also be inferred from the observation of the strategy of some particularly popular *apps* such as Spotify and Deezer (music *streaming*), Stitcher (*podcasts*), and Sygic (navigation) which are present on MirrorLink but also on Android Auto1 [16], Apple CarPlay and the *infotainment* systems of some car brands [117]. This appears to be in line with the strategy set out above.

113 This is the same *post* with which Google announced the opening up of Android Auto to new categories of *apps*.

114 '*New ways to reach more drivers on Android for cars*' of 11 August 2020 (https://android-developers.googleblog.com/2020/08/android-for-cars.html) and '*Introducing the Android for Cars App Library*' of 15 October 2020 (https://android-developers.googleblog.com/2020/10/introducing-android-for-cars-app-library.html), in doc. no. 194.

115 See https://www.apple.com/it/ios/carplay/ (*webpage* verified on 17 September 2020, in doc. no. 194).

116 To date, Android Auto does not host third-party navigation *apps*. However, Sygic's interest in being present on Android Auto is demonstrated by the fact that this developer has collaborated with Google to define a new *template* for navigation *apps* (still in *beta*).

117 Spotify is available on the *infotainment* systems of certain car models of the BMW, Buick, Cadillac, Chevrolet, GMC, MINI, Polestar, Tesla and Volvo brands (https://spotify-everywhere.com/collections/car-audio, *webpage verified on* 3 February 2021, in doc. no. 194). Deezer is available on the *infotainment* systems of certain car models of the BMW and MINI brands as well as the FIAT 500X and Jeep Renegade (https://www.deezer.com/it/devices/cars, *webpage verified on* 3 February 2021, in doc. no. 194). Stitcher is integrated in more than 50 car models of the GM, Ford, BMW, MINI, Jaguar, Land Rover, Volvo, Mazda, Subaru and other brands (https://www.stitcher.com/download#/, *web* pages verified on 3 November 2020, in doc. no. 194). The maps and navigation systems developed by Sygic are available on the

of presence on a variety of platforms in order to be as usable as possible for users. In this sense, the presence on MirrorLink does not appear to be an alternative to that on Android Auto, but rather complementary.

86. The reduced attractiveness of MirrorLink has also been confirmed by the car manufacturers surveyed, who highlight its limited applications and possibilities of use. Specifically:

- P SA is phasing out compatibility with MirrorLink, which will not be present at all in the future *infotainment* system (to be produced from mid-2021) as *[omissis]*[118];
- Renault, which does not offer MirrorLink compatibility in its vehicles, explained *[omissis]*[119];
- Volkswagen notes that MirrorLink *[omissis]*[120];
- FCA, which does not offer MirrorLink compatibility, considers that *[omissis]*[121];
- as regards Mercedes-Benz, *[omissis]* [122].

87. Enel X Italia considers that the MirrorLink platform does not guarantee the level of service and deployment sought by users123. In particular, Enel X Italia pointed out that: ***(i)*** the number of (models of) *smartphones* supporting MirrorLink is limited and that these are mostly older models; ***(ii)*** *"consumers have always complained about connection problems between mobile phones and infotainment systems*'; ***(iii)*** the voice command system (for text messages) is '*mentally rude*'; ***(iv)*** MirrorLink does not support some of the most popular and used *apps* including Google Maps and Waze [124].

connected car models adopting Smart Device Link, InControl (Land Rover) and HondaLink technologies (https://www.sygic.com/enterprise/use-case/automotive, webpage verified on 3 November 2020, in doc. no. 194).
Smart Device Link allows developers to program *apps* compatible with the *infotainment* systems of connected cars without the involvement of *smartphone* manufacturers. Smart Device Link is led by a consortium whose members are car manufacturers Ford, Suzuki, Toyota, Madza and Subaru (https://www.smartdevicelink.com/).

118 See doc. no. 163 (PSA reply of 30 September 2020).

119 See Doc. No 162 (Renault's reply of 29 September 2020).

120 See doc. no. 161 (Volkswagen's reply of 25 September 2020).

121 See doc. no. 156 (FCA reply of 24 September 2020).

122 See Doc. No. 167 (Mercedes-Benz reply of 15 October 2020). MBUX (Mercedes-Benz User eXperience) is an artificial intelligence interface, launched with the 2018 Mercedes Clas se A.

123 See document No 157 (Enel X Italia's reply of 25 September).

124 The limitations of MirrorLink emerge, according to Enel X Italy, from numerous *online* sources, among which the article "*Why did MirrorLink fail*?" is cited (https://www.carexpert.com.au/car-news/why-did-mirrorlink-fail, in doc. No 194).

Operating systems for infotainment units: Android Automotive Operating System

88. *Smartphone projection apps* are distinct from the operating systems that manage the car's *infotainment* equipment. *Infotainment* systems comprise *hardware* and *software* components that allow the user to interface with some of the car's instruments, such as the *display* and steering wheel controls, in order to access information on the car's operation and information and entertainment services, such as navigation and radio [125] applications. *Smartphone projection apps,* on the other hand, represent the interface between the *smartphone* and the *infotainment* systems in order to allow easy and safe use of certain *apps* while driving, including through the car's controls.

89. The landscape of operating systems for car *infotainment* equipment appears to be rather varied, with manufacturers opting for proprietary models126 , manufacturers relying on market solutions127 , and manufacturers adopting a mixed model combining in-house work with external suppliers128. The variety of available solutions was highlighted by Google itself, which also pointed out that car manufacturers may use different solutions for different car models129. The adoption of a variety of operating systems for *infotainment* equipment for different models or model classes is also apparent from the replies of the car manufacturers surveyed (in particular, Volkswagen, FCA, Renault and PSA).

90. Google recently introduced the Android Automotive Operating System, which is an operating system (based on Android) to manage the *infotainment* (*hardware*) equipment of the [130] cars. Android Automotive Operating System was announced in the course of 2019 while the first model of car

125 See doc. No 125 (Mercedes-Benz reply of 20 July 2020), doc. No 131 (PSA reply of 29 July 2020), doc. No 133 (Volkswagen reply of 3 August 2020), doc. No 135 (Renault reply of 4 August 2020) and doc. No 155 (FCA reply of 21 September 2020). See also doc. No 122 (Google reply of 17 July 2020).

126 See document No 125 (Mercedes-Benz reply of 20 July 2020).

127 See doc. no 133 (Volkswagen's reply of 3 August 2020) and doc. no 155 (FCA's reply of 21 September 2020).

128 See Doc. No. 135 (Renault's reply of 4 August 2020) and Doc. No. 131 (PSA's reply of 29 July 2020).

129 See doc. no. 122 (Google's reply of 17 July 2020).

130 According to the timeline reconstructed in the expert report attached to Enel X Italia's application for precautionary measures (doc. no. 73), Android Automotive Operating System was announced by Google in March 2017 and the interfaces (APIs) for the development of compatible *apps* were released in April 2019. Indeed, Google stated that on 3 May 2019 it had amended the guidelines for *app* development for Android car platforms precisely to introduce "the *first time a reference to Android Automotive OS, in order to familiarise developers with this new operating system that is not yet available to date, but could be launched as early as 2019*" (doc. no. 25, Google's response of 30 July 2019).

which adopts Android Automotive Operating System (Volvo Polestar 2) was put on the market in 2020.

91. Google has reported that four car manufacturers - namely Volvo, General Motor, FCA and the Renault-Nissan-Mitsubishi *partnership* - have publicly expressed their intention to adopt Android Automotive Operating System for certain models (Volvo for the Polestar 2 model, launched in the second half of 2020, and General Motor from 2021). Moreover, according to some reports, BMW and Volkswagen may also use Android Automotive Operating System131 in the future.

92. Even if the carmaker decides to adopt Android Automotive Operating System, it is up to the carmaker itself to decide whether or not to allow *infotainment* systems to interoperate with Android Auto. "*It is up to OEMs to decide whether their vehicles will incorporate support for projecting smartphone screen content. For example, an OEM may decide that its version of AAOS does not support Android Auto, but rather Apple CarPlay* "[132].

93. Moreover, Google has developed a version of Google Play for Android Automotive Operating System and licenses it to manufacturers who decide to use it (with Android Automotive Operating System). The version of Google Play for Android Automotive Operating System has been designed with the objective of ensuring the user's safety when driving and therefore differs from the version for *smartphones* and *tablets*, even though it is based on the latter. In particular, developers have to create two versions of the same *app*, one for each *app store* considered; moreover, Google Play for Android Automotive Operating System contains a few dozen *apps* (around thirty as of 17 July 2020) compared to around three million in the Google Play Store for Android (*smartphones* and *tablets*).

94. Google has developed a *template* (i.e. a *set of programming* tools based on a predefined based on a predefined *app template*) for *media apps* compatible with the Android Automotive Operating System; this *template is* based on the corresponding *template* for Android Auto and can be customised by the car manufacturer. In addition, Google has developed a version of Google Maps for Android Automotive Operating System and considers it very likely that, after the development of a *template* for third-party navigation *apps* for Android Auto (which was expected by the end of 2020), a similar template will be developed for Android Auto.

131 See doc. no. 122 (Google's reply of 17 July 2020).
132 See doc. no. 122 (Google's reply of 17 July 2020).

template can be imported to Android Automotive Operating System in a short period of time [133].

95. Concerning the data connection used by *apps* on the Android Automotive Operating System, Google explained that *apps* generally use the car's data connection. However, it is up to the car manufacturer to decide whether *apps* should use the *smartphone* data connection or the car data connection[134].

96. On the Android Automotive Operating System, SMS messaging and calls can be used via voice commands. Google also plans to make 'Actions on Google' available on the Android Automotive Operating System in 2020, so that *media* and messaging *apps* can also be used via Google Assistant, and '*Google apps such as Google Maps allow the user to perform navigation-related searches via voice commands*'.[135]

97. Although Android Automotive Operating System and Android Auto are different products and respond to different user functions from the car manufacturers' point of view, from the developers' point of view they are comparable products since in both cases Google defines and makes available tools for *app* programming. As pointed out, also for Android Automotive Operating System, Google has defined a *template* for *media* (audio content) *apps*, derived from the corresponding *template* for Android Auto; moreover, Google considers it very likely that it will define a *template* for navigation *apps* for Android Automotive Operating System after having defined the corresponding *template* for Android Auto. Moreover, in the pages dedicated to developers entitled "*Androi d for Cars", both the* programming tools for Android Auto and those for Android Automotive Operating System136 are discussed.

133 '*Google has developed versions of Google Maps (for AAOS and Android Auto) and Waze (for Android Auto only) that can be used safely in vehicles. These versions are available on Google Play. As the Authority is aware, Google is developing a template for third-party navigation apps for Android Auto with the aim of ensuring driver safety. Google expects this template to be ready by the end of 2020. Most likely, Google will import this template to AAOS shortly thereafter, although work on this has not yet started. Alternatively, navigation apps can (already now) be pre-installed directly by the OEM, if they meet the requirements set by that OEM*" (doc. no. 122, Google's reply of 17 July 2020, footnote 22).

134 '*It is up to the OEMs to decide whether AAOS and available apps should use the data connection provided by mobile telecommunications operators to the car or to the mobile device connected to the vehicle. If the car has a data connection, apps on AAOS will generally use that data connection. However, OEMs may also enable the car to use the data connection of the mobile device when the latter is available (e.g. by tethering to the data connection of the smartphone)*". (Doc. No. 122, Google's reply of 17 July 2020).

135 See doc. no. 122 (Google's reply of 17 July 2020).

136 See https://developer.android.com/cars, *webpage* verified on 7 December 2020, in doc. no. 194.

Apps for services related to electric charging

The development phase of electric mobility

98. In the course of the proceedings, Enel X Italia pointed out that sales of electric vehicles are going through a phase of development sustained not only by investments by car manufacturers, but also by stricter regulations on emissions from cars and light commercial vehicles137 and public incentives for the purchase of electric vehicles138. According to the company, "*we are on the verge of a real transport revolution in Europe, as all major car manufacturers have unveiled their electric car models and will be able to deliver vehicles to consumers in the early 2020s* "[139].

99. Data on registrations of *plug-in* hybrid and electric cars, released by UNRAE (Table 1), show significant growth for these types of cars in 2019 compared to 2018 (+79%) and, more markedly, in the first ten months of 2020 compared to the whole of 2019 (+113%). Electric and *plug-in* hybrid cars still remain a residual category: in the period of highest observed growth, i.e. the first ten months of 2020, registrations of interest amounted to 36,529 against a total of 1,131,466. However, the weight of electric and *plug-in* hybrid cars is growing: plus 0.5% in 2018, plus 0.9% in 2019, plus 3.2% in the first ten months of 2020.

Table 1 - Plug-in hybrid and electric car registrations in Italy

	2018	**2019**	**January to October 2020**	***Change % 2019 vs 2018***	***% change Jan-Oct 2020 vs 2019***
***Plug-in* hybrid cars**	4.569	6.498	16.080	***42%***	***147%***
Electric cars	4.996	10.661	20.449	***113%***	***92%***
Electric cars and *plug-in* hybrids	9.565	17.159	36.529	***79%***	***113%***

137 On 1 January 2020, Regulation (EU) 2019/631 came into force, setting strict limits for manufacturers in terms of the average emissions of their fleet of new vehicles registered in a given year, for the period 2020-2030.

138 See doc. no. 73 (Enel X Italia's application for precautionary measures of 20 February 2020).

139 See doc. no. 49 (communication of Enel X Italia of 30 October 2019). See also doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019) where it is stated: "*the diffusion of electric vehicles is strongly accelerating*" and furthermore "*the incidence of the value of the battery on the overall value of an electric car has significantly declined and is approaching its minimum level: this is a significant fact given that in the early stages of the marketing of electric cars the cost of the batteries had a significant impact on the cost of production and on the selling price of electric cars*".

% electric cars and plug-in hybrids on total registrations	***0,5%***	***0,9%***	***3,2%***		
Total registrations	1.909.952	1.916.222	1.131.466		

Source: Elaborations on UNRAE data - Analysis of the motor vehicle market in Italy, Years 2018 and 2019, and Market structure, October 2020

100. According to Enel X Italia, the spring of 2020 should have marked the start of a phase of significant growth in sales of electric cars in Italy, given that car manufacturers, in addition to delivering the electric cars booked in 2019, would have presented new models during 2020; furthermore, a significant growth in sales of electric cars and *plug-in* hybrids at European level was expected in 2020140. As a result of the Covid-19 health emergency and the containment measures adopted, according to Enel X Italia, the start of the significant growth phase in sales of electric cars was postponed between the end of 2020 and the early months of 2021141.

101. The car manufacturers questioned in the investigation not only reported on the marketing and planning of numerous electric car models (*full electric* and *plug-in hybrid*), but also on the expectation, shared by the industry, that the five-year period 2020-2025 will be a turning point in the spread of electric cars. In particular, a 2019 study by the Politecnico di Milano142 has been cited in which three scenarios for the development of electric mobility (basic, moderate and accelerated) are identified in terms of the number of electric vehicles circulating and the percentage weight of electric vehicles on new registrations (see Figure 4) and it is stated that "[i]*n all three scenarios, the "real" impact of electric vehicles starts to be seen around 2025 - in line with the draft* NIPEC [National Integrated Energy and Climate Plan] - *followed by a period of very strong growth between 2025 and 2030.*

140 See doc. no. 73 (Enel X Italia's application for precautionary measures of 20 February 2020). On the forecast of growth in sales of electric vehicles Enel X Italia cites the source Bloomberg and in particular the article "*Europe Gains Ground in Global Race to Sell Electric Cars*" of 12 December 2019 (https://www.bloomberg.com/news/articles/2019-12-12/europe-gains-ground-in-global-race-to-sell-electric-cars, in doc. no. 194).

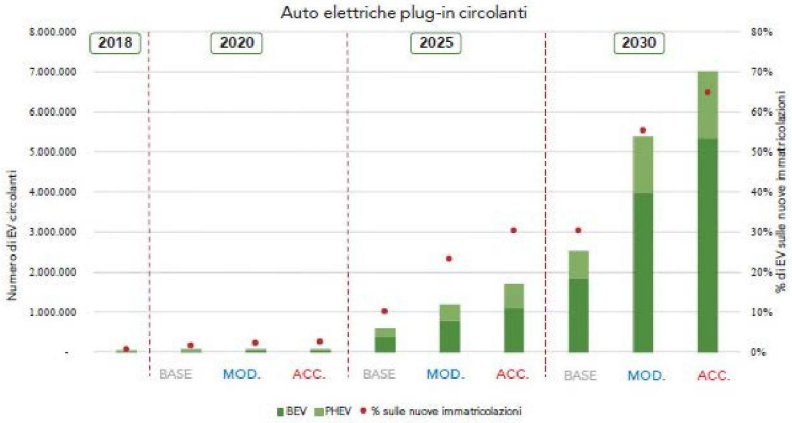
141 See doc. no. 81 (supplement to Enel X Italia's application for precautionary measures).
According to Energy & Strategy Group's October 2020 Smart Mobility Report, available *online upon* registration (https://www.energystrategy.it/assets/files/SMR_20_webdef29_10.pdf), "[n]otwithstanding *an overall declining car market, the electric car market has confirmed its growth. In fact, registrations of electric cars (BEVs and PHEVs) accounted for more than 3% of the total, (+2% compared to the same period in 2019) amounting to almost 30 thousand electric cars registered in the first nine months of 2020 (+155% compared to the same period in 2019).*"

142 September 2019 '*Smart Mobility Report*' study by Energy & Strategy Group, available *online after* registration (https://www.energystrategy.it/assets/files/SMR_19_web_v2.pdf).

2030". According to car manufacturers, the main factors behind this growth are European regulations to limit carbon dioxide emissions, incentives for the purchase of electric cars and changes in purchasing and consumption behaviour in favour of electric mobility143.

143 In particular, the automotive groups represented as follows.
Mercedes-Benz considers that electric mobility is destined to grow in the next few years '*both because of changes in the purchasing behaviour of customers and because of the incentives of various kinds linked to electric mobility which are currently available*'; the company also referred to the study by the Politecnico di Milano, according to which the effects of the growth phase in sales of electric cars will be seen in 2025 (see document No 125, reply by Mercedes-Benz of 20 July 2020).
PSA believes that the development of electric mobility in Italy over the next few years will be supported by the need for car manufacturers to comply with the limits on carbon dioxide emissions (CAFE - *Corp orate Average Fuel Economy*) imposed by European legislation; the company also cited a UNRAE report that forecasts a growth in registrations of 97% for *plug-in* hybrids and 127% for battery-powered cars by 2020, taking into account the slowdown in growth in the first half of the year (see document no. 131, PSA's reply of 29 July 2020).
Renault points out that in the first half of 2020 sales of electric vehicles grew significantly compared to the same period in 2019, even though there was a sharp drop in sales of conventional fuels, attributing the different *trend* to public incentives for the purchase of electric cars and to "*a growing customer awareness*" in favour of electric mobility; according to Renault, the growth *trend* is destined to continue over the next few years as a result of the strengthening of public incentives for the purchase of electric cars, the CAFE targets set at European level, traffic restriction measures in city centres and the orientation of car manufacturers' offerings in favour of electric models (see doc. No 135, Renault's reply of 4 August 2020).
FCA reports that "[w]*ithin 2026, leading analysts expect market penetration of Plug-In vehicles (BEVs and PHEVs) to be between 23% and 30%*" at European level, and that, with reference to Italy, there is "*a forecast of steady growth in market share up to 24% in 2025 (equivalent to about 440.000 Plug-In vehicles (BEVs and PHEVs) sold in that year*"; the main *driver* of the growth in sales of electric vehicles is to be found in the constraints on maximum levels of carbon dioxide emissions set **by** European regulations, constraints that have not been relaxed as a result of the health emergency; in some countries, including Italy, there are also public incentives for the purchase of electric cars, possibly combined with those for scrapping cars with internal combustion engines (see doc. no. 155, FCA response of 21 September 2019).
Volkswagen cites the growth forecasts for sales of electric cars contained in the study by the Politecnico di Milano and points out that sales of electric cars have shown a positive *trend* since 2017, even in the face of a contraction in the sector as a whole; the carmaker believes that "*electric mobility is not destined to remain a market niche, but is becoming a fundamental component of the mobility of the future*"; Volkswagen also affirms that, according to its "TOGETHER Strategy 2025", the Volskwagen Group "*intends to invest significantly in electric mobility and artificial intelligence*"; the company also outlines a framework of incentives and facilities in Italy for the purchase of electric cars: cd. The company also outlines the incentives and benefits provided in Italy for the purchase of electric cars: the so-called "ecobonus", regional incentives and those of the city of Milan, concessions on road tax, facilitated access to car parks and restricted traffic zones, incentives provided by the so-called "Decreto Rilancio", the so-called "Dec. Decree, the so-called "eco-tax" (which is a disincentive to purchase cars with emissions above a certain threshold). See doc. no. 133 (Volkswagen's reply of 3 August 2020).

Figure 4 - Growth scenarios for electric vehicle registrations in Italy



Source: "Smart Mobility Report" by Energy & Strategy Group, September 2019

102. As far as electric recharging is concerned, it has been pointed out that the accessibility of public or publicly accessible recharging points144 is a central factor in guaranteeing an adequate driving experience and, therefore, a *driver* for the development of electric mobility. In fact, the presence of a sufficiently capillary network of recharging infrastructures that is easily accessible and usable is fundamental in order to deal with what is known as "recharging anxiety", which constitutes one of the greatest obstacles to the spread of electric mobility from the point of view of consumers/users, together with the cost of purchasing electric cars [145.]

103. *In this regard,* FCA stated that "[it is] *therefore fundamental that navigation tools and APPs for smartphones allow to identify the columns actually available in the network to which the user is subscribed*" thus affirming not only the relevance of information on the actual accessibility of the recharging columns but also the substitutability for this purpose of specialised *apps* and navigation services [146.] Volkswagen referred to the study carried out by the Politecnico di Milano, pointing out (among other things) that a *survey* conducted among users showed that '*the main driver in choosing which charging point to use is the location of the charging point*'.

144 In industry jargon, public (roadside) or publicly accessible charging points (e.g. in shopping centres or car parks) are contrasted with private charging points, such as those located at the user's home or workplace (with access restricted to employees).

145 See Doc. No 44 (Enel X Italia reply of 22 October 2019), Doc. No 125 (Mercedes-Benz reply of 20 July 2020), Doc. No 131 (PSA reply of 29 July 2020), Doc. No 135 (Renault reply of 4 August 2020), Doc. No 133 (Volkswagen reply of 3 August 2020) and Doc. No 155 (FCA reply of 21 September 2020).

146 See Doc. No. 155 (FCA reply of 21 September 2020).

recharging along the route to the final destination, with price playing a minor role "[147].

The electric charging chain

104. According to the description given by Enel X Italia, electric charging "*is based on two pillars: assets, i.e. the network of charging points, and services, from which* [...] *most of the added value of the supply chain will derive* "[148]. The management of recharging infrastructures is followed by CPOs (*Charging Point Operators*) while the relationship with the user, and therefore the more strictly service phase, is followed by MSPs (*Mobility Service Providers*)[149].
105. In addition, the supply chain for EV charging services is evolving towards the creation of platforms - such as Hubject, Girève, e-Clearing Net and others - that connect CPOs with MSPs and MSPs with each other. Through these platforms, MSPs can extend the *networks of* charging infrastructures made available to users in a *one-stop-shop* approach[150] . These platforms are based on interoperability between the systems of the participating operators and also act as *clearing houses* for monetary items between the operators151.
106. Enel X Italia is an MSP integrated in a group that also operates as a CPO. For its activity as an MSP Enel X Italia has developed the JuiceP ass *app*. In fact, MSPs are increasingly developing *apps* while also offering their services via *cards*.

147 See doc. no. 133 (Volkswagen's reply of 3 August 2020).
148 See doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019). See also doc. no. 49 (communication of Enel X Italia of 30 October 2019).
149 Of course, there are entities that operate as both CPOs and MSPs. However, in order to operate as an MSP it is not necessary to also be a CPO and, moreover, an MSP that is also a CPO can also cover the *networks of* other CPOs. See doc. no. 49 (communication from Enel X Italy dated 30 October 2019).
150 In other words, for the user who relies on a given MSP, it is irrelevant whether a given recharging column is managed by a CPO connected to that MSP or by a different CPO or by a different MSP, as long as the reference MSP has interoperability agreements in place for that given column. See doc. no. 49 (communication of Enel X Italia dated 30 October 2019). See also doc. no. 95 (reply by Enel X Italia dated 16 June 2020).
151 "*The supply chain of services for electric mobility is in turn evolving, showing a trend towards the creation of entities that operate as clearing houses between the multiple CPOs and MSPs (Mobility Service Providers) present on the market so as to make it easier for users to use charging points managed by different CPOs and/or covered by different MSPs*" (doc. no. 43, minutes of the hearing of Enel X Italia of 10 October 2019). See also doc. no. 80 (reply by Enel X Italia dated 16 March 2020), doc. no. 95 (reply by Enel X Italia dated 16 June 2020) and study "*Smart Mobility Report*" dated September 2019 by Energy & Strategy Group (Politecnico di Milano).

Apps for services related to electric charging

107. There are numerous *apps* like JuicePass for electric vehicle charging services: e.g. Ionity, ChargePoint, EVgo, NextCharge, PlugShare, EvWay, e-Moving, Recharge Around, D-Mobility, Be Charge, E-Mobitaly, Yess.Energy, Neogy Mobility, Plug&Go, ChargeMap and Electromaps as well as Digital Charging Solutions and PlugSurfing. Car manufacturers themselves have developed *apps* for electric charging related services - e.g. FCA's My Easy Charge152, Volkswagen's We Charge153, and BMWCharging and MiniCharging (originated from ChargeNow) - and/or electric charging related services integrated in *apps* providing a wide range of services - e.g. Mercedes-Benz's Mercedes Me154, Volkswagen's We Connect155 and P SA's Free2Move156; in several cases, car groups cooperate with *Mobility Service Providers157*.

108. *Apps* for services related to electric charging, including those developed by car manufacturers and/or integrated into car manufacturers' service *apps*, are usually available in the Google Play Store and the Apple App Store. That is, these *apps* are available in the Android and iOS ecosystems.

109. The different *apps* all provide for the search and visualisation of charging infrastructures on a map, which is necessarily the first *step* to charging, similar to refuelling. The MSPs then intermediate the relationship with the CPO, allowing the management of the charging process (start, monitoring and completion) and the payment of the charging. In several cases, the *apps allow the* booking of the charging session: among the above mentioned *apps,* booking is possible in JuicePass as well as in (at least) NextCharge and Recharge Around, Be Charge, Yess.Energy and Neogy Mobility 158.

110. The functionalities of searching and booking (if any) charging infrastructures as well as the management of the charging session distinguish electric charging service *apps* from *cards*. The latter, in fact,

152 See Doc. No. 155 (FCA reply of 21 September 2020).
153 See doc. no. 133 (Volkswagen's reply of 3 August 2020).
154 See doc. no. 167 (Mercedes-Benz reply of 15 October 2020).
155 See doc. no. 133 (Volkswagen's reply of 3 August 2020).
156 See doc. no. 131 (PSA reply of 29 July 2020).
157 See Doc. No 167 (Mercedes-Benz reply of 15 October 2020), Doc. No 155 (FCA reply of 21 September 2020), Doc. No 131 (PSA reply of 29 July 2020) and Doc. No 135 (Renault reply of 4 August 2020).
158 See article *"Electric cars, the best apps to find the columns*" of 23 December 2019 on the website "insideevs" (https://insideevs.it/features/389366/migliori-app-colonnine-auto-elettriche/, in doc. no. 194).

allow only the payment function (possibly associated with customer customisation programmes).

The competitive space of services related to electric charging provided through apps

Definition

111. The competitive relationship between electric charging service apps and navigation apps identifies a competitive space that contains both types of *apps*. This is expressed in terms of actual competition (search and navigation functions), potential competition (expansion of charging-related functions in navigation *apps*) and competition for users and data.
112. Navigation *apps* offer navigation and - what is relevant here - search functions for a wide range of points of interest (generalist approach) while connected services *apps* are specialised on charging stations and services for charging electric vehicles (specialist approach). This dichotomy between the generalist and the specialist approach does not prevent, as will be seen, the identification of a competitive space with defined boundaries in which the conduct of firms can be assessed from *an anti-trust* perspective.
113. The search function of the charging infrastructure, as well as the navigation function, can be carried out both on navigation apps and on *apps of* services related to electric charging (effective competition). The search function usually returns information not only on the location of the charging stations but also on the technical and operational characteristics of the charging points (such as socket type, opening hours, availability, etc.). As we have seen, the location of the recharging infrastructures along the route travelled by the user is the main factor in choosing the infrastructure at which to recharge159. As far as the technical and operational characteristics of the charging points are concerned, the user needs to know them in order to verify at which column it is possible to recharge his electric vehicle.
114. The search function, therefore, is the user's gateway to the services (charging sales and related) offered by electric charging service *apps. For* this reason, the functionality of the *apps*

159 See "*Smart Mobility Report*" of September 2019 by Energy & Strategy Group of Politecnico di Milano. See also doc. no. 133 (Volkswagen's reply of 3 August 2020).

Navigation apps allowing the search of charging infrastructures and the provision of detailed information on charging points may entail an intermediation by navigation apps in the use of electric charging service *apps*: the user may, in fact, search for charging points through the navigation *app* and then manage and complete the charging through an electric charging service *app*; moreover, where navigation *apps* contain links to electric charging service *apps* and possibly *in-app* payment functions, the user may manage the charging and possibly pay for the charging without leaving the navigation *app* [160]. For a given electric charging service *app*, the described intermediation effect may lead to the consequence that the user may choose a charging station that is not part of the covered *network.*

115. Navigation apps can also represent a complete alternative to MSP *apps* if they integrate other functions such as management and/or payment of the charging and possibly reservation of the charging point (potential competition). In this respect, it is worth noting that (at least) one navigation *app* developer has integrated typical MSP functions into its *app*: in particular, the developer Sygic makes available free of charge to users of the Sygic GP S Navigation *app* functions such as checking the availability of charging points, notification of completion of charging and payment directly from the *app*; for this purpose, all users need to do is to activate the electric vehicle mode [161].

116. In addition, with the so-called *plug&charge* technology*, it* is not necessary to authenticate oneself at the *network of* recharging stations, by means of an app *or* card*, in order* to recharge, but it is enough to insert the plug into the battery of one's car. Therefore, the spread of the technology in question would have the consequence that the user experience through the *app would* end with the search and choice of the recharging station. The 2019 Milan Polytechnic study on the electric mobility sector mentions *plug&charge* technology as an emerging *trend*, also indicating *ad hoc* projects *launched* or planned by Daimler and Audi and estimating around 800 enabled charging points (at the time) in Italy162.

117. Both Google and Apple show significant interest in expanding their offer of services related to electric charging. As far as Google is concerned, as will be seen below, it has made significant efforts to extend the coverage of its charging network and provide detailed information

160 See doc. no. 65 (minutes of the hearing of Enel X Italia of 17 December 2019).

161 See "Electric Vehicle Mode" page on Sygic's *website* (https://www.sygic.com/it/what-is/electric-vehicle-mode/), verified on 11 November 2020 (in doc. no. 194).

162 "*Smart Mobility Report*" of September 2019 by Energy & Strategy Group.

on charging stations on Google Maps; furthermore, Google stated that "[t]*o improve the charging experience, in the future Google Maps may help users to connect to apps or websites operated by such MSPs at the appropriate time during their journey, for example or when arriving at a charging station* "[163]. As for Apple, at the launch of iOS 14 (June 2020), it announced that it would be possible in Apple Maps to calculate routes for electric vehicles by including charging stations in the route, depending on battery charge and socket type.[164]
The Apple Maps website is a useful tool to help users connect to apps or websites managed by such MSPs at the right time during their journey, for example or when arriving at a charging station.

118. In conclusion, there is an overlap of functions between electric charging service *apps* and navigation apps with regard to the function of searching for the location of charging stations and relevant information on them. This overlap is likely to lead to an intermediation of electric charging service *apps by* navigation *apps.* Furthermore, navigation *apps* may become an alternative to electric charging service apps depending on the specific functionalities that can be added to the navigation *apps* themselves (such as booking and payment) and on the development of *plug&charge* technology, allowing the management of charging without the use of dedicated apps or cards.

119. In the final analysis, the two types of *apps* (navigation and services related to electric recharging) compete for the same resource, namely the relationship with the user (competition for users): for navigation *apps,* it is important that users use them to carry out activities related to the localisation of points of interest on a map, including the search for recharging infrastructures; for *apps* related to electric recharging services, it is important that users use them to search for recharging columns as a first step towards the provision of recharging services.

120. *The* relevance of the user relationship for *apps* is such that Google makes a clear distinction between the *downloads of* an *app* and the actual use of the *app by* users. Google warns that most downloaded apps are not actually used: "*Growing number of app downloads YOY. Only 20% of apps are used more than once a month. More than 70% of apps are uninstalled in less than 1 year*". In other ways,

163 See doc. no. 122 (Google's reply of 17 July 2020). In this regard, it is worth highlighting that, in the version of Google Maps for *smartphones* and *tablets,* "[a]ll *of the available points of interest (e.g., hotels, restaurants, home delivery services) include links to third-party websites and apps, through which the user can book a hotel or restaurant or order a meal*" (see doc. no. 36, Google Italy's submission of 13 August 2019).

164 "*Electric vehicle routing adds charging stops along a planned route based on current vehicle charge and charger types*" (see press release "*Apple reimagines the iPhone experience with iOS 14*" of 22 June 2020, in doc. no. 194).

Google highlights the possibilities of creating and consolidating a relationship for users through the use of the *app*, citing the opportunity for '*direct* user *engagement*' and the reinforcement of '*loyalty*', as illustrated in the diagram below (Figure 5).

Figure 5 - Extract from the presentation entitled "Enel X & Google. Ideas for Enel X Recharge".

Source: DC5 document (supplement to Enel X Italia report of 3 April 2019)

121. Establishing and maintaining a relationship with the user also means creating and consolidating a source of data, since through the use of *apps* users generate data (competition for data). These data constitute a valuable *input* both to increase the level of services offered and to disseminate advertising content according to the characteristics of the recipients. Google and Enel X Italia have both provided, each for their respective *app,* indications on the types of user-generated data that can be collected and on the possible uses of such data (*below*).
122. From a geographic point of view, in the present case, the competitive area shared by navigation apps and *apps* for services related to electric recharging concerns the Italian territory. This is because the JuiceP ass *app* (formerly Enel X Recharge), in relation to which Enel X Italia has complained of the impossibility of developing a version publishable on Android Auto, is focused on the Italian territory.

The JuicePass app (already Enel X Recharge)

123. The JuicePass *app*, formerly known as Enel X Recharge, makes it possible to ***(i)*** view and search for recharging infrastructures on a map, also accessing relevant information for the purposes of recharging (type of socket, socket status, maximum deliverable power, availability of the column, *etc.), (ii) book a recharging point, (iii) learn about and be guided through routes to reach the recharging infrastructure of interest and (iv) start, stop, monitor and (v) pay for the recharging session.*), ***(ii) to*** book a charging point, ***(iii) to*** know and be guided through the routes to the charging infrastructure of interest and ***(iv) to*** start, stop, monitor and ***(v)*** pay for the charging session165.

124. For the functions *under* ***(i)*** and ***(iii),*** which are among the typical functions of navigation *apps,* i.e. search and display of points of interest (in this case, charging infrastructures for electric vehicles) and navigation to points of interest, JuicePass uses the maps of the *device*'s reference operating system, i.e. Google Maps for Android *devices* and Apple Maps for iOS [166] *devices*. Enel X Recharge has repeatedly pointed out that the distinguishing feature of JuicePass is the possibility of booking recharging columns.

125. In particular, electric recharging takes significantly longer than refuelling, since at the most common recharging infrastructures it takes about forty-five minutes for a *city car* and about two hours for a medium-sized [car167]. It is therefore particularly important that the user is sure to find the chosen charging station free on arrival (and not already booked or in use by another user)[168]. From the point of view of

165 During the hearing of 10 October 2020, Enel X Italia showed a video illustrating the functioning of the JuicePass *app* in which "*actually three phases are* distinguished*: search for the socket according to the type of socket and selection of the socket; booking of the recharge; initiation, monitoring and payment of the recharge*" (doc. no. 43, minutes of the hearing of Enel X Italia of 10 October 2019).
More in detail, the functions of JuicePass are: *'- to display on a map the charging stations dedicated to electric vehicles compatible with the service; - to configure different profiles and pricing plans for charging; - to book a socket for a maximum duration of 15 minutes and display the route to reach it; - to purchase an Enel X Recharge card; - to start or stop the charging process (as an alternative to the card); - to monitor in real time the kWh delivered during the charging session; - to pay the charging session directly through the App; - to receive notifications about the charging session; - to monitor the consumption history*'. (see doc. DC1, Enel X Italia report).

166 "[W]*hen, following numerous user-app interactions on the smartphone, the user comes to select the column of interest and asks the app to take him there, the app opens Google Maps or the Apple map if the user is using an iPhone. Moreover, if the same request is made to the app while keeping Android Auto or Apple CarPlay open, the app opens Google Maps in the Android Auto version*" (doc. no. 23, minutes of Google Italy's hearing of 16 July 2019). See also doc. no. 122 (Google's reply of 17 July 2020).
As explained by Enel X Italia "*for navigation functionalities, the app refers to Google Maps or Apple maps, i.e. the navigation functions set on the device*" (doc. no. 43, minutes of Enel X Italia's hearing of 10 October 2019).

167 See doc. DC1 (report by Enel X Italy).

168 See doc. no. 73 (application for precautionary measures by Enel X Italia).

Enel X Italia believes that the booking function allows its JuicePass *app to* stand out from Google Maps - which is also an *app* with a very large user base - with specific reference to services related to electric recharging [169].

126. At the end of February 2020, the JuicePass *app covered [8,000-9,000]* charging points in Italy out of a total of 13,721 (estimated at the end of January 2020) for a coverage of *[60-70%]* [170]. At the same date, the JuicePass *app covered [1,000-2,000]* recharging points located in other EU countries, demonstrating that its operations are concentrated in Italy. Also at the end of February 2020, Enel X Mobility, the Enel Group company acting as Charging *Point Operator* (CPO), managed a network of *[7,000-8,000]* charging points in Italy, accounting for *[50-60%]* of total charging points (estimated at the end of January 2020).

127. The JuicePass *app* has been available since 2 May 2018 on the Google Play Store and Apple App Store *app stores.* Enel X Italia requested the integration of JuicePass into Android Auto from September 2018 but still remains outside of this platform.

128. In 2018, JuicePass *downloads were [up to 10,000]*, including *[up to 10,000] in the* iOS environment and *[up to 10,000] in the* Android environment; in 2019, *downloads* increased to [*10,000-20,000]*, including *[up to 10,000] in the* iOS environment and *[10,000-20,000]* in the Android environment. Monthly active users were [up to *10,000] in* December 2018 and *[up to 10,000]* in December 2019.

Table 2 - JuicePass downloads and monthly active users (years 2018 and 2019)

	2018	**2019**
Total downloads	Up to 10,000	[10.000-20.000]
of which downloads in Android environment	*Up to 10,000*	*[10.000-20.000]*
of which iOS downloads	*Up to 10,000*	*Up to 10,000*
Active users month (December)	Up to 10,000	Up to 10,000

Source: doc. no. 95 (Enel X Italia reply of 19 June 2020)

169 '*In other words, it is highly likely that if JuicePass users were given the possibility not only to view the charging stations, but also to book them with immediate and easy functions while driving the vehicle, they might prefer JuicePass to Google Maps with specific reference to the functions of viewing and booking the charging stations*' (doc. no. 73, application for adoption of precautionary measures by Enel X Italia).

170 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).

129. In order to be published on Android Auto, Enel X Italy had developed a version of JuicePass using the *template* for *media apps*; this was due to the fact that Google had only made available *templates* for *media* and messaging apps171. This version of JuicePass was based on exclusively voice interactions between the user and the *app* and, therefore, according to Enel X Italy, complied with the Android Auto *app* quality guidelines published by Google on its *app* developer pages [172].

130. On 12 November 2020, Enel X Italia announced that during the month of November 2020, JuicePass would be available on Apple CarPlay with the following functionalities: search for charging stations, selection, navigation, booking of an outlet at the selected charging station, starting and stopping the charging session173. The JuicePass *app* has been available on Apple CarPlay since 23 November 2020174.

131. This result is the result of the intensification of a collaboration (which had already begun) with Apple, following the presentation of the new iOS 14 operating system on 22 June 2020175. Apple had (among other things) announced that it would be possible to calculate routes for electric vehicles in Apple Maps by including charging stations in the route, depending on the battery charge and the type of socket. Apple also announced that Apple CarPlay would be open to new categories of *apps, including, in particular, apps* for charging electric vehicles, for parking and for ordering food at home. At the same time as presenting the iOS 14 system, Apple had released a *beta* version of the operating system, which allowed Enel X Italia to test the feasibility of a version of JuicePass

171 "*Enel X contacted Google from the very beginning of the project to bring JuicePass to Android Auto, namely in July 2018, to ask for support on how to proceed. Since Google had made available programming tools only for apps belonging to the media and messaging categories, Enel X developed the JuicePass app for Android Auto using, on Google's instructions, the programming tools for messaging apps, as it considered them more adherent to its own case*" (doc. no. 43, minutes of Enel X Italia's hearing of 10 October 2019).

172 See https://developer.android.com/docs/quality-guidelines/car-app-quality?hl=en.
In particular, according to Enel X Italy, "*Google believes that the App is not one of the multimedia or messaging applications, since it allows the visualization on a map and the booking of charging stations. And this, despite the fact that the integration of the App for Android Auto (i) has been developed in strict compliance with the guidelines specifically prepared by Google, and in accordance with them, and (ii) allows the interaction with the user, necessary for the booking of the charging stations, exclusively through voice messages in full compliance with the users' safety*" (see document DC1, Enel X Italia's report).

173 See doc. no. 169 (Enel X Italia's update note of 12 November 2020).

174 See document no. 173 (Enel X Italia's update note of 18 December 2020).

175 See press release "*Apple reimagines the iPhone experience with iOS 14*" of 22 June 2020 (https://www.apple.com/newsroom/2020/06/apple-reimagines-the-iphone-experience-with-ios-14/, at doc. no. 194). iOS 14 was released on 16 September 2020.

for Apple CarPlay and '*engage with the Apple team for technical insights*'[176].

132. Enel X Italia highlighted the importance of establishing and maintaining a relationship with users through *apps*. In particular, the company stated that "the relationship with the user is a *central issue for both Enel X and Google: for Enel X the relationship with the user is the starting point to offer services related to electric mobility, for Google the relationship with the user is the starting point to offer many services including those for electric mobility* "[177].

133. Enel X Italia provided an overview of the information produced by JuiceP ass users. In particular, the company highlighted the following classes of information:

- "Preferred *outlet and preferred columns of end customers*";
- "*Evi dence of the i ndi vided recharging socket and time made duo of travel*";
- "*More crowded areas*";
- "*Heat maps on attempts to find charging stations*";
- "*Historical data and customer habits* "[178].

134. Enel X Italia also provided some examples of how the information generated by JuiceP ass users can be useful to define and improve the service offered. In particular, the company highlighted that:

- Information on searches that did not result in a refill provides indications of areas of higher demand179;
- the identification of the most crowded areas, and therefore of greatest interest to users, makes it possible to promote '*dedicated and time-based offers*';
- knowledge of vehicle characteristics, such as remaining charge and socket type, could be used to define the optimal route to a given destination [180].

176 See doc. no. 169 (Enel X Italia's update note of 12 November 2020).
Enel X Italia specified that Apple made the iOS 14 *beta* version available to developers on June 22, 2020 and released the "final" version of the operating system on September 16, 2020; developers were able to program their *apps*, including those for electric charging, in the *beta* version without having to sign any agreement with Apple; the publication of *apps* for electric charging on Apple CarPlay was allowed at the same time as the release of the final version of iOS 14 (see document no. 173, Enel X Italia's update note of December 18, 2020).

177 See doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019).

178 See doc. no. 44 (Enel X Italia's reply of 22 October 2019).

179 "*With the use of the data acquired by the app, MSPs could build heat maps in relation to users' attempts to search for recharging infrastructure that did not subsequently result in a recharging event. This information is of particular importance as it provides MSPs with the possibility to identify the areas in which there is a higher demand from users*" (see doc. no. 44, Enel X Italia's reply of 22 October 2019). See also doc. no. 49 (communication of Enel X Italia dated 30 October 2019).

180 See doc. no. 44 (Enel X Italia's reply of 22 October 2019).

135. Enel X Italy also pointed out that the MSP has data on searches for recharging points that result in a recharge, while searches made on Google Maps constitute - from the point of view of the MSP - searches that do not result in a recharge. This second type of information would be of interest "for *operators active as CPOs, in the definition of infrastructure plans*" and "*for MSPs, in the definition of the strategy of expansion of agreements with CPOs (in the sense that the MSP will prefer the conclusion of agreements with CPOs present in the areas where there is greater demand for such services) as well as for the definition of pri cing logi ces*" [181].

Google Maps

136. As is well known, Google Maps is a navigation *app* that allows (among other things) to search for different points of interest on a map and to access relevant information about them. Among the points of interest covered by Google Maps are electric car charging stations.
137. The location of recharging stations and some information about them have already been available on Google Maps since at least mid-October 2018[182]. This functionality had been announced in a *post* on 16 October 2018 by Andrew Foster (Group Product Manager, Google Maps) in which the start of the service was announced thanks to the collaboration with Tesla and Chargepoint as well as SemaConnect, EVgo and Blink (USA), Chargemaster and P od P oint (UK) and Chargefox (Australia and New Zealand)[183].
138. During 2019, the location of charging stations and the visibility of some detailed information about the stations were made available in the Android Auto version of Google Maps. In February 2019, *[GA, Google Maps & Android Auto, Group Product Manager]* stated that charging station features, already visible on the *smartphone,* would also be visible on Android Auto, presumably

181 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).
182 See doc. DC4 (supplement to the s egnalisation of Enel X Italy of 25 March 2019), in particular articles "*Electric car columns on Google Maps Italy*" of 17 October 2018, on the website "mobilitasostenibile.it", and "*Electric cars, on Google Maps recharging columns also pop up*" of 24 December 2018, on "lastampa.it".
183 See *post* "*Get charged up with Google Maps*" (https://www.blog.google/products/maps/get-charged-google-maps/, in doc. no. 194). The *post in* question is referred to via a *link* in a preliminary version of the response sent on 18 January 2019 by Google to Enel X Italia. That preliminary version reads: '[f]*inally, I do want to emphasise that Google is committed to bringing EV recharging station information to end users. Our Google Maps team started integrating* [link] *such information, and has also reached out to Enel X to integrate yours*" (see documents ISP81 and ISP122).

in the course of the year184 and that, in addition, information on the real-time availability of the columns would also be made available ("*I am fine to have whoever presents verbally advise them that we're preparing to launch specific EV features, including EV port type and count, and real time availability soon*")[185].

139. Indeed, Google has represented that '[as] of *the end of April 2019, an additional feature has been introduced in Google Maps in the United States and the United Kingdom, namely the real-time availability of nearby charging stations. This function [...] is available in the two countries mentioned* [...] in *a simplified version (in order to distract drivers as little as possible) on Android Auto*'[186].

140. In the version of Google Maps for Android Auto and Android Automotive Operating System it is possible to search for charging stations ***(i)*** exclusively via *touch*, ***(ii)*** via *touch* and voice commands and (***iii)*** exclusively via voice commands. Information available on the charging points includes number, availability, type and speed of the sockets and opening hours of the point. The selection of a slot is done by *touch as well as the* start of navigation ("start" button)[187].

141. *Regarding* the deployment of Google Maps, Google explained that '*virtually all Android smartphone manufacturers have decided to pre-install Google Maps on their phones, by entering into licensing agreements with Google. Users therefore do not need to download Google Maps because it is already pre-installed on their device when they purchase it*'[188.] The number of daily unique users as of 31 December 2018 was *[5-10 million]*, as of 31 December 2019 *[5-10 million]*. Monthly unique users were *[10-50 million]* in December 2018 and *[10-50 million]* in December 2019.

In the future, we will display information such as the charging port types in Maps in Android Auto. Today this is only available on the phone. I am fine to indicate under NDA that this is coming to the Android Auto Maps pro duct this year' (see doc. ISP47, in particular, *email* from *[GA, Google Maps & Android Auto, Group Product Manager] dated* 15 February 2019 06:12).

185 See doc. ISP47, in particular *email* from *[GA, Google Maps & Android Auto, Group Product Manager] dated* 18 February 2019 01:19.
In an *email* dated February 1, 2019 10:55 AM *[GL1, Android, V.P. Engineering]* writes "*we're actively working to integrate EV charging station data into Google Maps for use across all surfaces (including Auto). Ifthey ultimately want to drive traffic to their stations, getting those stations into Google Maps is the best bet. We've done this already with the large networks, such as [Omissis]*". (see doc. ISP10).

186 See doc. no. 36 (Google Italy's submission of 13 August 2019). See also *post* '*Finding a place to charge your EV is easy with Google Maps*' by Alex Donaldson (Product Manager, Google Maps), 23 April 2019 (https://www.blog.google/products/maps/finding-place-charge-your-ev-easy-google-maps/, at doc. no. 194).

187 See doc. no 122, Google's reply of 17 July 2020.

188 See doc. no. 122, Google's reply of 17 July 2020.

142. Enel X Italia considers that, during the course of the investigation, Google has updated Google Maps by introducing the possibility to pay for the recharging of electric vehicles189 , basing this belief on the assessments expressed by some IT experts in an article on Google Maps version 10.30 [190]. In response to a specific question, Google stated that '[t]*ra*

Google's plans include assisting users to check through Google Maps which payment options are available at a given charging station, but has no plans to allow users to initiate or pay for a charging session directly through Google Maps' [191].

143. Google has also stated that it does not offer and has no plans to offer booking functionalities for charging stations through Google Maps and, more generally, that it has no plans to develop services typical of MSP [192]. However, as noted above, '[i]n *order to improve the charging experience, in the future Google Maps may help users connect to apps or websites operated by such MSPs at appropriate times during their journey, for example when arriving at a charging station*' [193].

144. In any case, the evidence on file shows that the integration of a booking function is technically possible and is among Google's future objectives. In particular, in the internal Google debate on the issue of the JuiceP ass *app* (at the time called Enel X Recharge), the possibility that a booking function could be integrated into Google Maps ("*could it be in roadmap for maps?* "[194]) was discussed, among other things,

189 '*Google* [has] *already proceeded, despite the ongoing antitrust proceedings, to "update" the version of Google Maps to allow the payment of electric charging services*' (see doc. no. 73, Enel X Italia's application for precautionary measures).

190 This is the article that appeared on the *website* <xda-developers.com> on 18 November 2019 entitled "Google *Maps 10.30 prepares to let you pay for EV charging and find compatible plugs" (*see doc. no. 80, Enel X Italia's reply of 16 March 2020). The article in question states that '*Google Maps 10.30 for Android has added strings that suggest it will support making payments straight from the app. ... New in version 10.30 are the following two strings, part ofa larger set ofstrings pertaining to electric vehicles, that describe adding payment methods to the user's electric vehicle profile*". The article was widely echoed in several other articles (see document no. 80, Enel X Italia's reply of 16 March 2020).

191 See doc. no. 122 (Google's reply of 17 July 2020).

192 "*Google does not offer, and has no plans to offer, EV charging station reservation functions on Google Maps*". "*Google has no current plans to develop services typically performed by Mobility Service Providers*" (see doc. no. 122, Google's reply of 17 July 2020). See also doc. no. 36 (Google Italy's submission of 13 August 2019).

193 See doc. no. 122 (Google's reply of 17 July 2020).

194 See doc. ISP36, in particular comment no. 16, by *[GI1, Google Cloud, Account Manager]*. See also doc. ISP100.

within Google is certain that it will come to this ("*I'm sure that Google Maps will at some poi nt bui ld such a feature*")[195].

145. Several pieces of evidence point to the fact that Google has invested resources to improve e-mobility services offered through Google Maps, with respect to Italy. Firstly, Google has acquired datasets on charging stations in (several countries including) Italy. In addition, Google has developed a format called GELFS (Google EV Location Feed Specification) for the data on charging stations in Google products (including Google Maps and Waze). In addition, Google is actively pursuing the goal of feeding the flow of EV charging data through the GELFS format.

146. With respect to the acquisition of datasets Google concluded contracts with two *[types of operator],* namely, *[Omissis]* (agreement concluded on 3 July 2018) and *[Omissis]* (agreement concluded on 21 December 2018); these two contracts allowed for a coverage of *[10-20%]* of the charging stations present Italy [196]. Google also entered into agreements with [Omissis*] (agreement entered into on* 20 September 2018), *[Omissis] (agreement entered into on* 23 October 2019) and *[Omissis]* (agreement entered into on 6 April 2020) for electric vehicles. *[Omissis]*, [Omissis*]* and *[Omissis]* provide data using the format defined by Google (GELFS)[197]. In addition, Google uses publicly available data on the websites of Italian municipalities198.

147. At the end of 2019, Google was tracking *[8,000-9,000]* charging points out of a total of 13,721 (estimate for January 2020) for a coverage of *[6070%]* [199]. Moreover, as highlighted, during 2020 Google entered into an additional agreement (with *[Omissis]*) to acquire information on charging stations so that the coverage of Google Maps increased (at least) in absolute terms.

148. The GELFS format is described in an internal Google document called '*Google EV Location Feed Specification*' whose references are '*Status: Draft V0. 86 | Final, Created: 2018-04-27 / Last updated: 2018-0511*' and labelled '*Google Confidential and Proprietary - Provided under NDA*'[200]. A schematic description of the GELFS specification can be found in an internal Google document where it is pointed out that it is a common format for making available information on the

195 See doc. ISP36, in particular comment No 17, by *[GN, EMEA Partnerships, Head of Automotive]*. See also doc. ISP100.
196 See doc. no. 36 (Google Italy's submission of 13 August 2019).
197 See doc. no. 122 (Google's reply of 17 July 2020).
198 See doc. no. 36 (Google Italy's submission of 13 August 2019).
199 See doc. no. 122 (Google's reply of 17 July 2020).
200 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and doc. ISP86.

products, among which Google Maps and Waze are explicitly mentioned (and no other products)[201]. As to the content, it is pointed out that it concerns information ***(i)*** on the location of the charging stations, ***(ii) on the*** characteristics of the sockets and the power output, ***(iii) on the availability of the charging*** point in real time, ***(iv)*** on the availability of the charging point in the future (reservation lists, out-of-service) and ***(v)*** on scheduled maintenance202.

149. The GELFS format evidently identifies the information that Google considers relevant in relation to the search for electric charging points. Indeed, in specifying the information that Google itself could acquire in the event that Enel X Italia decided to integrate the information on recharging points in Google Maps, Google essentially reproduces the content of the GELFS203 format.

150. Enel X Italy pointed out that in the 'Payment' section of the GELFS format there is information on currency, price, payment unit (time or kWh), duration tariff, possible *extra* for parking and supported payment plans, as well as on the start and end time of the duration session. The articulation of this information is, according to Enel X Italy, so detailed that Google will be able to '*incorporate even the most complex pricing schemes*'. The very distinction between 'location', 'station' and 'port', on which the format is based, is '*indicative of the level of detail of the functionalities that Google intends to implement with the GELFS project*'. In addition, incremental updates of socket status information are foreseen '*to enable low-latency publication of socket status changes (busy, reserved, available)*'[204].

151. The contact person in Italy for the conclusion of agreements for the acquisition of data streams in GELFS format is *[GI3 Global Product Partnerships,*

201 See doc. ISP62. See also doc. DC5 and doc. ISP86.

202 "*The Google EV Location Feed Specification (GELFS) defines a common format for electric vehicle (EV) charging locations and associated information. GELFS enables EV charging networks to publish this data to be consumed by a variety of applications including Google Maps. Key to this format is the ability to provide:*

- *Information to accurately represent the location ofthe charging station (address and a hosting business, if relevant), - The connectors and power characteristics ofthe charging station, - Real time usage availability,*
- *Future planned availability, such as reservati on queues, or out ofservi ce mainten ance periods*" (see doc. DC5 and doc. ISP86; see also doc. ISP62).

203 See doc. no. 122 (Google's reply of 17 July 2020). The information listed is *'- name; - address; - location (latitude/longitude); - opening hours; - website; - phone number; - number of charging ports; - types of charging ports; - power levels of charging ports; - real-time availability of charging points; - locations hosting charging points; - description of location of charging points; - payment methods accepted at charging points; - signs that charging points are out of service, if available*'.

204 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).

Manager] [205]. He keeps contact with operators providing information on electric vehicle charging point *networks*, including Enel X Italy206.

152. The evidence in the file gives an account of the relations between Enel X Italia and Google regarding the possibility of integrating the information on the charging stations contained in JuicePass within Google Maps, according to the GELFS specifications. Broadly speaking, contacts began in October 2018207, were interrupted due to Google's refusal to integrate JuicePass into Android Auto208, resumed following a *call* held on 28 February 2019 with the CEO of the Enel Group, but stalled after a short time.

153. Google has explained that, in compliance with legislation protecting the privacy of users' personal data, it collects a range of data derived from users' use of Google Maps. These data include:

"- *Information about users' activities on Google Maps, such as, for example, user preferences and other settings, interaction data (such as clicks), search history (including information about searches made and content offered to the user, such as ads and pages visited); and*

- Information on the location of users when they use Google's services, depending on their account and device settings' (emphasis added). Google services, depending on the settings set on their account and device' (emphasis added).

205 See doc. no. 122 (Google's reply of 17 July 2020).

206 See doc. ISP91.

207 On 17 October 2018, Enel X Italy wrote to Google "*[Omissis], who reads us in cc, has kindly given me your contact to explore issues of displaying points of interest on Google maps*" (see doc. ISP103).
During the same month, Enel X Italia's participation in the GELFS project was discussed on other occasions. In an *email* dated 23 October 2018 Enel X Italy writes Google "*Thank you very much for the organisation of this afternoon's meeting, really very useful and interesting. For Enel X the main topics to deepen are: - integration of charging stations in Maps. Next step: meeting scheduled tomorrow and as far as I understand there should be no particular criticalities*" (see doc. ISP25).
In an *email* dated 31 October 2018 *[GA, Google Maps & Android Auto, Group Product Manager] tells* [GI3*, Global Product Partnerships, Manager] that* he has been contacted by Enel X Italia in relation to the project on charging columns with reference to Spain, Italy and other countries and [GI3*, Global Product Partnerships, Manager]* explains, in an *email dated* 1 November 2018, that he has already been contacted by the Enel X Italia team on the point (see doc. ISP92).
In December 2018, Enel X Italia reportedly made itself available to provide Google with information on charging stations. In an *email* dated 19 March 2019 *[GI3, Global Product Partnerships, Manager]*, replying to *[GI1, Google Cloud, Account Manager]* on a question related to the modalities of providing information on the charging stations, writes "*since my meeting I believe in December they had made themselves available to provide us with the data in the requested format (GELF)*" (see doc. ISP35).

208 "*[GI3, Global Product Partnerships, Manager] was part ofthe initial conversations with EnelX late last year about including their charging stations in Maps before EnelX pushed back b/c of the issue with their app*" (see doc. ISP10, in particular *email* from *[GS1, Google Maps/Local, Strategic Partner Manager]* dated 11 February 2019).

In addition, in the case of authenticated users (i.e. using the services having activated a Google *account*), other data are added, including:
"- *activity and location history, depending on the user's account and device settings*" (emphasis added)[209].

154. Google also explained how user-generated data can be used to improve the services rendered to users. Among other possibilities, '*Google also provides many features that rely on aggregated and anonymous location data, such as traffic updates and 'rush hour' display*'[210].

III.3 GOOGLE'S CONDUCT Preamble

155. The case under examination originates from Enel X Italia's request to Google to publish (on Google Play) an Android Auto compatible version of the JuicePass211 *app*, which at the material time was called Enel X Recharge. In particular, Enel X Italia developed a version of its own *app* based on the *template* for messaging *apps*, considering it the most suitable tool, since at the time Google only made available to third party developers the *templates* for messaging and *media* (music and audio) *apps.* Google denies the publication of the JuicePass *app* (formerly Enel X Recharge) on Android Auto, arguing that only two categories of *apps*, messaging and *media apps*, can be present on Android Auto. A discussion ensued in which, as emerges from the preliminary findings, Enel X Italia asked to be allowed to develop a version of its *app* compatible with Android Auto and Google responded by proposing alternative solutions that did not address the issue of the request but merely reiterated the lines of action already decided within Google itself.

156. The issue of the publication on Android Auto of the *app* for services related to electric recharging intersects with the efforts made by Google to acquire the Enel Group as a client of its *cloud computing* services and Enel X Italia as a *partner* for the project of integrating information on recharging stations in Google Maps according to the GELFS format. This context is well summarised in an *e-mail* from the contact person for Italy

209 See doc. no. 130 (Google's reply of 24 July 2020).
210 See doc. no. 130 (Google's reply of 24 July 2020).
211 *Apps* are published on Google Play and if they are compatible with Android Auto they automatically become available on Android Auto. Therefore, when we talk about publishing an *app on Android Auto*, we mean publishing an Android Auto compatible *app on* Google Play.

In this case we have a compli cated tri angulated relationship among Cloud, Android Auto and GPP [Global Product Partnerships, ed.] *teams where Cloud push for sales and the client wants to leverage on this to close additional product benefits (i ntegrate thei r app on Android auto and thei r data on Google maps), that is somethi ng we are i nterested to do i t but wi th our product ti melines. The negotiation is both internal and external*" (emphasis added)[212].

157. The issue of the publication of JuiceP ass *app* (formerly Enel X Recharge) on Android Auto undergoes an *escalation within the* Enel Group and, consequently, within Google. There are two relevant stages in this *escalation*: the intervention of the CEO of Enel X Italy, who puts Google on the spot, in December 2018, to obtain a definitive response, and the intervention of the CEO of the Enel Group, who raises the issue to the highest levels of Google, at the end of January 2019, thus giving the impetus to the organisation of a *call*, which takes place on 28 February 2019, attended by two *Vice Presidents of* Google in addition to the CEO of the Enel Group himself.

158. The Enel Group, to which Enel X Italia belongs, emerges as a very relevant counterpart for Google. In fact, there was a declared interest of the Google Cloud business function to acquire the Enel Group as a customer.

159. The issue of the publication of the Enel X Italia *app* on Android Auto has been long and intensely discussed within Google. The Google Cloud business function of Google Italy acts as a point of contact between Enel X Italia and Google, but always consulting the relevant Google professionals from time to time and acting as a link within Google when a choral work was necessary. In substance, the issue of the publication on Android Auto of the Enel X Italia *app* is managed by different corporate functions; this emerges, moreover, from Annex 1, which contains a list of the Google employees involved, with the indication of the company and the corporate function to which they belong, as well as the role played within them.

160. Right from the early stages of the case, which saw Enel X Italia requesting the publication on Android Auto of the Enel X Recharge *app* (now JuicePass) and then asking for the reasons for the refusal and possible solutions, the Google Play corporate functions (in particular, *[GL12, Platforms Google Play, Play BD Product Specialist]*) and Android Auto (in particular, John

212 See doc. ISP106, in particular *email* from *[GI3, Global Product Partnerships, Manager]* dated 18 March 2019 10:16 am.

[GL11, Android Auto, Product Manager]). The Legal business functions (in particular, *[GSw1, Legal Competition, Senior Competition Counsel]* and *[GI13, Legal, Associate Legal Counsel]*) are involved in drafting the response solicited by Enel X Italy in December 2018, Public P olicy (in particular, *[GI7, Public Poli cy, Manager]*), EMEA Partnerships and Automotive Partnerships (in particular, *[GF1, EMEA Partnerships, President]*, *[GN, EMEA Partnerships, Head of Automotive]* and *[GF2, Automotive Partnerships, Manager]*). The *call of* 28 February 2019 with the CEO of the Enel Group is attended by senior figures from the Android213 and Google Cloud214 business functions. In addition, in the assessment of alternative solutions to the publication of Android Auto to be proposed to Enel X Italia, in addition to the Android and Google Cloud business functions, the Auto (in particular, *[GL10, Auto, Product Manager]*), Google Maps and Android Auto (in particular, *[GA, Google Maps & Android Auto, Group Product Manager]) and* Google Maps/Local (in particular, [GS1*, Google Maps/Local Strategic Partner Manager]) business* functions are involved.

161. The non-publication of the Enel X Recharge (now JuicePass) *app is* not due to technical impediments, but to Google's corporate policy, defined on the basis of the safety needs of the automotive industry, user preferences and available resource constraints. This implies that a given activity related to the publication of *apps* on Android Auto must be prioritised in order to be implemented. Google has identified five categories of *apps* on which to focus its resources: two are *template-based,* and concern *media* and messaging *apps*; two are '*full-screen*', and therefore without the limits of predefined *templates,* and concern native navigation apps and *custom apps*, including *apps* developed by car manufacturers; the remaining category consists of voice-activated actions (i.e. mediated by Google Assistant) on the Actions-on-Google platform (hereafter, also AoG).

162. In the course of the negotiations, which run from September 2018 to March 2019, Google is proposing three alternative solutions to Enel X Italia: ***(i)*** collaboration with car manufacturers to develop versions of the Enel X Recharge *app* (now JuicePass) compatible with car *infotainment* systems, ***(ii)*** integration of detailed information

213 In particular, *[Omissis]*.

214 In particular, *[Omissis]* replacing *[Omissis]*, the latter being in any event involved in contacts with Enel X Italia.

(iii) use of the Enel X Recharge *app* (now JuicePass) via Actions-on-Google. The first solution is proposed only in the early stages of the talks. The second solution is proposed for the entire course of the negotiations. The third solution was proposed during the *call* with the CEO of the Enel Group on 28 February 2019. None of the three solutions responds to Enel X Italia's request to see its *app* published on Android Auto, and Google is aware of this.

The refusal to publish the Enel X Italia app on Android Auto

163. Google communicated the inability to integrate the Enel X Recharge (now JuicePass) *app* into Android Auto in *emails* dated 20 and 21 September and 8 November 2018. In these communications, Google explained that the denial is due to the fact that only *apps* belonging to the two categories ***(A)*** *media* and ***(B)*** messaging are likely to be integrated into Android Auto215. Specifically:
- 20 September 2018 (first denial) android-auto-review@google.com writes to enelxglobal@gmail. com: "*Hi developers at Enel X, Unfortunately, after further review, we found that your app* ***Enel X Recharge (com. enel.mobile.recharge2)*** *is not eligible for* ***Android Auto****. At this time, we are only accepting apps with the* ***Media*** *or short form* ***Messaging*** *categori es for Android Auto. It appears that your app is a uti li ty app used for chargi ng states ons whi ch currently does not fit our cri teri a*" (emphasis in original);
- on 21 September 2018 (second denial), the Google contact wrote to the Enel X Italia contact: "[u]*nfortunately, at this time only messaging and media apps are eligible on Android Auto. Changing the logic of the dialogue won't help as the app i tself is not purely a messaging app*";
- on 8 November 2018 (third refusal), the Google contact reiterated to the same recipients that '[u]*nfortunately, only Media and Messaging apps are compatible with Android Auto. We don't have plans to expand it to other categories in 2019*".
164. In an *email* dated 21 December 2018, the CEO of Enel X Italia requested a definitive response from Google on the request to make the Enel X Recharge *app* (now JuicePass) available on Android Auto, with particular reference to the possibility of ***(I)*** restricting the search for charging points to

215 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019). The relevant *emails* are also contained in several inspection documents (e.g. ISP57).

those with characteristics compatible with the vehicle in use, ***(II) select*** a column from a pre-selected list, ***(III)*** make a reservation of the electric station and ***(IV)*** start the recharging phase216. In this communication Enel X Italia points out that Android Auto does not only include multimedia and messaging apps but also navigation *apps*, namely Google Maps and Waze, both owned by Google. Enel X Italia also points out that it has developed JuiceP ass with the aim of ensuring user safety while driving by using only voice messages for user-app interactions, in line with what Google has done for Google Maps and Waze on Android Auto.

165. On 18 January 2019, Google reiterates by *email* the impossibility of publishing the Enel X Recharge (now JuicePass) *app* on Android Auto. This is because only three categories of *apps* are available on Android Auto, namely ***(A)*** *media* ***(B)*** messaging and ***(C)*** navigation. In addition, [p]ursuant *to user safety and other technical reasons*', Google does not make other categories of *apps* available on Android Auto, nor do third-party navigation *apps*; expanding *app* categories '*would require significant technical resources that Google does not yet have available for Android Auto*'. Google, which estimates that it may open up Android Auto to third-party navigation *apps in the* near future, states that it considers Enel X Recharge (now JuicePass) to be a booking app, not a navigation *app*, and that it is not able to estimate when Android Auto will be able to host *apps* that offer utilities such as booking services. Google also refers to its contacts with Enel X Italy to integrate the information on charging stations contained in the Enel X Recharge *app* into Google Maps217.

216 On 21 December 2018, the CEO of Enel X Italy wrote to the contact person in Google Italy: "*I therefore summarise again, as requested to me for the umpteenth time in today's conference call, the cases of use that we want to make available to users of the X Recharge app on the move: - search for points recharging stations compatible with the customer's recharging needs pre-selected on X Recharge at the time of registration: socket type, power - confirmation from a pre-selected list - recharging station reservation - enabling recharging start. After all these months of work, I am therefore kindly asking you for definitive feedback regarding our requests for integration into your Android Auto environment. In light of the numerous and prolonged interactions that have taken place to date, and given the urgent need to provide X Recharge mobile users with a service that can be used in complete safety, I kindly request that such feedback be provided no later than 18.1.2019*" (see, among others, doc. DC5 and doc. ISP77).

217 On 18 January 2019, the contact person at Google writes to the CEO of Enel X Italy '*Therefore, as of today, only apps belonging to the following categories are available on Android Auto: - messaging*

- *multimedia -navigation. ... For user safety and other technical reasons, making other categories of apps or additional navigation apps available on Android Auto would require significant technical resources that Google does not yet have available for Android Auto. ... Moreover, while it is reasonable to expect that Android Auto will be able to support navigation apps developed by third parties in the not too distant future (probably not before next year, though), the Enel X Recharge app is technically not even a navigation app, but an app that allows users to book a service using navigation aspects, which is not its purpose.*

Contacts between Enel X Italy and Google on the issue of the Enel X Recharge app (now JuicePass)

Contacts prior to the opening of the investigation procedure

166. In July 2018, Enel X Italia started developing the version of the Enel X Recharge (now JuicePass) *app* to be integrated into Android Auto. Specifically, Enel X Italia contacts Google for guidance on how to do this. The following internal Google exchanges show that there are guidelines (intended for developers) only for messaging and *media apps,* while *ad hoc* collaborations are reserved for car manufacturers218.

167. In October 2018, after the first two denials, Enel X Italia places the issue of the Enel X Italia *app* (now JuicePass) in the overall framework of the ongoing negotiations with Google concerning the integration of information on charging stations in Google Maps and an agreement for the provision of *cloud* services; Enel X Italia specifies to Google that the issue of the *app* is a priority and announces pressure to obtain an expansion of the categories of *apps* compatible with Android Auto219. After the third denial, Enel X Italia wrote to Google noting that "*1.- The app makes all the sense in Android Car. It is absolutely better for people to have it on the car than just on their phone. 2.- The theme that the App is not of the type that has been defined as valuable, cannot be understood. Talking about collaboration between Google and Enel, with these things, doesn´t seem a good start...* "[220].

168. In December 2018, further contacts took place between Google and Enel X Italy, in particular a meeting (3 December 2018) and two calls (19 and 21 December 2018)[221]. At this stage, Google proposed to Enel X Italy two alternative solutions to the publication (on Google Play) of a version compatible with Android Auto: ***(a)*** integrating the information on the columns

main. Unfortunately, to date, we are unable to estimate when Android Auto will be able to host apps times and book services or products" (see DC5 and ISP77).

218 An *email* dated 25 July 2018 states: "In *fact, there is nothing other than these public guidelines with which only messaging and music apps can be developed. This information had been given to us by pm [GL24, Strategic Partnerships, Partner Development Manager]@google.com], writing that all other customisations were reserved for Automakers, maybe we could try to understand with him if Enel-X could be included among them by creating an ad hoc partnership*" (see document ISP34).

219 An *email* dated 23 October 2018 states: '*For Enel X, the main issues to be investigated are: - integration of charging stations in Maps ... - Enel X app integration with Android auto, with the issues commented today related to exceeding the standard. Next step: insisting with Android Product Manager to include other services in the standard besides messaging. This is a priority issue for us*" (doc. ISP25, emphasis in original).

220 See doc. ISP57, in particular *e-mail* from *[Omissis]* to *[Omissis]*.

221 See doc. DC1 (reporting by Enel X Italy), doc. ISP59 (minutes of the *calls of* 19 and 21 December 2018), and doc. ISP120.

contained in the Enel X Recharge (now JuicePass) *app* within Google Maps and use Google Assistant to give voice commands to Google Maps; ***(b)*** develop versions of the Enel X Recharge (now JuicePass) *app* for the different *infotainment* systems of car manufacturers222.

169. Enel X Italia considers the two proposed solutions unsatisfactory. The first because the user would not interact with the Enel X Recharge *app* (now JuicePass) but with Google Maps; furthermore, the user would not be able to book recharging stations. The second is because it would force '*not only to enter into agreements with each individual manufacturer, but also to maintain as many versions as there are installed on the various environments: an effort that cannot be justified in view of the use cases covered*'[223].

170. With specific reference to the hypothesis of integration of the information on the recharging stations in Google Maps, and to the consequent search of the stations and navigation towards them through Google Maps, Enel X Italia highlighted that Google would come into possession of the following data:

- area in which the user does most recharging (derived from the geolocation of the user);
- user habits while charging the car (derived from the user's geolocation);
- type of electric car owned by the user (derived from the type of charging station reached);
- frequency of recharging the electric car;
- an estimate of the kilometres the user drives with the electric car (derived from the frequency of recharging the electric car);
- recharge times224.

171. The month of December 2018 also sees an *escalation of* the issue posed by Enel X Italia within Google. The Google Cloud business function reports the dispute to the EMEA Partnerships function with a request to intervene with the Android Auto *team* to find a "*win-win"* solution and prevent Enel X Italia from writing to the European Commission complaining that Google favours its own products (Google Maps and Google

222 See doc. DC1 (reporting by Enel X Italia). See also *email of* 21 December 2018 in which the CEO of Enel X Italia requests a definitive response from Google on the issue **of** the publication on Android Auto of the Enel X Recharge *app* (now JuicePass); this *email* is contained in several documents including doc. DC5 and doc. ISP77. It should be noted that in the alternative solution *sub b* Enel X Italia would have had to use the *Software Development Kit* (SDK) of Android Auto that Google itself provides to car manufacturers. In fact, the publication policy for Android Auto provides that car manufacturers can develop *apps* for Android Auto using "*full screen*" programming tools (and not *templates*).

223 See *email of* 21 December 2018 in which the CEO of Enel X Italy requests a definitive response from Google (contained, inter alia, in documents DC5 and ISP77).

224 See doc. no. 73 (Enel X Italia's application for precautionary measures of 20 February 2020), in particular the attached expert report.

Assistant)[225]. In fact, the issue of the non-publication of the *app* on Android Auto had been brought to the highest levels of Enel X Italy and the intention to complain to the European *antitrust authorities* about Google's refusal was reported226.

172. In addition, Enel X Italia reports to Google that the Italian government, in view of financial interventions on e-mobility, would have asked the Enel Group to implement all necessary utilities for e-mobility, including the Enel X Recharge *app* (now JuicePass). Therefore, Enel X Italy warns that it will inform the Italian government of any "blocking" situation with respect to this task227.

173. There follow two relevant moments in the *escalation of the* Enel X Recharge *app* issue. The first sees the intervention of the CEO of Enel X Italy, who, by *email* dated 21 December 2018, asks Google for a definitive response on the request to publish the Enel X Recharge *app* (now JuicePass) on Android Auto. The second sees the intervention of the CEO of the Enel Group and leads to a *call*, held on 28 February 2019, attended by two *Vi ce Presi dent of* Google.

174. In the time between these moments of *escalation*, the negotiations between Google and the Enel Group regarding a possible relationship for the supply of *cloud computing* services and the provision of services in the field of telecommunications stopped.

225 On 14 December 2018 *[GI2, Google Cloud, Country Manager]* writes to *[GF1, EMEA Partnerships, President]*: '*I'd n eed your h elp in order to prevent ENEL wri ting a letter to EU, asking to i nvestigate Google practices preventing th ird party publishing their apps on Android auto, privileging Google own apps (Maps, Assistant) usage. I would advise to: - escalate ENEL request to Android Auto team in order to make them aware of the issue, verifying if solutions proposed to ENEL so far are the best we can do - secure Android Auto exec availability for a call with [Omissis] (ENELX CEO). I trust we can explain/find a win-win sol uti on with ENEL on this issue*" (doc. ISP67).

226 In the aforementioned *email* of 14 December 2018 *[GI2, Google Cloud, Country Manager]* explains to *[GF1, EMEA Partnerships, President]*: '*At this point ENEL escalated at all levels: [Omissis] (CIO), [Omissis] (Chief of Procurement), [Omissis] (Head of IT in EnelX) and others got in touch with me and [GI1, Google Cloud, Account Manager] (Cloud FSR in Rome) asking for App approval on Android Auto. They froze any negotiation on Cloud in order to put pressure. Then, [Omissis] (ENEL CIO) called me today stating that ENELX CEO, [Omissis], advised him he's willing to write at the EU as Google is preventing them publishing Recharge app, proposing Enel services availability through Google Maps and Assistant apps*" (doc. ISP67, emphasis in original).

An internal document, presumably dated 17 December 2018, states "*Enel is now threatening to bring this topic to the European Commission, as they believe Google is abusing of dominant position (believing only Google-owned navigation apps are made compatible)*" (doc. ISP58, emphasis in the original). On 18 December 2018 *[GI1, Google Cloud, Account Manager]* writes to *[GL12, Platforms Google Play, Play BD Product Specialist] 'Unfortunately during this week ENEL escalated further for their request. I introduced the possible solutions discussed (use Assistant and Maps or Work with an OEM) but it seems they do not satisfy them. ENEL CIO got in touch with our GM in Italy saying ENEL will probably send a note to European Community on this matter*" (doc. ISP57).

227 In an *e-mail* dated 21 December 2018, *[GI2, Google Cloud, Country Manager]* reports: "*[Omissis] was clear in stating that Italian govenment is planning financial investments for renewables energy sources in general and electric cars in particular, asking to ENEL (as Italian electricity incumbent operator) to implement all facilities (charging points across the country, etc) in order to enable scenario design by government. Providing recharging apps is part of this scenario, [Omissis] stated he ... "will let government know anything Enel won't be able to secure due to third party blockers", referring to our issue*' (doc. ISP120). See also ISP59 (minutes of the *calls of* 19 and 21 December 2018 with Enel X Italy).

the integration of information on charging stations (contained in the Enel X Italia *app*) into Google Maps228. In this period there was a *call229* whose content (as reported between the top management of Enel X Italia and the Enel Group) described the state of the negotiations: Enel X Italia asks Google what the procedure is to test the safety of using an *app* when the user is driving and says it is ready to follow such a procedure in order to make its *app* compliant with the safety *standards developed* by Google230; Google replies that it is not possible to provide further information on the procedure in question and that, in the end, the *people in charge of the product are* against an extension of the types of *apps* present on Android Auto ("*We were, once again, told that they couldn't provide that information and that the people in charge of the product were agai nst openi ng to other Apps*")23 1. Google's closed attitude to the publication of the Enel X Recharge *app* (now JuicePass) caused great frustration within Enel X Italia ("*the level of disappointment and frustration of the whole team is quite high*")[232].

175. Following the *call of* 28 February 2019 attended by the CEO of the Enel Group, Enel X Italia puts forward some requests and asks Google for clarifications with regard to the possibility of integrating the information on the filling stations in Google Maps; this in order to verify the feasibility of solutions that, although considered unsatisfactory, could increase the usability of the Enel X Recharge *app* (now JuicePass), pending its publication on Android Auto233. In particular, Enel X Italia

228 In an *email* exchange on 23 January 2019, *[GI3, Global Product Partnerships, Manager]* writes to *[GS1, Google Maps/Local, Strategic Partner Manager]* and *[GS3, Geo, Strategic Partnership Lead]:'due to a controversial issue with Cloud and Android Auto teams, our discussion with them has been put on hold from the partner they hope to continue the collaboration as soon as possible but they don't know ifand when. .... There is a lot of people involved (policy, legal, product, cloud and more) since the issue has been escalated, I've been involved so I will follow*" (see doc. ISP96).
An internal memo in preparation for the February 28, 2019 *call* with the Enel Group CEO states that after the refusals to the request to publish the Enel X Recharge (now JuicePass) *app* on Android Auto and the alternative solutions proposed by Google being deemed unsatisfactory "[a]*s a result Enel stopped all the interactions with Google*" (ISP5).

229 See doc. ISP59.

230 "[W]e *asked what was the testing procedure and criteria that they followed to make their Apps driver-safe. We also added that we were more than happy to follow the same pro cess and we were ready to be 'Google cert ified for driver-safety*'" (see doc. ISP73, in particular *email* from *[Omissis]* to *[Omissis]* of 30 January 2019).

231 "*We were, once again, told that they couldn't provide that information and that the people in charge of the product were against opening to other Apps*" (doc. ISP73, in particular *email* from *[Omissis]* to *[Omissis]* of 30 January 2019).

232 See doc. ISP73, in particular *email* from *[Omissis]* to *[Omissis]* of 30 January 2019.

233 Enel X Italia clarified "*that it had expressed interest in the two alternative solutions only for the purpose of making its electric mobility services available to users, albeit in forms deemed unsatisfactory, for the period necessary to achieve full integration of JuicePass into Android Auto, which remains the sole objective*" (see doc. no. 43, minutes of the hearing of Enel X Italia of 10 October 2019).

asks whether it is possible to provide the data flow for Google Maps through *ad hoc* APIs (*Application Programming Interface*), instead of according to the GELFS format, and whether it is possible to allow a *link* to the Enel X Recharge *app* (now JuicePass) within Google Maps234. Enel X Italia also asked for a timeframe for the implementation of the proposed solutions, but Google was not willing to change its work plans or commit to the timing of the implementation of the requested activities235.

Contacts after the initiation of the investigation procedure

176. Further contacts between Enel X Italia and Google took place after the opening of the preliminary investigation procedure. In particular, in September, October and November 2020, following Google's announcement of the forthcoming opening up of Android Auto to third-party navigation apps as well as to *apps* for electric recharging and parking236 , Google allegedly proposed to Enel X Italia to enter into a confidentiality agreement in order to access a privileged treatment in the timing of the publication of its *app* on Android Auto237 ; this advantage has already been granted by Google to some

234 "*Enel was happy with the 2 examples we showed and asked to follow up, so I need your support and advice:* ***Option (1) Maps integration*** *They wan t a seamless experience both on Mobile and Auto using Maps. They would like to go on with GELFS, showing API on position but also on availability and characteristics. @[GA, Google Maps & Android Auto, Group Product Manager] as this will be soon available which are the specifics for Enel? ...* ***Option (2) AoG*** *is it possible to create an action to book the station on Auto where the app is not installed? @[GL10, Auto, Product Manager] can you give advice? '*" (Doc. ISP47, specifically *email* from *[GI1, Google Cloud, Account Manager]* dated 2 March 2019 2:18 AM).
In an *e-mail* dated 19 March 2019, Google's contact persons wrote to Enel X Italia's contact person: '*we are sending you below a quick update of the plan discussed for XRecharge and its integration on Maps. The plan will result in: Having Maps team to include Enel X data through API to show data about location/characteristics and real time availability of charging stations. On this point we usually request data in GELF format but we are going to evaluate if we can integrate it in the format provided by Enel - to be confirmed 2. Having Maps team to evaluate the inclusion of X Recharge app link in Maps so users can be easily redirected to buy/pay the recharge through the app*". (doc. DC5, integration of Enel X Italia's report).
235 '*On timeline: - We cannot commit on 3rd party linking time frame. As things stand, I'd prefer we do not give any indication on ofwh en this is coming*" (doc. ISP47, specifically *email* from *[GA, Google Maps & Android Auto, Group Product Manager] dated* 6 March 2019 00:32).
"*I joined the ENEL meeting last week and realised the partner has misleading expectations on data integration by 4 weeks, that is unfortunately something we cannot commit as reported by product. So far what we can propose them is EOY* [End-of-Year] *for EV data integration into Google maps and a TBD* [To-Be-Defined, ed.] *for the payment/booking feature*" (ISP106, in particular *email* from *[GI3, Global Product Partnerships, Manager]* dated 18 March 2019 10:05).
236 See Google's *post* '*New ways to reach more drivers on Android for cars*' of 11 August 2020 (see https://android-developers.googleblog.com/2020/08/android-for-cars.html, in doc. no. 194).
See also Google's post '*Introducing the Android for Cars App Library*' of 15 October 2020, announcing the release of a *beta* version of *templates* for navigation, parking and electric charging *apps* (https://android-developers.googleblog.com/2020/10/introducing-android-for-cars-app-library.html, in doc. no. 194). This *post* states, among other things: '*We're looking forward to enabling Google Play Store publishing for your beta apps in the coming months*'.
237 See doc. no. 166 (communication of Enel X Italia to Google Italy of 14 October 2020) and doc. no. 170 (reply of Google Italy to Enel X Italia of 20 November 2020).

app developers, whom Google defines as "*early access partners*", who have collaborated with Google in the development of the *template* for the new allowed *app* categories238 ; among the "*early access partner*" developers are two *competitors* of Enel X Recharge, namely PlugShare and Charge Point. In any case, until the final version of the new *template* for Android Auto is released, the possible publication of the relevant *apps* can take place in a *beta test* version and in an area of the Play Store reserved for this type of *app* and known to a limited number of users who are willing to download and use apps in a non-final version239.

177. In particular, on 14 October 2020, Enel X Italia brought to the Authority's attention that it had been contacted by Google with respect to the proposed opening of Android Auto and that it had been invited to enter into a confidentiality agreement in order to receive information on the process that could lead to the publication of the JuicePass *app* (formerly Enel X Recharge) on Android Auto240. On this occasion, Enel X Italia made specific requests to Google for clarification on the characteristics of the proposed solution241.

178. On 20 November 2020, Google replied point by point to Enel X Italia's requests of 14 October 2020. Google also clarified that, as of today, only operators that are *early access partners*, including PlugShare and Charge Point, can publish their *apps*, developed with a *beta* version of the *template*, on Android Auto, while other developers will be published "*as soon as practical* "[242]. Should Enel X Italia decide to sign the confidentiality agreement, it would be treated in the same way as the *early access partners*, i.e. it could develop its own *app* using the *beta version of* the *template* and see this version published on Android Auto. Moreover, if Enel X Italia had signed the confidentiality agreement before 15 October 2020, it would have been able to start using the Android Auto app.

238 See doc. no. 170 (reply of Google Italy to Enel X Italy of 20 November 2020).

239 See doc. no. 173 (Enel X Italia's update note of 18 December 2020).

240 See doc. no. 166 (communication from Enel X Italia to Google Italy of 14 October 2020).

241 The questions raised concerned: ***(i)*** the timing of the development of the *template in light of the* fact that some of Enel X Italia's *competitors*, namely PlugShare and Charge Point, were Google's *partners* in the relevant project; ***(ii)*** the scope of the functionalities that will be made available on Android Auto; ***(iii)*** the positioning on Android Auto of Google Maps and third-party *apps* for services connected to electric recharging; ***(iv) the*** development of the *template* for navigation, electric recharging and parking *apps* for Android Automotive Operating System.

242 "*Currently, only early access partners can publish these apps on Google Play store. Once you sign the on-disclosure agreemen t and trusted tester agreement, you will be placed on an equal footing compared to our early access partners, and you will be able to publish JuicePass for Android Auto on Google Play. Otherwise, any developer will be able to publish its Android Auto-compatible app as soon as practical. We can send you again the draft non-disclosure and trusted tester agreements at your earliest convenience*' (doc. no. 170, reply of Google to Enel X Italia of 20 November 2020).

the *beta* version of the *template* before its release to developers (other than *early access partners*)[243].
179. On 18 December 2020, Enel X Italia clarified that *apps* developed in *beta* version are published '*in the section of Google's Play Store reserved for apps in beta test*' and that this section is accessed '*only by a limited number of users who are aware of the existence of this section and who explicitly decide to proceed with the download of a beta version - and therefore by definition incomplete and to be placed alongside the production app on their mobile phones*'[244]. Therefore, according to Enel X Italy, being among the *early access partners* allows one to intervene with one's own comments in the *design* and *testing* process of the *template*, but does not allow either the publication of the *app* in the *standard* Play Store modalities or a clear indication of the timeframe in which such a publication will take place.

Google's publication policy for Android Auto

180. Google's refusal to publish the Enel X Recharge *app* (now JuicePass) on Android Auto is not due to technical issues, but to a corporate choice of '*publishing policy*' on Android Auto. This was made clear from the earliest stages of the *escalation* (before the CEO of Enel X Italia asked Google for a written and definitive response to the request to publish the Enel X Recharge *app*). In an internal *e-mail* to Google dated 21 November 2018, it is asked whether the impossibility of publishing the Enel X Recharge *app* on Android Auto depends on technical issues or on a *policy* choice: "[a] *quick question: the reason why we cannot publish Enel X app on Android auto is only because of our actual publishing policy or, reviewing the app you also found technical blockers? (i.e. user interface etc) "*[245]. The answer is that it depends on a *policy* choice: "*That's correct. It's a publishing policy. At the moment, the only apps that are approved on Android Auto are Media and Messaging apps*'[246].
181. The policy of publishing on Android Auto focused only on certain categories of *app* appears to be a 'surprising' reason for refusing the publication on Android Auto of the Enel X Italia *app* to *[GL7, Google Cloud, President]*, an apex figure within Google. In an *email*

243 "[I]*f you had signed the non-disclosure agreement and trusted tester agreement, you would have been able to start developing a beta version ofJuicePass for Android Auto before October 15*" (see doc. no. 170).
244 See document no. 173 (Enel X Italia's update note of 18 December 2020).
245 See doc. ISP57, in particular *email* dated 21 November 2018 from *[GI1, Google Cloud, Account Manager]* to *[GL12, Platforms Google Play, Play BD Product Specialist]*.
246 See doc. ISP57, in particular *email* dated 27 November 2018 from *[GL12, Platforms Google Play, Play BD Product Specialist]*.

of 1 February 2019, bringing to the attention of *[GL1, Android, V. P. Engineering]* the issue of the non-publication of the Enel X Recharge *app* and its implications for the negotiation of a major *cloud* services agreement with the Enel Group, notes: '[a]*pparently the AA team is telli ng them that we are only focusi ng on Entertainment and Messaging Apps and hence can not accommodate their asks of being "distributed" on AA. I find our reasons to be a bit "surprising" but love to hear from you if this is just me here* "[247].

182. *The limited* number of categories of *apps* that can be published on Android Auto is related to the limited resources available. Indeed, the Android Auto feature affirms its interest in expanding the categories of *apps* on the car environment - thus confirming that there are no technical limits to this happening - but notes that there are priorities and resource constraints that do not make this possible in the near future. In an *email* dated 1 February 2019, in response to the above comment from *[GL7, Google Cloud, President]*, *[GL1, Android, V. P. Engineering]* illustrates this position: '*We absolutely want to enable third party apps, but it's a complex problem to solve, so we currently support three categories of apps ... We *do* want to open up to more categories, but need to bui ld a framework that mi tigates the complexi ty, and that won't likely happen in 2019 given our other priorities and resource constrai nts*" (emphasis in original)[248].

183. The company's policy of publishing *apps* on Android Auto has been defined by Google in consideration of driving safety requirements, which imply the need to *test* usable functions while driving, and of user preferences, which in the first instance go to navigation, messaging and *media apps*. The limited resources available do not allow the categories published to be expanded in the short term.

184. An internal *email* dated 29 November 2018 outlines Google's policy for publishing *apps* on Android Auto: "[a]*utomotive industry is an industry very co[*ns]*cious of security driver distraction is a big thing for us | we are testing apps with automotive to ensure security is granted | messagi ng and maps is what users want to do in the car so we are testing those top use cases and figure out how they work and then will study additional use*

[247] See doc. ISP10.

[248] See doc. ISP10.
In an *email* dated 18 December 2018, *[GL11, Android Auto, Product Manager]* highlights the interest in expanding the categories of *apps* published, an interest that clashes, however, with the limited resources available: '[a]*s much as* we'd like to open up to other categories of apps*, we simply don't have the bandwidth to take on another category. This is likely to remain the case for at least 2019*" (doc. ISP57, emphasis in original).

cases "[249]. In an internal *email* dated 18 December 2018, it is also explained that Android's strategy is based on two pillars "***Resourcing / priorities of the Android Auto team***" and "***Driver distraction***" (emphasis in the original) and that resources have been prioritised to the three categories of *apps* that users consider most important in their journeys namely navigation, *media* and messaging250.

185. When discussed at the highest levels, at the height of the *escalation* (following the intervention of the CEO of the Enel Group in support of the request to publish the Enel X Italia *app*), the company's policy of publishing *apps* on Android Auto is framed in a broader framework whose supporting elements are the need to govern the IT complexity of the projection of *apps* on car *infotainment* units, the resources required, the contractual obligations with car manufacturers and Google's responsibility for *apps* distributed through Google Play. In an internal *email* dated 1 February 2019, it is explained: '*the si tuati on isn't one we can easi ly unblock. Managi ng vehicle integration and driver distraction is a complex problem for us -- it's resource intensive, we have contractual commitments to car makers to review every app, and we ultimately take liability for the apps distributed through the Play Store*" *... On top of the driver distraction issues, we need to make sure every app works across a wi de di versi ty of screen configurations with touchscreen, rotary, touchpad, dpad, etc. i nput* "[25 1.]

186. This has led Google to identify three categories of *apps* that can be published on Android Auto, as explained in the same internal *email*: "*we currently support three categories of apps: 1.) Media -- through a template we control (so can manage driver distraction, vehicle integration, associated liability, etc.) 2.) Messaging -- through a template we control, and through Assistant (voice-only) 3.) Actions on Google Assistant -- voice only integrations where we can manage driver distraction* "[252]. The presence of Google Maps and Waze

[249] See doc. ISP76, in particular *email* from *[GI1, Google Cloud, Account Manager]* dated 29 November 2018 in which the content of an interview with *[GL12, Platforms Google Play, Play BD Product Specialist*] is reported.

[250] See doc. ISP57, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 18 December 2018. With respect to resource constraint and prioritization, "[r]ight *now, we are only staffed suffi ciently to focus on the primary, critical user journeys that we've identified (through numerous studies) with our users. Namely, giving them the ability to (a) navigate, (b) listen to media, and (c) communicate via phone and text*". As for driving safety, "[o]*ur core product vision is to provide a safe and seamless driving experience. To that end, we've done extensive testing on the handful of supported user journeys (enumerated in my previous point). To extend beyond these scenarios isn't just a question of engineering effort, but moreover, how can we ensure that new app categories are introduced while continuing to keep the driver safe?* ".

[251] See doc. ISP10, in particular *email* dated 1 February 2019 from *[GL1, Android, V.P. Engineering]* to *[GL7, Google Cloud, President]*.

[252] See doc. ISP10, in particular the *e-mail* referred to in the previous footnote.

is not an exception to this approach as these are *apps* with a large user base, which are at the top of users' requests and which, being owned by Google, allow a more direct management of liability issues253.

187. Looking more broadly at programming tools for the development of Android Auto compatible *apps*, a more complex picture emerges. In addition to the categories of *template-based apps,* i.e. *media* and messaging, and Actions-on-Google-based *apps, there are also apps* that use '*full screen*' programming tools, i.e. without the limitations of predefined *templates*. *Full screen'* programming tools are reserved for Google, which has used them to develop the Android Auto versions of Google Maps and Waze, and for car manufacturers. Finally, there is the category of custom apps, which is part of Google's internal discussions on Enel X Italia's request when the Kakao *app* (only available for South Korea)[254] is mentioned among the navigation *apps*.

188. *In* an internal *email* dated 18 December 2018, it is specified that automakers are enabled to develop "*not-template-based"* ("*full screen*") apps for Android Auto because they have the necessary equipment and experience to conduct safety *tests* on the use of the apps while driving: "[a]*s OEMs are the only other organizations with the necessary equipment and experience for running comprehensive safety studies that adheres to the various international guidelines (NHTSA, AAM, ESOP, JAMA), they are the only ones that have been granted our "full screen" (not template-based) SDK* [Software Development Kit, ed.][255].

189. In a later *e-mai l* (19 December 2018) it is clarified that Google Maps and Waze fall into the "*full screen"* programming cases on Android Auto and that in addition there is a navigation *app*, Kakao, for South Korea only: "*As for Waze, and in general mappi ng applications, this falls into the same "full screen" category that I described. In this case, we were able to do the safety certification ourselves. By the way, Waze is not the only additional*

253 "*Google Maps and Waze are no exceptions here, but they have much larger user bases, were top user requests, and they are Google owned so we can more directly manage the liability risk*" (doc. ISP10, in particular *e-mail* referred to in the two previous notes).

254 In an *email* dated 10 January 2019 *[GL12, Platforms Google Play, Play BD Product Specialist]*, referring to an interview with *[GL11, Android Auto, Product Manager]*, provides the full picture of Google's policy for publishing *apps* on Android Auto: "*we currently only support: 1. Navigation apps, currently limited to Google Maps, Waze, and Kakao (South Korea only) 2. Media apps 3. Messaging apps 4. OEM-developed apps 5. Assistant-integrated interactions via "Actions on Google"*. (Doc. ISP31).

255 See doc. ISP57, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 18 December 2018.

mapping application (other than Google Maps). In S Korea, we support a Korean mapping app named Kakao (as usi ng GMM and Waze weren't permitted by S Korean law). Again, that went through extensive driver distraction evaluation'[256].

190. As regards the communication of the company's policy on the publication of *apps* compatible with Android Auto, it is worth noting that in the first three refusals (20 and 21 September and 8 November 2018) Google states that there are two categories of *apps* that can be published, *media* and messaging, while only in the third refusal (reply to Enel X Italia dated 18 January 2019) is the third category of *app,* navigation, mentioned, which is not open to third parties in the absence of a *template.* Moreover, the reference to navigation *apps* is added because Enel X Italia points out the presence of Google Maps and Waze on Android Auto: in an internal Google *e-mail,* dated 27 November 2018, it is reported: "[a]*lso, a feedback they are sharing is that in android auto you can find applications which are not strictly media and messaging. Is that true?* "[257].

191. The company's policy to publish *apps* for Android Auto had already led Google to refuse other developers, including the automotive group *[Omissis]*[258] and the navigation *app* developer *[Omissis]*[259]. *The fact* that Enel X Italia was not the first to ask for the publication of an *app* that Google considers not to be in line with its corporate policy, led a Google representative to state that a clear communication plan should be put in place on what can and cannot be published on Android Auto: "[b]*tw, this is not specific to Enel, this is a concern that has been raised by others like [Omissis], and we need a clear communi cation plan on what we can do and cannot do in the short and long term* "[260]. Moreover, in the internal Google debate for the preparation of the reply requested by Enel's CEO

X Italy shows that there is neither a public nor an internal classification of *app* categories ("*We don't have any publicly (or for that matter,*

256 See doc. ISP57, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 19 December 2018.

257 See doc. ISP57, in particular *email* dated 27 November 2018 from *[GI2, Google Cloud, Country Manager]*. The only *apps* not covered by the *media* and messaging categories were Google Maps and Waze (Kakao is only available for South Korea).

258 See doc. ISP19, in particular *email* from *[GF3, EMEA Media & Entertainment and Automotive Partnerships, Director] dated* December 18, 2018 4:45 PM. See also doc. no. 122 (Google's response of 17 July 2020) in which Google stated that it had denied "*in several cases*" the publication of third-party *apps* citing, by way of example, the cases of *[Omissis]* (*webinar* and teleconference apps) and the developer of a gaming *app*, as well as that of the automotive group *[Omissis]*.

259 See doc. ISP57, in particular *email* from *[GSw1, Legal Competition, Senior Competition Counsel]* dated 20 December 2018 11:51 AM.

260 See doc. ISP19, in particular *email* from *[GF3, EMEA Media & Entertainment and Automotive Partnerships, Director] dated* 18 December 2018 4:45 PM.

internally) definition of what we consider to be "media" vs. "communications" vs. "navigation" apps")[261].

Enel X Italia app as part of Google's publication policy for Android Auto

192. Google's internal exchanges to address the issue posed by Enel X Italy, bring to light the internal policy of publishing *apps* for Android Auto and, at the same time, the potential solutions to the publication of *apps* that do not fall into the categories for which *templates* have already been developed. These solutions are not of immediate implementation, as they require changes to the *status quo*, but they are explicitly contemplated in Google's internal debate.

193. The most 'straightforward' solution is for Google to develop a new *template*. This solution requires, however, that Google devotes resources to this project. In the words of an Android Auto *product manager*: "*how can we ensure that new app categorisations are introduced while conti nuing to keep the dri ver safe? The 'right way' to do this is for us to test new layout templates against the new layout templates.*
i ndustry safety gui delines, but agai n due to resourci ng challenges, we don't currently have the capaci ty to do so'[262].

194. Theoretically, from Google's point of view, Actions-on-Google may be the 'best' solution to integrate the Enel X Italia *app* into Android Auto as Google Assistant (responsible for recognising voice commands) is integrated into Android Auto and interactions based solely on voice commands are considered safe for users while driving263. However, the

261 See docs. ISP48 and ISP118, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 17 January 2019 7:05 AM.
262 See ISP57, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 18 December 2018.
263 In an *email* dated 10 January 2019, *[GL12, Platforms Google Play, Play BD Product Specialist]* reporting to *[GI1, Google Cloud, Account Manager]* on a discussion he had with *[GL11, Android Auto, Product Manager]*, identified the categories of *apps* that can be published on Android Auto (media, messaging, navigation, car manufacturers and Actions-on-Google) and highlighted the resource constraints, concludes: '[t]*he best integration option for them at the current time is Actions on Google*' (see doc. ISP31).
In an *email* dated 10 January 2019, *[GI1, Google Cloud, Account Manager]* asks for an explanation of the proposed solution: '*If I understand well, we are proposing AoG integration to allow app to be used via Android Auto. Is not clear to me how the AoG would work without the app on Android Auto. The user should access to Enel X via voice command and go through mobile app?* "(see doc. ISP31).
In *an 'email* dated 11 January 2019, *[GL11, Android Auto, Product Manager]* explains, "*Yes, AoG would be the correct integration point. Assistant is "embedded" within Android Auto. So while a user is in Android Auto, they could for example say, "OK Google, ask Enel to find a nearby charging station", and the entire interaction would be voice-based (only). The user would see the Assistant open / listening on the screen, but no other visible UI*" (see doc. ISP31).
In *an email* dated 16 January 2019, *[GL11, Android Auto, Product Manager], in* order to highlight the need to verify the actions con s ented by A ctions-on-Goo gle, s crive: "*For more information on AoG (th e only route they really have open to them*) ... "(see doc. ISP118, emphasis added).

"The 'actions' enabled on Actions-on-Google are limited and do not include either the booking of a service and other functionalities included in the JuicePass *app* (formerly Enel X Recharge)[264] or the activation of actions on Google Maps by a third-party *app* (such as JuicePass)[265].

195. As subsequently explained by Google itself, '*when a smartphone is connected to Android Auto, among the "actions" possibly developed by Enel X* [Italy] *through Actions on Google it would only be possible to set up a dialogue with the JuicePass app (through Google Assistant) aimed at locating the charging points*'[266]. In order to widen the range of possible actions on Actions-on-Google, Google would have to devote resources to the development of the project, similarly to what has been ascertained in relation to the development of a new *template*. In any case, the possibility of implementing a solution using Actions-on-Google is proposed to Enel X Italia during the *call of* 28 February 2019 with the CEO of the Enel Group.

196. Google never offered Enel X Italia the possibility to develop the Enel X Recharge app (now JuicePass) as a *custom app* for Android Auto. This is despite the fact that, at the time of Enel X Italia's request for publication, Google had already developed a *custom app* in collaboration with a third party developer (navigation *app* Kakao, for South Korea).

197. In the course of the negotiations, Google offered Enel X Italy two alternative solutions which do not imply the publication of the Enel X Recharge *app* on Android Auto: the integration of the *app* in question into the various *infotainment* systems of the cars and the integration of the information on the charging stations (contained in the *app*) into Google Maps. As seen above, these solutions were rejected by Enel X Italy.

264 Commenting on the possibility of preparing a solution based on Actions-on-Google, contained in a preliminary draft of the 18 January 2019 response to the CEO of Enel X Italy, *[GN, EMEA Partnerships, Head ofAutomotive]* writes: "*Coming out ofa call with gTech (the folks that technically know what works and doesn't work for Assistant). It's really a no -go from their point ofview booking/reserving a charging station just does not work at this stage, and there are other usecases that just might not work yet too. We should delete the whole Actions on Google section this is only going to create more issues ifwe do*' (see doc. ISP36; see also doc. ISP100).

265 In internal exchanges at Google for the preparation of the 28 February 2019 *call* with the CEO of the Enel Group, discussing an Actions-on-Google based solution whereby the user asks the Enel X Italia *app* to search for a charging station, *[GL10, Auto, Product Manager]* explains that it is not yet possible to activate actions on Google Maps, that this is a development that is intended to be done but this requires it to be identified as a priority project: "[f]*or AoG, we have not yet launched the intent into maps but this can be done it just requires prioritisation. We do want to enable this we just have not gotten to it*" (see doc. ISP47, in particular, *email* from *[GL10, Auto, Product Manager]* dated 15 February 2019); further "*we do not have a timeline yet for when we will be able to enable intending into maps for AoG. We want to but it has not yet been prioritised*" (see doc. ISP47, in particular, *email* from *[GL10, Auto, Product Manager]* dated 26 February 2019).

266 See doc. no. 122 (Google's reply of 17 July 2020).

198. In particular, Google suggests that Enel X Italia could collaborate with a car manufacturer, due to the fact that car manufacturers are recognised as having broader programming tools and that they are able to carry out all the security *tests* necessary for the development of *apps* for Android Auto. This solution was proposed in the early stages of the *escalation* (before the request by the administrator of Enel X Italia for a written and definitive answer on the request to publish the Enel X Recharge *app* on Android Auto). Subsequently, this solution was abandoned and no longer proposed by Google267. As mentioned above, Enel X Italia considered this solution impracticable as it was too costly (agreements with car manufacturers, large number of *app* versions to be developed and maintained) and inefficient in relation to the number of use cases.

199. The solution based on the integration of the information on the charging stations in Google Maps is proposed to Enel X Italia since the beginning of the matter under consideration and in every phase of the subsequent negotiation, in particular in the reply of 18 January 2019 to the CEO of Enel X Italia and in the *call of* 28 February 2019 with the CEO of the Enel Group. This represents, in effect, an intermediation of the JuicePass *app* (formerly Enel X Italia) by Google Maps (which is present on Android Auto). As highlighted above, Enel X Italia considers the solution in question unsatisfactory as it would not allow it to establish and maintain a strong relationship with users and, in any case, would not allow users to benefit from the booking function (which is not provided in Google Maps).

267 In November 2018*[GI1, Google Cloud, Account Manager]*, reporting to *[G12, Google Cloud, Country Manager]* a conversation he had with *[GL12, Platforms Google Play, Play BD Product Specialist]*, writes "*potential follow up: 1 - work with an OEM (Automotive) such as (more or less all automotives) 2 - Work with Maps Team and Assistant team to access content on android auto (but anyway users will accesss content but NOT the app. At visual level users can only see Google Maps so, for ex, charging stations on Maps) ... Surely integrating content with Maps and Assistant offers a wider range of users. Then if they really want the app, we can just work with an OEM*" (see ISP76, in particular *email* from *[GI1, Google Cloud, Account Manager]* dated 29 November 2018 8:58).
In December 2018 *[GI1, Google Cloud, Account Manager]* writes to *[GL12, Platforms Google Play, Play BD Product Specialist]*: '*I introduced the possible solutions discussed (use Assistant and Maps or Work with an OEM) but it seems they do not satisfy them*' (see ISP57, in particular *email* from *[GI1, Google Cloud, Account Manager]* dated 18 December 2018 2:43 AM).

The Enel Group is a strategic counterpart for Google

200. For the Google Cloud function acquiring the Enel Group as a customer is a strategic objective, as highlighted by an internal *email* of 29 November 2018: "*Enel requested us to support them and for Cloud this is a super strategic prospect we are trying to close*" (emphasis added)[268]. This emphasis is reiterated and specified in two internal documents, one preparing for the World Economic Forum in Davos (22-25 January 2019)[269] and one preparing for the *call on* 28 February 2019 with the CEO of the Enel Group, in which it is stated: *"Enel is one of our main GCP Prospects in Italy* "[270].

201. Google's interest in concluding an agreement with the Enel Group on *cloud* services is being used at the highest levels of Google itself to press for a solution on the issue of the Enel X Recharge (now JuicePass) *app.* In an *email* of 22 January 2019, *[GL7, Google Cloud, President]* highlights the potential of an agreement with the Enel Group, also related to Enel's *know-how* with respect to *cloud* services and openness to negotiate agreements with Google271, and on the issue of the *app*, which may block this potential, he observes: "[s]*ticky point on the mobility app but*
I told him that if we are going into a big partnership we should be able to address this issue and find a joint solution". In an *email* of 1 February 2019 the same *[GL7, Google Cloud, President]* raises the issue of the *app* to *[GL1, Android, V.P. Engineering]* ("*One small issue ... is concerning an issue around bei ng able to use thei r "chargi ng" app on Android Auto*") highlighting the relevance of the Enel Group as a customer for *cloud* services: "*We have talked about taking them to the Cloud and unseating [Omissis]. ... We have such a huge untapped demand wi th Enel I thi nk i t is worth poking the bear :). Let me know if you think we could go around here and engage on a broader partnership. I would only go ahead if they could on their side commit for a big deal of course* "[272].

268 See doc. ISP57, in particular *email* of 29 November 2018 from *[GI1, Google Cloud, Account Manager]*.
269 See doc. ISP61 ("*Davos 2019 - Executive 1:1 Briefing Doc*") where it also states: "*Cloud has a vested interest to successfully onboard Enel to GCP based on opportunities listed below, [omissis] and also position ourselves as a strategic partner for the holistic digital transformation of Enel. Omissis]. We are developing a strong pipeline and we already delivered [omissis]*".
270 See documents ISP5 and ISP60 ('*Executive Meeting briefing Doc*').
271 "*The meeting with the CEO ofENEL went really well this morning ... They are good to very good at Cloud. Everything is in the Cloud (with [Omissis]). He thinks his team knows what they need now (which is a translation for: we are not hostage of [Omissis], and we can see who has the best techno out there). He stated he was one of the biggest customer of [Omissis] (at least in EMEA)*' (doc. ISP16, in particular *email* of 22 January 2019 from *[GL7, Google Cloud, President]*).
272 See doc. ISP10.

The reply of 18 January 2019 to the CEO of Enel X Italy

202. In an *email* dated 21 December 2018, the CEO of Enel X Italia asks Google for a definitive response on the request to publish the Enel X Recharge (now JuicePass) *app* on Android Auto. The response, which is forwarded on 18 January 2019, is the result of an extensive discussion within Google involving several people and different corporate functions including *[GI7, Public Policy, Manager]*, *[GI13, Legal, Associate Legal Counsel]*, *[GSw1, Legal Competition, Senior Competition Counsel]*, *[GN, EMEA Partnerships, Head of Automotive]*, *[GI1, Google Cloud, Manager]*, *[GI3, Global Product Partnerships, Manager]*, who is the Italian contact for the acquisition of data flows on the GELFS columns, and *[GL11, Android Auto, Product Manager]*[273].

203. Google appears concerned about putting its response to Enel X Italia's request in writing. In an internal *e-mai l* of 16 January 2019, it is considered proposing to organise a *call* instead of sending a written reply ("*I would propose to call Venturini rather than wri ti ng hi m so we avoi d they can use what we wri te agai nst us*") but it is subsequently noted (*e-mail* of 17 January 2019) that Enel X Italia has asked for a written reply to be sent to it anyway ("*However, Mr Venturini is asking for a wri tten answer to be anti cipated via emai l in order to prepare the call*")[274].

204. Within Google, it is believed that the most delicate sections of the reply are the one in which the reasons for not allowing the publication of the Enel X Recharge *app* (now JuicePass) on Android Auto are explained, and the one in which the use of Actions-on-Google as an alternative solution to the publication on Android Auto is suggested. In the words of a Google representative: "[t]*he following secti ons are in my vi ew the tri cki est: 1. Our explanation on why we do not allow other navigation apps on Android Auto 2. Whether/how we should bring up the alternative of AoG at all. I think we should include only if we actually believe this is something that makes sense* "[275].

205. Regarding the reasons for the refusal to publish, part of the internal discussion concerns the classification of *apps*. The Android Auto business function notes that the Enel X Recharge *app* (now JuicePass) does not fall into the category of navigation *apps* but simply uses

[273] See documents ISP36, ISP48, ISP100 and ISP118.
[274] See doc. ISP24, in particular *email* dated 16 January 2019 from *[GF1, EMEA Partnerships, President]* and *email* dated 17 January 2019 from *[GI2, Google Cloud, Country Manager]*.
[275] See doc. ISP118, in particular *email* from *[GN, EMEA Partnerships, Head of Automotive]* dated 16 January 2019 9:44 PM.

navigation functions to offer other services276. In the wake of this observation, the Legal business function asks for more details on the classification of *apps and* considers this to be a useful argument that Google is not advantaging its *apps ("i t would weaken their argument on us abusing our purported dominant position and excluding their app from Android Auto")*[277]. It emerges, however, that there is no public or internal classification of what is meant by *media*, messaging and navigation apps278.

206. *In relation to the* reasons for refusing publication, it is debated whether to clearly state that Android Auto contains two navigation *apps* owned by Google, namely Google Maps and Waze, or whether to mention the navigation *app* Kakao (for South Korea). As regards Google Maps and Waze, the Public Policy department considers that mentioning their presence on Android Auto would reinforce the thesis that Google favours its own *apps279*; the Legal Competition department, noting that it is publicly known that Google Maps and Waze are on Android Auto, observes that Google's position is that the *anti trust* law does not prevent favouring its own products: "[e]*ven if we are accused of favouring our own services, in our view anti trust law does not prohibit this. Yes, we got fi ned for alleged favouri ng in the Shopping case but the facts were very different and we strongly disagree wi th the decision. We've appealed i t* "[280].

207. As regards the Kakao *app*, the EMEA Parternships business function notes that among the navigation apps published on Android Auto, the Kakao *app* is not mentioned281; in this respect, the Legal business function states that mentioning the Kakao *app* would be *an assist* to Enel X Italia: '*My 2 cents is that mentioning Kakao is an assist to Enel. I am not even sure they will find out that Kakao exists if we do not mention it* "[282]. The reference to the Kakao *app* is removed.

276 "*And by the way, technically their app isn 't a navigation app either... it's simply one that would benefit from providing navigation instructions. But the core use case is different*" (see doc. ISP48 and ISP118, in particular *email* from *[GL11, Android Auto, Product Manager]* dated 16 January 2019 22:18).

277 "*I think what [GL11, Android Auto, Product Manager] is saying on the technical qualification ofENEL app as something different from a navigation app is key here as it would weaken their argument on us abusing our purported dominant position and excluding their app from Android Auto. @[GL11, Android Auto, Product Manager]: can we dig a little bit more on this and find out a different qual ification for ENEL app (better ifsupported by a solid technical explanation) ?* "(see doc. ISP48 and ISP118, in particular *email* from *[GI13, Legal, Associate Legal Counsel]* dated 17 January 2019 6:18 AM).

278 "*We don't have any publicly (or for that matter, internally) definition ofwhat we consider to be "media" vs. "communications" vs. "navigation " app*" (see Docs. ISP48 and ISP118, in particular *email* from *[GL11, Android Auto, Product Manager]* dated January 17, 2019 7:05 AM).

279 '*This sen tence cr[*e]*ates in my opinion room to accuse us to privilege our own services. I suggest to refrase or cancel*' (see ISP36, in particular comment No 1, by *[GI7, Public Policy, Manager]*).

280 See doc. ISP36, in particular comment No 3, by *[GSw1, Legal Competition, Senior Competition Counsel]*.

281 See doc. ISP36, in particular comment No 4, by *[GN, EMEA Partnerships, Head of Automotive]*.

282 See doc. ISP36, in particular comment No 6, by *[GI13, Legal, Associate Legal Counsel]*.

from the text of the reply to Enel X Italia's managing director and the company only became aware of the *app in* question in the course of the present proceedings283.

208. *As regards* the possible alternative solution based on Actions-on-Google, the draft reply feared that it would not be possible to implement a booking function284. In the course of the discussion, it was made clear that it was indeed not possible at present to make bookings via Actions-on-Google, and that other functions of the Enel X Recharge *app* (now JuicePass) were also not yet supported: "*Coming out of a call with gTech (the folks that technically know what works and doesn't work for Assistant). It's really a no-go from their point of view booking/reserving a charging station just does not work at this stage, and there are other usecases that just might not work yet too*" [285]. Therefore, we opt to keep the possible alternative solution based on Actions-on-Google286 out of the answer.

209. The relevance of the booking function for Enel X Italy is well known by Google. In fact, as noted above, the Public Policy function recommends implementing a solution that also includes a booking function. Moreover, the suggestion of an alternative solution based on Actions-on-Google (subsequently removed from the text of the reply) is closed by the notation that *unfortunately* ('*unfortunately*') it does not seem to allow booking. It is also known that Enel X Italia has already found Google's proposal for solutions without a reservation function unsatisfactory287.

210. Similarly, Google knows that Enel X Italia intends to build and maintain a relationship with users through its *app.* In this regard, commenting on the possibility that the booking function could be implemented in the future

283 The presence of the Kakao *app* on Android Auto is recalled by Google during the hearing of 16 July 2019 (see doc. no. 23 of the investigation file).

284 "*In the short term, the alternative to bring your Enel X Recharge service to drivers, in addition to Google Play, and to those correctly outlined in your email, is through our Actions on Google platform* [link https://developers.google.com/actions/]. *This enables fully-customizable interaction with the Google Assistan t that would allow the user to locate the n earest recharging stations and to learn how to reach them. Considering the use cases outlined, you would likely need to authenticate users. Unfortunately, it seems that we would not be able to let the user reserve the recharging station at this point as Actions on Google still does not support reservation*" (see documents ISP36, ISP81 and ISP122).

285 See doc. ISP36, in particular comment No 15, by *[GN, EMEA Partnerships, Head of Automotive]*. See also ISP100.

286 '*We should delete the whole Actions on Google section this is only going to create more issues ifwe do*' (see doc. ISP36, in particular comment No 15, by *[GN, EMEA Partnerships, Head of Automotive]*; see also ISP100).

287 "*I read once again Mr Venturini email and this seems exactly what he explains as alternative options we outlined to him and that are not ok of Enel*" (see doc. ISP100, in particular comment of *[GI13, Legal, Associate Legal Counsel]*).

in Google Maps - and that therefore the integration of recharging stations in Google Maps could represent an alternative solution for Enel X Italy - the EMEA Partnerships business function observes: "*But that's not w*[h]*at Enel is looking for they wish to build/maintain their own engagement with end users* "[288].

The call on 28 February 2020 with the CEO of the Enel Group

211. In January 2019, the CEO of the Enel Group meets, on the occasion of the World Economic Forum in Davos, two senior figures of the Google Cloud function (*[Omissis]* and *[Omissis]*) and brings to their attention the issue of the non-publication on Android Auto of the Enel X Italia289 *app*. Moreover, on 31 January 2019, the CEO of the Enel Group raises the issue again with the same persons and, as a result of this, an internal Google discussion is initiated that leads to a *call* held on 28 February 2019290.

212. This *call is* attended by senior figures from Google and the Enel Group: for Google, *[Omissis]* (Android business function) and [Omissis*] (*Google Cloud business function), who replaces *[Omissis]* (Google Cloud business function)[291]; for the Enel Group, the Group CEO and the CEO of Enel X Italy292.

213. The preparation of the *call* involves a large group of people including top Google figures in the Android, Android Auto and Google Maps/Local business functions: in particular *[GL7, Google Cloud, President]*, *[GU1, Google Cloud, V.P. EMEA]*, *[GL1, Android, V.P. Engineering], Lawrence [GL2, Android Auto, Head of Product Management], [GS1, Google Maps/Local, Strategic Partner Manager]. Engineering]*, Lawrence *[GL2, Android Auto, Head of Product Management]*, *[GS1, Google Maps/Local, Strategic Partner Manager]*; the preparation is also attended by *[GI2, Google Cloud, Country Manager]*, *[GI1, Google Cloud, Account Manager]* and *[GI3, Global Product Partnerships, Manager]*, who is the Italian contact for the acquisition of data flows on the columns in GELFS293 format. Google's strategy for the *call* is set out in an internal document entitled "*Briefing for the call with Mr. Francesco Starace (ENEL CEO) on 2/28 at 9AM PT - 6PM GMT+1*"[294]; another internal document, entitled "*Executive Meeting Briefing Doc*", sets out some of Google's strategies for the call.

288 See doc. ISP36, in particular comment No 17, by *[GN, EMEA Partnerships, Head of Automotive]*.
289 See documents ISP10 and ISP73.
290 See documents ISP10 and ISP73.
291 See doc. ISP74, in particular *email* from *[Omissis]* dated 27 February 2019 12:08.
292 See documents ISP60, ISP62 and ISP74.
293 See doc. ISP73.
294 See documents ISP15, ISP62 and ISP63. See also doc. ISP71.

Key Talking Points for Google Executive - Pls use this presentation and video to guide the conversati on") [295].

214. The agenda prepared by Google for the *call consists of* three phases:

- In the first one, *[GL1, Android, V.P. Engineering]* explains the reasons why the Enel X Recharge *app* (now JuicePass) is not available on Android Auto ***('Android Auto Positioning ([GL1])'***);
- In the second one, Google Italy proposes a collaboration to increase the visibility of the Enel X Recharge *app* (now JuicePass) and to better exploit the potential of using the same *app* on Android Auto with the available tools (***"Unique collaboration ([GL1], supported by local team)"***);
- In the third phase, the Google Cloud business function calls for an unblocked negotiation on *cloud* services (***"Cloud partnership ([GU1])"***)[296].

215. Among the discussion points identified for use during the *call*, the following are emphasised:

- explain the goals and activities defined for Android ***Auto ('Introduce Google Engagement on Android Auto'***) as well as the reasons behind the policy to publish *apps* (***'Explain why we have a policy to publish apps'***);
- highlight the reasons why it might not make sense to have the Enel *app* X Recharge (now JuicePass) on Android Auto, with particular reference to the fact that its potential users would be less than *[omissis]* (***"Let's shape the issue of not having XRecharge app on Auto in Italy"***) and that, on the other hand, Google is willing to commit itself to allow the use on Android Auto of the Enel X Italia *app* through Google Maps and Google Assistant (***"Google Com m itment to partner with Enel on e-Mobilty"***);
- illustrate how Google can help Enel X Italy to increase *downloads of* the Enel X Recharge *app* (now JuicePass) (***"Increase X Recharge app download on Playstore (Smartphones)*** "[297].

216. The objective of increasing *downloads of* the Enel X Recharge *app* (now JuicePass) from the Google Play *store* was allegedly pursued through a campaign on Google's various *networks,* namely Google Play, Google Search, YouTube, Chrome and GDN (Google Display Network) ('*X-Recharge App campaign across numerous* networks') and was targeted at users ('*UAC* [Universal App Campaign] *uses hundreds of millions of signal*

295 See documents ISP5 and ISP60.
296 See ISP71, in particular *email* from *[GI2, Google Cloud, Country Manager]* dated 27 February 2019 5:07 AM (emphasis in original). See also ISP10 and ISP62.
297 See doc. ISP5 (emphasis in original).

combinations to Target Relevant Users"). The campaign to increase the visibility of Enel X Italia's *app* could have been tested with a monthly expenditure of *[omissis]* euros and a *target* result of *[omissis] downloads* (*"UAC test proposal"*)[298].

217. As mentioned, the strategy developed by Google for the *call of* 28 February 2019 with the CEO of the Enel Group also envisages that Google illustrates the possibilities of using the Enel X Recharge *app* (now JuicePass) on Android Auto with the tools available at the time; to this end, a video is also prepared to be shown during the meeting299. Google identifies two possible options: in the first one the user searches on Google Maps, using a voice command, to find a charging station ("*Option (1) "Find Enel charging stations" - local maps query*"); **in the** second one the user searches on the Enel X Recharge *app* (now JuicePass), using a voice command, to find a charging station ("*Option (2) "Ask Enel to find chargi ng stations" - AoG query to an Enel agent*") [300.]

218. The first option is an example of how Google Maps could be used on Android Auto to search for a recharging station if the information contained in the Enel X Recharge *app* (now JuicePass) was integrated into Google Maps in the GELFS301 format. In fact, in the internal document setting out the strategy for the *call,* the GELFS project is expressly referred to (entire presentation *slide*) with the indication "*We propose to Enel to be Pioneer of this project* "[302.] The second option is based on the Actions-on-Google platform and concerns the use of Google Assistant to interact with the "Enel X Recharge" *app* (now JuicePass), which would however remain outside Android Auto303.

219. The use of Google Maps on Android Auto referred to in the first option would allow to find a column but also to obtain information on the columns (such as voltage and availability of the socket) while the use of the Enel X Recharge *app* (now JuicePass) through Actions-on-Google would only allow to search for the columns304. Moreover, as pointed out above, in the internal debate within Google for the preparation of the reply to the Managing Director of Enel X Italia305 and in the one preceding it

298 See doc. ISP63.
299 See documents ISP47 and ISP106.
300 See doc. ISP47, specifically *email* from *[GI1, Google Cloud, Account Manager]* dated February 19, 2019 7:36 PM.
301 See, inter alia, doc. no. 122 (Google's reply of 17 July 2020).
302 See documents ISP15, ISP62 and ISP63. See also doc. ISP71.
303 See, inter alia, doc. no. 122 (Google's reply of 17 July 2020).
304 See doc. no. 122 (Google's reply of 17 July 2020).
305 See doc. ISP36 and ISP100.

the *call* with the CEO of the Enel Group306 , the limitations of Actions-on-Google emerge, as well as the fact that these same limitations could be overcome if Google judged it a priority to invest in the platform in question.

220. The group of people involved in the preparation of the 28 February 2019 *call* are aware that both solutions shown in the video have already been proposed to Enel X Italy, which rejected them. In the words of a contact person: "*Status with customer: solution on Maps+Assistant+Actions on Google has already been proposed at Enel CEO-1 level (head of EnelX, innovative vision busi ness in Enel) so far. Customer pushed back at that level* "[307].

221. In the course of the proceedings, Google clarified that it had mentioned during the *call on* 28 February 2019 that it was working to allow additional categories of *apps to* be published on Android Auto in the future. However, Google allegedly made no mention of the relevant implementation timeline, as it was unable to commit to a specific deadline308.

IV GOOGLE'S DEFENSIVE POSITION

Introduction

222. In the course of the proceedings, Google illustrated its position with respect to the preliminary hypothesis in a statement of defence309 , in the course of the hearings310 , in its replies to requests for information311 and in the dialogue with Enel X Italia in relation to the *template* (in *beta* version) for navigation, electric recharging and parking apps312. Google further defined its defensive position in a memorandum pursuant to Article 14, paragraph 4, of Presidential Decree 216/1998 (final memorandum), with which it replied to the assessments and conclusions contained in the Communication of Investigation Results (CRI)[313], and in the course of

306 See doc. ISP47.
307 See doc. ISP10, in particular *email* from *[GI2, Google Cloud, Country Manager]* dated 8 February 2019 11:17 AM.
308 See doc. no. 122 (Google's reply of 17 July 2020).
309 See doc. no. 36 (Google Italy's statement of defence of 13 August 2019).
310 See doc. no. 23 (minutes of the hearing of Google Italy of 16 July 2019) and doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
311 See doc. no 122 (Google's reply of 17 July 2020) and doc. no 130 (Google's reply of 24 July 2020).
312 See doc. no. 170 (reply of Google Italy to Enel X Italy of 20 November 2020).
313 See Google's final submission of 24 March 2021.

the final hearing before the Panel, as provided for in Article 14(5) of Presidential Decree 216/1998314.

223. In its final statement, Google reiterated some of the defence arguments already illustrated in the previous contributions and organised them in a series of criticisms of the preliminary investigation procedure and of the assessments contained in the IRC. In the following, the main arguments of Google's defence position will be illustrated first, and then a paragraph will be devoted to the remarks made by Google to the modalities of carrying out the preliminary investigation and to the conclusions of the IRC.

The main defensive arguments

The genesis of this one raised by Enel X Italy

224. As a preliminary remark, Google stated that the case reported by Enel X Italia stems from a misunderstanding about the potential of Android Auto. Such misunderstanding would have been originated and fuelled by the fact that Enel X Italia's request to obtain the publication of the JuiceP ass *app* (formerly called Enel X Recharge) on Android Auto was handled by Google's employees dedicated to commercial relations (*partnerships), in* particular to *cloud* services, and not to product development315.

225. Google also argued that Android Auto '*is not a strategic product*' as it was developed '*to enhance the usability of the mobile phone*' and to '*support Android's competitiveness against the iPhone*'. Android Auto is totally free of charge and '*limited resources are allocated to* it, *even in terms of dedicated engineers*'[316].

Driving safety requirements

226. *The* development of Android Auto is conditioned by the need for Google to comply with '*stringent rules and regulatory requirements, laid down by various public agencies and industry associations*' on driving safety317 . These regulations, which are also articulated at territorial level, were put in place by

314 See minutes of the final hearing of 29 March 2021.

315 See doc. no. 23 (minutes of the hearing of Google Italy of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019) and doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).

316 See doc. no. 23 (minutes of the Google Italy hearing of 16 July 2019).

317 See doc. no. 36 (Google Italy's submission of 13 August 2019). See also doc. no. 23 (record of Google Italy's hearing of 16 July 2019). The European Road Safety Observatory, the US National Highway Traffic Safety Administration (NHTSA), the Alliance of Automobile Manufacturers and the Japan Automobile Manufacturers Association (JAMA) are mentioned among those who have drafted legislation on driving safety.

system and consolidated by Google in order to make Android Auto globally compliant [318].

227. In order to develop the *templates* for Android Auto, Google conducted and continues to conduct complex simulations to test the safety of the actions allowed to the user; these simulations are also onerous in terms of the time required. Also in the case of the *custom* Kakao *app,* Google had to provide significant assistance in relation to security *testing.* In contrast, in the case of the *custom apps* developed with car manufacturers, the latter conducted the *tests* for driving safety autonomously.319 In the case of the Kakao custom app, Google had to provide significant assistance with regard to safety tests.

228. In its final statement, Google reiterated the relevance of driving safety requirements in the development of Android Auto, highlighting the need to carry out onerous *tests* on user-app interactions with regard to *templates* and collaborations with third-party developers for *custom apps*. According to Google, driving safety requirements constitute an objective justification for the conduct under investigation.

Template development and Google's responsibility

229. Regarding the development of *templates* for Android Auto and the role of third-party *app developers*, Google explained that in some cases it is possible to collaborate with the developers of an *app* 'of *interest to users or of interest to Google*' during the *template* development phase. However, Google considers that '*the development of Android Auto technology is, in fact, a Google prerogative*'. In addition, Google said that the *template* control is necessary to guard against the possibility that users could hold Google liable for damages resulting from the use of *apps* on Android Auto. In this respect, Google stated that '*even negligent behaviour can give rise to theories of damages*'[320].

230. Google also explained that some contracts with car manufacturers for the interoperability of *infotainment* systems with Android Auto contain '*escalated on path*' clauses whereby '*if an OEM believes that a Google service or third-party app poses a significant risk to the safety or security of users, it may contact Google directly to resolve the issue*'[321]. In the case of

318 See Google's *Global Distraction Guidelines* (Annex 1 to doc. No 36).
319 See doc. no. 122 (Google's reply of 17 July 2020).
320 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
321 See doc. no. 36 (Google Italy's submission of 13 August 2019).

of *custom apps* developed for car manufacturers, the latter take full responsibility for safety issues322.

Failure to publish the Enel X Italia app on Android Auto

231. The decision not to publish the JuiceP ass (formerly Enel X Recharge) *app* on Android Auto '*is a simple consequence of applying Google's policies for Android Auto, which, as already explained, are generally applicable, contain technical limitations, and are ultimately firmly based on safety and legal liability considerations*'[323].

232. Google pointed out that, when Enel X Italia started to develop its own *app* for Android Auto, it was clear from the *web* pages dedicated to developers that only two categories of *apps* could be present on Android Auto, namely *media apps* and messaging apps; Google Maps and Waze, both owned by Google, were also present on Android Auto, but they did not identify a third category of *apps* open to developers but were native Android Auto *apps*. Enel X Italia's request to see the Enel X Recharge *app* (now JuicePass), developed according to the *template* for messaging *apps*, published on Android Auto, was therefore based on an incorrect assumption.

233. In its final statement, Google stated that the release of the *beta* version of the new *template* for electric recharging *apps* constitutes a suitable instrument to allow the publication of the Enel X Italia *app* on Android Auto. The publication of a *beta* version of an *app, as of* any *software*, is a necessary step to test the *app* and thus avoid harmful effects for users324. The developer of an *app that* is already on Google Play can send *e-mails* to the relevant users to inform them of the availability of a *beta* version for Android Auto and provide instructions on how to download and use it.

234. Google considers that its conduct regarding the release of the *beta* version of the new *template* for charging *apps* does not differ from that

322 See doc. no. 36 (Google Italy's submission of 13 August 2019).

323 See doc. no. 36 (Google Italy's submission of 13 August 2019).

324 The *beta version* constitutes "*the first version in which a given piece of software is made available outside the organisation that developed it*" and its release "*constitutes an essential stage in the development and testing of any software product*" (emphasis added). A *testing* phase through the *beta* version is necessary because "*any new product* [may] *contain a number of bugs that are impossible to predict in advance, and which can only be fully discovered and evaluated through the use of the product itself by developers and users*" (emphasis added). This *testing* phase is all the more relevant in the case of products '*whose use may have a significant impact on driver safety*'. See Google's final submission of 24 March 2021.

Apple's correspondent, which led to the publication of a definitive version of the Enel X Italia *app* on Apple CarPlay. The only difference could be noted with regard to the timing of the release, but this is a mismatch attributable to the fact that Apple began developing Apple CarPlay before Google began with Android Auto.

The alternative solutions proposed to Enel X Italy

235. Google claims that during the negotiations with Enel X Italia, it tried "*in good faith*" to find and propose solutions that would satisfy Enel X Italia325 . According to Google, the proposed solutions did not entail a loss of utility for users.

236. In fact, search and navigation functions would still be guaranteed, albeit mediated by Google Maps, while the remaining functions of the Enel X Recharge *app* (now JuicePass) do not need to be carried out while driving: "*while driving, drivers do not need (strictly speaking) the functions of a reservation app*" (emphasis in the original), as the reservation of a charging station can be made on the *smartphone* before starting the journey; moreover, for the charging session to start, the vehicle must be stationary and payment can be made while the vehicle is stationary before restarting326.

237. Google also considers unfounded Enel X Italia's claim that integrating the Enel X Recharge (now JuicePass) *app* directly into the cars' *infotainment* systems would have entailed significant transaction costs; this is because '*Android Auto is currently* [August 2019, ed.] *adopted by only four car manufacturers selling their electric cars in Italy (i.e., Nissan, Renault, Smart and Jaguar)*'327. In *any event, the access of* the Enel X Recharge (now JuicePass) *app* to users is guaranteed by its presence on Google Play while "*the potential for JuicePass users to access it through Android Auto would in any event be i ntri nsecently limited by the current restricted availability of Android Auto in electric vehicles*" (emphasis in original).

325 See doc. no. 36 (Google Italy's submission of 13 August 2019).

326 See doc. no. 36 (memorandum of Google Italy of 13 August 2019). See also doc. no. 122 (Google's response of 17 July 2020) where it is stated: "*Navigation is the only activity that needs to be performed while the car is in motion, in compliance with all the safety requirements guaranteed by Android Auto. Conversely, while on the move, drivers do not strictly need the functions of a reservation app. In principle, these activities (e.g. reserving a charging station, starting the charging process and paying for the charge) can be performed even when the car is stationary, without any noticeable impact on the user experience*.

327 See doc. no. 36 (Google Italy's submission of 13 August 2019).

The competitive relationship between Google and Enel X Italy

238. Google considers that it is not a competitor of Enel X Italia328. Enel X Italia's app is not a navigation app but a service *app* offering booking and payment functions for electric recharging; moreover, the Enel X Recharge *app* (now JuicePass) uses Google Maps to offer the navigation function on mobile phones with Android operating system. Google Maps, on the other hand, is a navigation *app and does* not allow in its Android Auto version the booking (not even through a *link* to third party *websites* or apps329) or the payment of services (even other than those related to electric recharging). Moreover, Google is not a *Mobi li ty Service Provider*, nor has it any interest in becoming one.

239. Google also stated that no reservation and payment functions are enabled in Android Auto for any kind of service. In any case, Google considers that it '*is not obliged to develop functions for third parties that it does not offer itself*'[330].

240. As far as data is concerned, Google stated that it has 'no *interest in the flow of data related to the characteristic functions of the JuicePass app or the use of charging stations*'. At most, Google might have confirmation that the user owns an electric car, but this information could be inferred from the fact that the user has downloaded the JuicePass *app* (formerly Enel X Recharge). As for the navigation to the charging points, this function within the JuicePass *app* is already done through Google Maps. According to Google, the only useful information would be '*the location of the recharging stations*', but this data is '*available on the market from other sources*'[331]. This position was confirmed in the final submission.

241. In its final submission, Google also reiterated the absence of a competitive relationship between Google Maps and Enel X Italia's *app*, and stated that there is no evidence to support the assessment that Google Maps could incorporate the booking and payment functionalities for electric recharging, and that *plug&charge* technology is *not* a concrete prospect in Italy. In addition, Google pointed out that the functions introduced in Google Maps are not automatically available in the Android Auto version, as it is necessary to verify compliance with the requirements of the new version.

328 See doc. no. 36 (Google Italy's submission of 13 August 2019).
329 In the version of Google Maps for *smartphones,* however, there are in some cases *links* to sites or *apps* through which the user can make reservations.
330 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
331 See doc. no. 36 (Google Italy's submission of 13 August 2019).

strict standards regarding driver distraction'. *The decision not to offer cooperation to Enel X Italy*

242. With regard to Google's choice not to propose to Enel X Italia a collaboration to develop JuicePass as a custom *app,* as was the case for the Korean *app* Kakao, Google stated that the latter "*constitutes an exceptional case*", being the only one outside of collaborations with car manufacturers332. Although neither the developer of Kakao nor Enel X Italia have '*any kind of experience in conducting tests for user distraction*',
the two cases are, according to Google, different for the following reasons: ***(i)*** JuicePass "*is not a navigation app, but a booking and payment app*" but these latter functions are not considered by Google to be indispensable for the driving user; ***(ii) the*** potential users of the JuicePass *app* would be "*very few*" as the number of electric vehicles sold in Italy is "*very limited*"; ***(iii)*** the JuicePass *app* was not available on the Apple CarPlay platform and, therefore, its absence on Android Auto would not have resulted in a competitive disadvantage compared to Apple333.
243. In its final statement, Google reiterated the exceptional nature of the development of the "Kakao" app as a *custom app and the* differences between this case and the request to publish the JuicePass *app* on Android Auto. In the final analysis, Google traced the decision to develop the "Kakao" *app as a custom app* to the need to make a navigation *app* available to Android Auto users in South Korea, since the proprietary navigation *apps* (Google Maps and Waze) did not work properly due to a national regulation limiting the availability of maps, the way they are stored and the content that can be displayed.
244. Regarding the choice of PlugShare and Charge Point as *partners* to develop the *template* that should bring electric charging *apps* to Android Auto, Google explained that these *apps* have on average more than 200,000 monthly users and can therefore make a significant contribution in quantitative and qualitative terms to the project; on the other hand, JuicePass has on average less than 20,000 monthly users and the publication of data on its use by third parties334 is recent (as of February 2020) and

332 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
333 See doc. no. 122 (Google's reply of 17 July 2020).
334 Specifically, by App Annie, which is a company that monitors and analyses the *app* industry (see <appannie.com>.

discontinuous335. Google also stated that, from a qualitative point of view, PlugShare and Charge Point had actively contributed to the development of the *template* by showing a "genuine interest" in collaborating with Google, whereas it is doubtful that Enel X Italia has a genuine interest in collaborating with Google336.

245. With reference to the fact that Google has started a collaboration with the developers of the SpotHero *app, which* allows the search and booking of parking spaces, for the development of the related *template* (still in *beta* version) including booking functionalities, Google stated that, while the SpotHero developers were open to all possible outcomes of the collaboration, Enel X Italia '*would have demanded the publication of its own app*'. In any case, Google considers that *it is 'not obliged to collaborate with all app developers who ask for it*'[337].

The remarks on the procedure and the conclusions of the

investigation338 *On the investigation procedure*

246. With regard to the investigation procedure, Google complains that its rights of defence have been infringed because:

- the Authority did not allow Google to introduce ancillary amendments to the commitments, submitted pursuant to Article 14-ter of Law No. 287/90, which were rejected due to the interest in proceeding with the investigation of the alleged infringement at the time of initiation;
- the time limit for submitting pleadings under Article 14(4) of Presidential Decree No 216/1998 was extended to an extent deemed inadequate;
- access to part of the preparatory documents was deferred pursuant to Article 13(10) of Presidential Decree No 216/1998, and the application for access according to

335 "*Google chose to collaborate with these operators because - in light oftheir considerable monthly average users (i.e., for both above 200,000 users prior to the lockdown) - they could provide signifi cant added value to the development of the Template from both a quantitative and a qualitative viewpoint. ... It is clear that Enel X is in a completely different position compared to these "competitors", considering that, at the end of 2019, the Android-based version of JuicePass had less than 20,000 monthly active users, based on App Ann ie's report. We also observe that App Annie did not start providing an estimate for Juice Pass data until very recently (e.g., in February 2020 Juice Pass information was not even shown) and information on JuicePass is only shown in certain months*" (see doc. no. 170, Google's reply to Enel X Italia of 20 November 2020).

336 "*From a qualitative viewpoint, these operators effectively contributed to the development of the Template, as they showed genuine interest in working with Google to jointly develop a product, and proactively provided useful feedback along the way. In this respect, also taking into account the terms of the Letter, it is safe to wonder whether Enel X was truly interested in pursuing this kind ofpartnership with Google*" (see doc. no. 170, reply of Google to Enel X Italia of 20 November 2020).

337 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).

338 See Google's final submission of 24 March 2021 and minutes of the final hearing of 29 March 2021.

the modalities of the so-called *data room* to a part of the confidential documentation was rejected;
- the investigation was based on the observations of the complainant alone, since other developers of *apps* for services related to electric recharging and developers of navigation *apps* as well as Apple were not involved; moreover, safety issues related to the use of *apps* via Android Auto were ignored.

On the conclusions of the investigation

247. Google's criticisms of the complaint contained in the IRC concern the definition of the relevant markets on which Google holds a dominant position, the proof of the alleged infringement and the qualification of Google as a *gatekeeper.*
248. With regard to the definition of the relevant markets on which Google holds a dominant position, the reference to case AT.40099 - Google Android is considered incorrect. This is because in that case the assessment concerned Google's conduct vis-à-vis *smartphone* manufacturers and the definition of the markets was based on the premise that Apple's operating system is not licensed, whereas in the present case Apple CarPlay is licensed.
249. With regard to the proof of the infringement, Google contends, first of all, that there is no competitive relationship between Google and Enel X Italia, since a partial overlapping of functions is not capable of establishing a relationship of substitutability. Reference is made to the Commission's decision in Case AT.39740 - Google Search (Shopping), in which the Commission found that comparative shopping services and commercial platforms did not belong to the same relevant market339.
250. Secondly, Android Auto is not considered indispensable for the Enel X Italia *app to* reach end users. In support of this claim, Google argues that:
- Enel X Italia's *app* would be able to grow regardless of its presence on Android Auto. In fact, *downloads of* that *app* have been steadily growing over the time period between May 2018 (release of the *mobile* versions of JuicePass) and March 2021, on the Apple and Google *app stores,* with *downloads* for Android devices (44,151) accounting for 62.2% of the total *downloads* made while those for iOS devices (26,822) accounted for 37.8%. In addition, following the release of the

339 Commission Decision of 27 June 2017.

version of JuicePass compatible with Apple CarPlay (23 November 2020), JuicePass downloads for Android devices (12,854) accounted for 67.7% of the total, compared to 32.3% of *downloads* for iOS devices;
- the use of Android Auto would still be modest. Over the past three years Android Auto monthly active users worldwide have grown (3.9 million in 2018, 7.8 million in 2019, 11.5 million in 2020) and so have the number of Android Auto-enabled vehicles (53 million in 2018, 79 million in 2019, 100 million in 2020), but the '*share of Android Auto-enabled cars used on a monthly basis*' (the ratio of the above indicators) would remain low at 7% in 2018, 10% in 2019 and 12% in 2020. Google believes that '*a large number of drivers continue to use apps directly on their smartphones (despite the fact that this behaviour can be perilously distracting)*' and that some drivers would use their cars' *infotainment* systems;
- the use of Google Maps via Android Auto would also be modest. modest. Between 14 February 2021 and 13 March 2021, around 11.3 million Google Maps users in Italy searched for directions by car, of which around 400,000, or 3.5%, used the Android Auto-compatible version of Google Maps;
- The main functions of JuicePass would not need Android Auto. In particular, the reservation of the recharging station could be made before the start of the journey, or, once the journey has started, by stopping the car for a period of time that Google estimates to be one minute, which is acceptable when compared to the recharging times of electric cars, between 45 minutes and two hours;
- Enel X Italy could enter into agreements with manufacturers of electric vehicles
to integrate its *app* into various *infotainment* systems. In this respect, Google points out that Enel X Italia has concluded several agreements with car manufacturers and is a major player in the electric charging services sector.
251. Third, Google's conduct under investigation would not constitute a refusal. This is because Google was unable to publish the Enel X Italia *app in the* absence of a suitable *template* and the conditions that led Google to develop the Korean navigation app "Kakao" as a *custom app were* not met. Google *was unable to publish the Enel X Italia app without a suitable template and the conditions that led Google to develop the Korean navigation app* "Kakao" as a custom app were not *met.*

of *Enel X*' (emphasis in original), Google invested resources in the development of a new *template* of which it released a *beta* version. Google believes that the *beta* version of the new *template* for electric charging apps is suitable for the publication of the Enel X Italia *app* on Android Auto.

252. Fourth, there is no exclusionary intent in Google's conduct, which, on the contrary, has always been characterised by a willingness to cooperate. Google also reiterates that it is not interested in the data generated by users with regard to the charging stations.

253. Fifth, the exclusionary effects of Google's conduct are not proven. In support of this assertion, Google points to the fact that mobility is still in a development phase, that Enel X Italia actually carries out the activities of *Mobi li ty Service Provi der* and *Chargi ng Point Operator*, and that there is evidence of a growth in *downloads of* the Enel X Italia *app.*

254. The qualification of Google as a *gatekeeper is* contested as a *ploy* to evade the obligation to prove the illegality of Google's conduct under Article 102 TFEU. The concept of *gatekeeping would* be "*completely extraneous*" to competition law340 and would have been introduced only to recall the concept of *level playing field* which, in turn, would be referable to two very specific scenarios of *antitrust* discipline (application of Article 106 TFEU on State aid and cases involving indispensable *inputs*).

On the sanction

255. On account of the criticisms of the findings in the IRC, Google takes the view that its conduct cannot be classified as unlawful, let alone as serious or very serious. Consequently, the conditions for the imposition of a penalty are not met.

256. Moreover, the subjective element for the imposition of a penalty exceeding the limits of a symbolic or minimum penalty is lacking in this case. In fact, a situation of '*legal uncertainty*' has arisen as a result of the '*complexity of the legal and factual context*' of reference and the '*novelty of the case*'. In such a situation, Google would not have been able to assess *ex ante* the compatibility of its conduct with competition law.

340 In particular, this is a notion borrowed from the proposal for a regulation on fair and contestable markets in the digital sector (Digital Markets Act).

257. As regards the duration, the beginning of the alleged abuse could not be made to coincide with Google's first express refusal (20 September 2018), since at that time there was no *template* suitable to allow the publication of the Enel X Italia *app* on Android Auto; moreover, it takes time to develop a *template* and, in the present case, the development and *testing* phase was slowed down by the effects of the Covid-19 pandemic on ordinary activities. The end of the alleged abuse could not be later than the release date of the *beta* version of the new *template* (15 October 2020).
258. As regards the criteria for quantifying the fine, Google disputes that the turnover related to Android and Google Play can be taken into account as a basis for calculation, since Enel X Italia was able to develop its own Android *app from the outset* and distribute it through Google Play. Therefore, the Authority could at most base its calculations on the Google Maps turnover.
259. Google also disputes that there are aggravating circumstances to be taken into account in the calculation of the penalty. In particular, the untimely domiciliation in Italy of the companies Alphabet Inc. and Google LLC, which was indicated in the IRC as a possible aggravating circumstance, did not produce any obstructive effect in the conduct of the proceedings and, in any event, Google has always participated proactively in those proceedings.
260. For the purposes of calculating the possible penalty, the Authority should, however, consider as an attenuating circumstance the fact that Google acted in the belief that its conduct was entirely lawful. In fact, Google based its conduct towards Enel X Italia "*on an internal legal opinion, which had confirmed the absence of any obligation to guarantee Jui cePass access to Android Auto*" [341].

On the imposition of obligations

261. Google considers that the imposition of obligations, as outlined in the CRI, is unnecessary since Google has released a new *template* (in *beta* version) that already allows Enel X Italia to develop a version of its *app* compatible with Android Auto. The *template* in question '*already includes a booking function (provided that this does not imply any activity relating to the payment of the recharging session)*', but does not allow the recharging session to be started; according to Google, the unavailability of this latter function does not constitute a concrete limitation of use, since '*before the recharging session is started, it is not possible to start it*'.

341 Opinion reported in several inspection documents consisting of *threads* of internal *emails including, for* example, doc. ISP50.

In order to use this function, the driver must necessarily get out of his car and connect the charging strip to the electric vehicle'.
262. As to the possibility of developing a customised *app* for JuiceP ass, Google reiterates that this 'is *not a viable option*'. Moreover, the development of a customised solution for Enel X Italy could discriminate against other *app* developers.

V. EVALUATIONS

V.1 FOREWORD

263. Google's conduct under investigation concerns the publication of *apps* by third-party developers on the Android Auto platform and, in particular, Google's refusal to grant Enel X Italia's request to have the JuiceP ass (formerly Enel X Recharge) *app* for services related to electric recharging available on Android Auto. Specifically, Google did not define and make available the IT solutions that would have allowed Enel X Italia to develop a version of its *app* compatible with Android Auto and/or usable in an easy and safe manner by users driving a car.
264. Google's conduct is relevant for the purposes of protecting competition and market dynamics because of the dominant position held by Google itself. The specific features of this market condition give Google a central role in enabling digital interactions and transactions and, in particular, in allowing professional users (in the present case, developers) to access the audience of final users of *apps* (*gateways*). In this context, interoperability (in a broad sense), which in itself represents a qualifying element of digital markets and products, becomes the key element for creating and maintaining a wide and plural offer. Moreover, the types and specific characteristics of the *apps* that can be published on Android Auto, as well as the timing of the definition and the provision of the necessary programming tools, depend exclusively on Google; therefore, Enel X Italia cannot develop a version of its own *app* compatible with Android Auto in the absence of a specific activity by Google.
265. A further circumstance makes Google's conduct worth investigating from *an anti-trust* perspective: the presence on Android Auto of the *app*

owner Google Maps. In fact, there is a competitive space that includes both Google Maps (as well as other navigation apps) and the Enel X Italia *app* (as well as other service *apps* related to electric recharging) with the former treating recharging columns as other points of interest on the maps (generalist approach) and the latter addressing the specific needs of users regarding electric recharging (specialist approach); both *apps* offer search and navigation services related to recharging stations (effective competition) and, in addition, the Enel X Italy *app* offers functionalities that are new and that could in the future be integrated into Google Maps (potential competition); moreover, the Enel X Italy *app* and Google Maps compete for users and for the data generated by them.

266. As a result of Google's conduct, the JuicePass *app has* been excluded from the Android Auto platform for more than two years and, in particular, at the beginning of a phase of significant growth in sales of electric cars and, therefore, in the demand for services related to electric recharging. If the availability of the Enel X Italia app on Android Auto were to be further hindered, the chances for the JuicePass app to establish itself among the *apps* that are actually used by users could be jeopardised, due to the relevance of Android Auto as an access point for users to use *apps* when they are driving and the (indirect) network effects as a key factor for the effective operation of digital apps.

V. 2 THE REFERENCE CONTEXT

267. The case under examination is set in a market context of strong innovation and rapid evolution. This is true both for e-mobility services, which represent in a broad sense the field in which the effects of Google's conduct under investigation are produced, and for the technological solutions for the use of *apps* on mobile phones (or *tablets*) through the *infotainment* units of cars, which represent in a broad sense the field in which Google's dominant position lies.

268. The entire e-mobility sector is in a phase of development and evolution which is reflected in the related services. In particular, the shared forecast is that from 2020 to 2025 there will be a significant growth in the registration of electric cars and, consequently, in the share of electric cars in the fleet342. With

342 See Energy & Strategy Group's September 2019 "*Smart Mobility Report*" study, doc. no. 125 (Mercedes-Benz reply of 20 July 2020), doc. no. 131 (PSA reply of 29 July 2020), doc. no. 135 (Renault reply of 4 August 2020), doc. no. 133 (Volkswagen reply of 3 August 2020) and doc. no. 155 (FCA reply of 21 September 2020).

With regard to electric recharging services, the structure of the offer is currently being defined, although some characteristic features can be glimpsed, including the distinction between CPOs (*Charging Point Operators*) and MSPs (*Mobility Service Providers*), the emergence of platforms for interoperability between the systems of the various CPOs and MSPs, and the spread of *apps* for services related to electric recharging343. It is in the field of electric charging services that the competitive battle is played out between *apps* dedicated to such services (specialist approach), such as JuicePass (formerly Enel X Recharge), and navigation *apps,* such as Google Maps, which include charging stations among the points of interest on maps for which it is possible to search (generalist approach). To date, both JuicePass and Google Maps offer search services for the location and information, relevant to recharging, of the recharging columns; the JuicePass *app* adds other services to this, namely those of booking, managing and paying for the recharging session.

269. As regards the technological solutions for the use of *apps* on mobile phones (or *tablets*) through the *infotainment* units of cars, the evidence in the file shows the diversity and variability of the solutions adopted by car manufacturers for the *infotainment* systems of their cars, as well as the clear interest of car manufacturers in offering their customers the possibility to use *apps* on mobile devices through *infotainment devices344.* These features lead to the clear affirmation of Android Auto as the *standard* for enabling interoperability between smart mobile devices running Android and car *infotainment* systems. Moreover, Google has recently launched an operating system for car *infotainment* devices based on Android (Android Automotive Operating System) thus confirming its interest in extending (in a broad sense) its operating system to the car environment.

270. The characteristics of strong innovation and rapid evolution mean that, in this case more than in others, a prospective perspective must be adopted in the evaluation of competitive processes. Thus, the diffusion of the Enel X Italy and Google's interest in offering Google Maps users services

343 See doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019), doc. no. 49 (communication of Enel X Italia of 30 October 2019), doc. no. 80 (reply of Enel X Italia of 16 March 2020), doc. no. 95 (reply of Enel X Italia of 16 June 2020) and study "*Smart Mobility Report*" of September 2019 by Energy & Strategy Group (Politecnico di Milano).

344 See doc. No 125 (Mercedes-Benz reply of 20 July 2020), doc. No 131 (PSA reply of 29 July 2020), doc. No 133 (Volkswagen reply of 3 August 2020), doc. No 135 (Renault reply of 4 August 2020), doc. No 155 (FCA reply of 21 September 2020) and doc. No 167 (Mercedes-Benz reply of 15 October 2020). See also doc. No 122 (Google reply of 17 July 2020).

connected to electric charging must be placed in the perspective of the development of electric mobility and not in the framework of a still limited deployment of electric cars. Similarly, the relevance of Android Auto as a market *standard for the* interoperability between the *smartphone* (and *tablet*) environment and the car environment should be assessed in the context of the variety and variability of car *infotainment* systems, which makes any customised solutions (for individual systems) all the more costly and less responsive to a goal of generalised dissemination among end users of applications for the car environment.

271. This case is also set in a digital context as it concerns the interoperability between the *smartphone* (and *tablet*) environment and the car environment and the competitive comparison between *apps*. The economic model of reference is that of digital platforms.

Android Auto, being an extension of Android to the car environment, is a platform chosen by car manufacturers and *app* developers to meet the needs and to capture the interest of the - very large - audience of owners of smart mobile devices running the Android operating system345.

The JuiceP ass *app* (formerly Enel X Recharge) for services related to electric recharging, developed by Enel X Italy, is itself a platform connecting different CPOs and MSPs allowing the recharging of electric cars, on the one hand, and users purchasing recharging, on the other hand. Google Maps is also a platform with reference to the search functions for the location and relevant information on points of interest (in the present case, recharging columns): in fact, Google Maps connects the subjects that own and manage said points of interest with the users that search on them.

272. Since the economic model of reference in this case is that of digital platforms, the relationship with users assumes a central role: through Android Auto, Google intends to maintain the relationship with users of smart mobile devices running the Android operating system when they are driving a car; with the JuiceP ass *app* (formerly Enel X Recharge), Enel X Italia intends to establish and maintain a relationship with users of services connected to electric recharging; by extending the location search and relevant information functions to recharging stations

345 Indeed, Android Auto extends to the car environment the platform function of Android, which connects manufacturers of smart mobile devices, *app* developers and users of smart mobile devices. In addition, Google Play, the *app store* through which *apps that* can be used on smart mobile devices and those that can (also) be used through car *infotainment* units are distributed, is a platform that connects *app developers* and users.

of Google Maps, Google aims to maintain the engagement and interest of users of its navigation *app* also with regard to the growing category of services related to electric charging.

273. Users are (also) a source of data and, therefore, this case also concerns the appropriation of user-generated data. In particular, data on searches for charging stations are of relevance, which are produced, alternatively, by using charging service apps or navigation *apps. In* contrast, data on the use of charging stations, such as the station where the charging is done and the duration of the charging, are generated using the electric charging service *apps*; these same data can be inferred from navigation *apps to the* extent that they have a precise mapping of the stations. Hence, for data related to the use of charging stations, the question of appropriation arises, from the point of view of navigation *app* developers, in terms of validation of (otherwise) inferred data.

274. Another consequence of the fact that the economic model of reference is that of platforms is the importance of so-called network effects and the possibility of *winner-takes-all* phenomena. The network effects reinforce the success and the diffusion of a platform because, on each side, the diffusion among an economic group of reference (e.g., in the case of Android Auto, owners of smart mobile devices with Android operating system and *app* developers), attracts other subjects, both belonging to the same group (direct effects, (direct effects, whereby the diffusion among developers attracts other developers and the diffusion among users attracts other users), as well as those belonging to the other relevant economic groups (indirect effects, whereby, for instance, the greater the number of owners of Android-based smart mobile devices, the greater the number of *app* developers programming apps for Android Auto and vice versa). When a single platform manages to connect the vast majority of the economic players of reference, a phenomenon known as *winner-takes-all occurs, whereby* the platform becomes an unavoidable reference point for a given type of service.

275. In the case at hand, the JuiceP ass *app* (formerly Enel X Recharge), as well as other *apps* of services related to electric recharging, face a competitive confrontation with navigation *apps, and in* particular with Google Maps. At stake in this comparison is the relationship with users and the appropriateness of user-generated information. The existence of network effects and the possibility of

winner-takes-all implies not only that it is necessary to reach a critical share of users but also that, in order to achieve this objective, one cannot wait for the market to be mature but, on the contrary, one must have one's offer ready from the first stages of significant market growth. In this sense, conduct aimed at hindering and delaying the development of an effective competitive confrontation between navigation apps and *apps* for services related to electric recharging is likely to result in the exclusion of the *apps* actually used by users to search for recharging stations.

276. Google is not only an *app* developer and, therefore, a competitor of Android Auto's professional users, but also the entity that created and controls Android Auto, i.e. the environment of choice for apps for navigation and for services related to electric charging. Moreover, Google is a *gatekeeper* for Android users and, specifically, for Android Auto: indeed, Android Auto is an entry point for end users to distribute *apps*, and, moreover, the definition and release of programming tools for Android Auto is a prerogative of Google, which decides which *apps* can be published on Android Auto and with what timing. The dual role of *gatekeeper* and competitor requires Google to respect a principle of equal competitive conditions (non-discrimination), the so-called *level playing field*, in the exercise of its prerogatives as the party responsible for the features and development of Android Auto.

277. Since Android Auto is a *gateway* on which the introduction of innovative applications (also) depends, the *level playing field is* both static and dynamic. In a static sense, the *level playing field* requires Google to make available to third party developers programming tools that allow them to create *apps* similar to Google's proprietary ones, i.e., in the present case, *apps that* allow searching for points of interest (such as charging stations) and navigation, and that do not entail any limitation with respect to the functionalities and ways of using Google Maps (and Waze) on Android Auto. In a dynamic sense, the *level playing field* requires that Google does not prevent third parties from offering new and different *apps* and functions on Android Auto, in addition to those offered by Google itself through its proprietary *apps*; the limit to this requirement is to be found in the existence of justified reasons preventing the introduction of additional and innovative functionalities.

V. 3 THE RELEVANT MARKETS UPstream AND THE COMPETITIVE SPACE DOWNstream The relevant markets upstream and the competitive space downstream

278. In the case at hand, two relevant markets are relevant, both identified by the European Commission in its decision on Case AT.40099 - Google Android: the market for the licensing of operating systems for smart mobile devices, where Google is present through Android, and the market for portals for the sale of applications for Android (Android *app store*), where Google is present through Google Play. The geographic scope of both markets is worldwide with the exclusion of China.

279. Android is a platform that connects manufacturers of smart mobile devices, *app* developers and end users. Android is used by developers to create *apps*, and the activity of developers and the network effects triggered in relation to end users are of crucial importance for the success of Android. Therefore, the Commission's assessment of market definition (and of Google's dominant position) in that case, which concerned Google's conduct vis-à-vis manufacturers of smart mobile devices, remains valid in the present case, which concerns Google's conduct vis-à-vis a class of *app* developers. The present case concerns, in particular, a specific feature of Android, namely Android Auto, and this feature is subject to further analysis in the analysis of the relevant upstream markets.

280. The iOS operating system, developed by Apple, is not licensed and therefore does not belong to the same relevant market as Android. The circumstance highlighted by Google, according to which Apple CarPlay is licensable (presumably to car manufacturers for *infotainment* systems), does not change the fact that iOS and Android identify distinct ecosystems, understood as sets of fully interoperable products and/or platforms aimed at satisfying a multiplicity of users' needs. In these ecosystems, as far as it is relevant, ***(i)*** end users cannot use *apps* developed for an operating system different from the one of their device, let alone for the corresponding extension to the car environment, and ***(ii)*** developers have to design their *apps* using *ad hoc* programming tools for the two operating systems and for the corresponding extensions to the car environment.

281. Android Auto is an extension of Android that enables the use of mobile devices with that operating system, and in particular certain *apps* therein.

present, when the user is driving, in conditions of safety and reduced distraction. Android Auto is also an integral part of the Android operating system from Android version 10346 onwards. The distribution of *apps* to end users of Android Auto takes place through Google Play, since the publication on Google Play of an *app* developed in such a way as to be compatible with Android Auto implies that the same *app* is available both in the 'full' version for *smartphones* (and *tablets*), and in the version adapted for safe use in the car environment. Therefore, two conditions must be met in order for an *app to* be published on Android Auto: the *app must be* developed with the programming tools provided by Google for Android Auto, and the *app must* be distributed through Google Play.

282. For the purposes of the assessment of Google's conduct, Android and Google Play are therefore the necessary precondition for the operation and development of Android Auto. Those products are, in particular, platforms connecting (at least) the two sides of developers (professional users) and end users of *apps* for intelligent mobile devices, thus delimiting the market space of Android Auto. Within this space, Android Auto defines the set of *apps* that can be easily and safely used while driving, thus addressing its offer to those professional and end users who are interested, as developers or as users, in applications for the car environment. The specific features of Android Auto as well as the substitutability with other solutions for the use of *apps* in the car environment will be the subject of a dedicated paragraph.

283. The relevant markets referred to above and, in particular, their application to the car environment, are upstream of the competitive space that includes both the apps for services related to electric recharging, which are applications dedicated to this category of services (specialist approach), and the navigation *apps* which, according to a generalist approach, extend their respective services, starting from the search one, to the recharging columns (adding these infrastructures to the points of interest integrated in the maps). It is in this competitive space that the effects of Google's conduct, which is the subject of the present proceedings, are produced.

284. The definition of such a competitive space derives from the competitive relationship linking electric charging service *apps*, including JuiceP ass, and navigation *apps,* including Google Maps, and is declined in terms of effective competition (search and navigation functions), competition

346 See doc. no. 122 (Google's reply of 17 July 2020).

potential (functions of management and/or payment of recharges and possibly booking) and, being platforms, competition for users and the data they generate. From a geographical point of view, the analysis concerns the entire national territory, since the Enel X Italia *app* is specialised in this area347 ; however, the services provided by JuiceP ass and Google Maps are local in nature and, therefore, the overall consideration of contiguous spatial areas does not appear to exceed the national territory due to the conditions of linguistic, urban planning and lifestyle homogeneity.

The extension of Android to the car environment: Android Auto

Android Auto creates a user experience specifically designed for driving users348

285. Android Auto is an extension of Android and, in more recent versions (Android 10 and Android 11), an integral part of the Android operating system349. Through Android Auto, the functionalities of mobile devices and some *apps* can be used easily and safely by the user while driving the car.
286. As we have seen, Android Auto creates a closed and modified environment, which is very different from the complex and activity-rich environment of *smartphones* and *tablets*. In addition, Android Auto responds to the needs of the driving user by allowing them to make phone calls, receive and send messages, listen to music and other audio content, use messaging apps, and use Google's navigation *apps,* activities that Google itself has deemed to be among the most relevant to the driving user. Furthermore, the user experience on Android Auto is strongly aided by the use of voice commands.
287. Android Auto's feature of creating a closed environment suitable for driving is enhanced by the possibility to use the *display* and controls of the car's infotainment unit, when the *smartphone* (or *tablet*) is connected (with a cable or *wirelessly*) to the same car *infotainment* unit. However, this feature is independent of the connection of the mobile device to the *infotainment* unit because, as Google points out, the user experience is simplified and adapted to driving,

347 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).
348 See doc. no. 23 (record of Google Italy's hearing of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (record of Google Italy and Google LLC's hearing of 13 November 2019) and doc. no. 122 (Google's reply of 17 July 2020).
349 See doc. no. 122 (Google's reply of 17 July 2020).

is also available just by activating Android Auto without connecting.
288. Android Auto is designed to use the data connection of the mobile device in the car. This feature is of particular interest for *apps* that need to be used *online*: this is the case with the JuiceP ass *app* developed by Enel X Italia, whose booking function requires that the actual availability of charging stations be checked in real time.
289. In essence, therefore, Android Auto creates a modified, simplified and necessary user experience for the use of the *app*'s services by the driver of the car - in order to meet the safety and distraction reduction requirements of driving a car - which cannot be replaced by the complex and rich interaction experience of the *smartphone* (or *tablet*), when Android Auto is not activated. In addition, exiting Android Auto requires unlocking the device, an activity which is in itself a source of distraction as well as an abrupt interruption in the fluidity of use of the device and *apps* when the user is driving.

Android Auto sets a standard for car manufacturers and app developers

290. Android Auto, by extending the Android platform to the car environment, connects car manufacturers and *app* developers with owners of Android-based mobile devices. On the side of car manufacturers, who decide whether to make their *infotainment* systems compatible with Android Auto, the latter emerges as a market *standard*: the vast majority of car manufacturers (representing 98% of cars sold in Italy) have in fact chosen to make their *infotainment* systems compatible with Android Auto.
their *infotainment* systems compatible with Android Auto350. Moreover, the automotive groups addressed in the course of the procedure explained that interoperability with Android Auto responds to the needs of potential customers and is necessary to keep up with the competition, confirming that Android Auto is a market standard351.
291. Similarly, the interest of *app* developers in the use of the

350 See information on car brands compatible with Android Auto and data on car registrations in Italy (doc. no. 194, record of acquisition of documentation from the Internet of 8 February 2021).
351 See doc. No 125 (Mercedes-Benz reply of 20 July 2020), doc. No 131 (PSA reply of 29 July 2020), doc. No 133 (Volkswagen reply of 3 August 2020), doc. No 135 (Renault reply of 4 August 2020), doc. No 155 (FCA reply of 21 September 2020) and doc. No 167 (Mercedes-Benz reply of 15 October 2020).

The attractiveness of Android Auto for navigation and electric charging app developers can be seen in the fact that, although Android Auto is not yet open to these types of apps, by using the beta version of the new template, the number of apps on this platform is still in the thousands352. The attractiveness of Android Auto for developers of navigation and electric charging apps is evidenced by the fact that, although Android Auto is not yet open to these types of *apps*, using the *beta* version of the new *template*, some developers of navigation and electric charging apps have developed *beta* versions of their respective *apps353.*

Apps that aspire to a large audience of users (such as navigation apps), or that already have a large audience of users (such as the music *streaming apps* Spotify and Deezer), are also present in Android Auto or have clearly expressed their interest in being so354.

Moreover, *apps* developed by car manufacturers, which decide on the *infotainment* systems in their cars, are present on Android Auto355. This is a particularly important indication of how relevant Android Auto is in terms of reaching end-users: indeed, car manufacturers could develop native *apps* in their *infotainment* systems without having to negotiate with any party and, moreover, are interested in reaching subsets of potential end-users, i.e. those who own cars built by them.

292. The audience of owners of devices running the Android operating system, who are potential users of Android Auto, is particularly large. In particular, as highlighted above, in Italy about three quarters of *smartphones* run the Android operating system and are therefore compatible with Android Auto.

Android Auto is not substitutable with other technologies for the use of apps on the smart mobile device through car infotainment units

293. The presence of some particularly popular navigation (Sygic) and music *streaming (*Spotify and Deezer) and *podcast* (Stitcher) *apps* on the *infotainment* systems of some car brands is in addition to, and not a substitute for, the

352 See indication of the main *apps* present on Android Auto (doc. no. 194, minutes of the acquisition of documents from the Internet of 8 February 2021) and doc. no. 56 (minutes of the hearing of Google Italy and Google LL of 13 November 2019).

353 See Google's final submission of 24 March 2021.

354 See *web* page on the main *apps* on Android Auto (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021) and Google's final submission of 24 March 2021.

355 See doc. no. 36 (Google Italy's submission of 13 August 2019) and doc. no. 122 (Google's reply of 17 July 2020).

publication on Android Auto356. Therefore, publishing an *app* on Android Auto does not emerge as an alternative to integrating it into car *infotainment* systems.

294. The use of the data connection of the mobile device, which is, as we have seen, a feature of Android Auto, can be of particular relevance for *apps,* such as JuiceP ass, which are intended for *online* use (to allow updating of information), as it makes access to the data connection certain and easy. In contrast, only newer car models are equipped with a data connection and, in any case, the use of this connection appears limited to a few utilities offered directly by car manufacturers to customers; therefore, the use of the car data connection appears limited and uncertain357.

295. The number and diversity of car infotainment systems, and the fact that *infotainment* systems are relatively new products and the related industry is evolving358 , make it quite clear that the development and maintenance of as many versions of an *app* as there are *infotainment* systems would present very significant transaction and operational costs. On the contrary, Android is an established and consolidated operating system and Android Auto is a market *standard* compatible with the brands that account for almost all (98%) of the cars sold in Italy359.

296. The limited and uncertain availability of a data connection in cars and the development and evolution phase of *infotainment* systems point in the same direction as the preferences expressed by *app* developers, i.e. that the integration of an *app* into car *infotainment* systems is not an alternative to publishing it on Android Auto. This is all the more true for an *app* like JuiceP ass, which is intended for *online* use and still has a limited uptake among users; this latter circumstance implies, in particular, that the operational and transaction costs, already very high in themselves, would end up being unsustainable. Moreover, Google itself, which at an early stage of the comparison

356 See the *websites* of the *apps* Sygic, Spotify, Deezer and Stitcher (doc. no. 194, minutes of the acquisition of documents from the Internet of 8 February 2021). To date, Sygic is not present on Android Auto, which does not yet host third-party navigation *apps.* However, Sygic has collaborated with Google in the development of a new *template* (still in *beta* version) thus demonstrating its interest in being present on Android Auto.

357 See doc. no. 156 (FCA reply of 24 September 2020) and doc. no. 163 (PSA reply of 30 September 2020).

358 See doc. No 125 (Mercedes-Benz reply of 20 July 2020), doc. No 131 (PSA reply of 29 July 2020), doc. No 133 (Volkswagen reply of 3 August 2020), doc. No 135 (Renault reply of 4 August 2020), doc. No 155 (FCA reply of 21 September 2020) and doc. No 167 (Mercedes-Benz reply of 15 October 2020). See also doc. No 122 (Google reply of 17 July 2020).

359 See information on Android Auto-compatible car brands and data on car registrations in Italy (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021).

with Enel X Italia had suggested that the latter should work with car manufacturers to integrate the *app* into their *infotainment360* systems, but in later stages dropped this proposal.

297. The strategy of some particularly popular *apps* - such as Spotify and Deezer (music *streaming*), Stitcher (*podcasts*), and Sygic (navigation) - to be present on MirrorLink but also on Android Auto361 testifies to the fact that the presence on MirrorLink is not alternative to that on Android Auto but rather complementary. Moreover, the tendency of the most popular *apps* belonging to the types most frequently used while driving, i.e. navigation and music *streaming* (and other audio content), to be present on more than one distribution channel has been noted, namely Android Auto and/or Carplay, MirrorLink and some *infotainment* systems.

298. MirrorLink, which aimed to create a *standard that would* work with any operating system, is not an alternative to Android Auto. In fact, MirrorLink is compatible with a limited group of car brands (representing 40% of cars sold in Italy) and *smartphone models362* . Moreover, this compatibility is destined to be further reduced in the near future as MirrorLink has been discontinued by an automotive group (PSA)[363] and by a mobile device manufacturer (Samsung), which are also part of the consortium that gave impetus to its creation364. In addition, MirrorLink has a limited number of *apps* (45) and does not include the most popular and used navigation *apps,* namely Google Maps and Waze, which are available on Android Auto and Apple CarPlay365. Finally, the low attractiveness of MirrorLink has been affirmed by the automotive groups surveyed during the investigation and by Enel itself.

X Italy366.

299. Finally, Android Auto cannot be replaced by Apple CarPlay.

Indeed,

360 See DC1 (Enel X Italy's report), DC5 (supplement to Enel Italy's report of 3 April 2019) and inspection documents ISP57, ISP76 and ISP77.

361 See *webpage* on the MirrorLink apps and *websites* of the Sygic, Spotify, Deezer and Stitcher *apps* (doc. no. 194, transcript of 8 February 2021). As already mentioned, Sygic has been working with Google on the development of a new *template* (still in *beta*) thus demonstrating its interest in being present on Android Auto.

362 See *web* pages on MirrorLink-compatible car brands (doc. no. 194, record of acquisition of documents from the internet of 8 February 2021).

363 See doc. no. 163 (PSA reply of 30 September 2020).

364 See article "*Samsung says goodbye to some in-vehicle services to make room for Android Auto*" (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021). See, also, doc. no. 157 (reply of Enel X Italia dated 25 September 2020).

365 See *web* pages on *apps* available on MirrorLink (doc. no. 194, record of acquisition of documents from the internet of 8 February 2021).

366 See doc. No 156 (FCA reply of 24 September 2020), doc. No 161 (Volkswagen reply of 25 September 2020), doc. No 162 (Renault reply of 29 September 2020), doc. No 163 (PSA reply of 30 September 2020) and doc. No 167 (Mercedes-Benz reply of 15 October 2020). See also doc. no 157 (Enel X Italia reply of 25 September).

Android Auto and Apple CarPlay serve two separate ecosystems, Android and iOS respectively.

The competitive space including electric charging service apps and navigation apps

300. Electric charging service apps and navigation *apps* are linked by a competitive relationship that stems from the fact that they both offer services functional to the charging of electric vehicles, but following two opposite approaches: the former being specialist, the latter generalist. This competitive relationship allows the identification of a competitive space that contains both types of *apps* and is defined in terms of actual competition, potential competition and competition for users and data.

301. The analysis of the functionalities provided by the *apps* for services related to electric recharging, such as the *app* developed by Enel X Italy, and of the functionalities provided by navigation *apps*, such as Google Maps, showed that there is an area of overlap - and, therefore, of substitutability - with regard to the function of searching for recharging stations and information on them relevant to recharging - such as the exact location, number and types of outlets, opening hours and availability. Indeed, for these functions, as well as for other charging-related functions that may already be offered by navigation *apps*, the latter and the service *apps* related to electric charging meet the same needs of the user (effective competition). In view of the decisive importance of the search function for the user's choice of the charging station, effective competition in respect of this function leads to a competitive relationship which extends to other current or future functions367 related to charging stations and related services, with which navigation *apps* can extend their offer of services related to the recharging of electric vehicles, according to a potential competitive relationship.

302. Since the search function of the charging stations is the gateway to charging services, and their location the main factor in choosing a charging station, overlapping activities with regard to the search function are likely to result in the intermediation of electric charging service *apps by* navigation *apps.*

367 It is quite possible that in the near future new functions related to charging electric vehicles will be introduced, also due to technological progress concerning vehicles, charging infrastructure and charging modes.

Furthermore, this overlap may lead to the replacement of electric charging service *apps by* navigation apps, due to the integration of new functionalities in navigation *apps*, such as the management and/or payment of the charging session and possibly its reservation, as well as the spread of technologies that do not require the intermediation of an *app* or *card* for charging (*plug&charge):* in such circumstances, the user experience may take place entirely within the navigation app.

303. The evidence in the file shows that the interest of navigation *app* developers in services related to electric recharging is concrete, as demonstrated by what has been done and/or announced by Google and Apple as well as by the fact that Sygic has already integrated relevant functionalities in its navigation services368. In addition, *plug&charge* technology is a concrete prospect for Italy, as it is recognised as an emerging trend and as there are implementation projects by car manufacturers as well as charging points already available369.

304. Ultimately, the two types of *apps* (navigation and electric charging services) compete for the same resource, namely the relationship with the user: for navigation apps, it is important that users use the *app* (also) for activities related to charging stations; for electric charging services apps, it is important that users start their charging activities in the *app.* The relationship with the user is clearly an *asset* for any kind of commercial activity, but it becomes central in the case of *apps* for which what counts is the actual use by users, as Google itself has well illustrated370; for navigation *apps,* they detect the number of users and the level of activity carried out by users; for service *apps* connected to electric recharging, they detect the number of users and the occurrence of the recharging event.

305. In the case of intermediation of the service app related to electric recharging by the navigation *app*, the former would have a less solid relationship with the user: suffice it to consider that the search results returned by a navigation *app* would also include the columns covered by other MSPs so that the search could lead the user to recharge outside the *network* covered by a given *app.* In the case of replacing the

368 On the offer of services related to electric charging by Google in the dedicated paragraph. With regard to Apple, see press release "*Apple reimagines the iPhone experience with iOS 14*" of 22 June 2020 (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021). With respect to Sygic, see *webpage* "*Electric Vehicle Mode*" (contained in doc. no. 194).

369 See '*Smart Mobility Report*' of September 2019 by Energy & Strategy Group of Politecnico di Milano.

370 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019), in particular presentation "*Enel X & Google. Ideas for Enel X Rech arge*".

services connected to electric charging with the navigation *app*, the former would not establish any relationship with the user, who would instead remain captured within the navigation *app* and would transfer his data to it, even when using the charging service.

306. In the digital environment, the user is above all a source of data, and both navigation *apps* and service *apps* related to electric recharging are interested in collecting them. Google and Enel X Italia have both provided an indication of the data that can be collected and their possible uses, respectively for Google Maps and for JuiceP ass (formerly Enel X Recharge)[371]. Google is undoubtedly interested in data, and is one of the companies to which *the* topic of *Big Data is* referred. Data are, in fact, an *input* for various activities, as their use can be traced to two main purposes: the improvement of the services offered and the profiling of users' activities.

307. In the case at hand, two main categories of data can be identified: those related to the search for a recharging pillar and those related to the use of the same pillars. The former are generated through the *app* with which the search is made, i.e. the *app* for services related to electric charging, such as JuiceP ass, or the navigation *app*, such as Google Maps. The latter are generated through the *app with which the* charging is done, i.e. the electric charging related services *app*, in the absence of electric charging management functionality within the navigation *app.* However, a navigation *app* that integrates an accurate map of charging stations could infer electric charging data through the history of the user's exact locations and precise mapping of charging infrastructure.

308. Data on users' search for charging stations - such as the location of the user at the time of the search, the time of the search, the proximity of the chosen charging station from the place where the search started, the search habits, the routes followed when making a search - are a valuable source for analysing the demand for charging services373 . Therefore, these data can be used by MSPs to define services and services of general interest.

371 As regards Enel X Italia, see doc no. 44 (reply by Enel X Italia dated 22 October 2019), doc no. 49 (communication by Enel X Italia dated 30 October 2019) and doc no. 80 (reply by Enel X Italia dated 16 March 2020). As regards Google, see doc. no 122 (Google reply of 17 July 2020).doc. no 130 (Google reply of 24 July 2020).

372 See, in particular, "*Indagine Conoscitiva sui Big Data*", conducted by the Authority jointly with the Autorità per le garanzie nelle comunicazioni and the Garante per la protezione dei dati personali, published on 10 February 2020.

373 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).

Moreover, it is a valuable source of information for defining the configuration and spatial articulation of the intermediate charging network. Similarly, the information in question is of particular interest to CPOs, i.e. the party that develops and operates the (infrastructure) recharging column network.

309. Both in the case of intermediation of service apps related to electric recharging by navigation apps and - a fortiori - in the case of substitution of the former by the latter, navigation *apps* would exclusively appropriate data on the searches for recharging stations carried out by users. As a consequence, the MSPs and CPOs would become tributaries of the navigation *apps for the* access to the data that they need to define fundamental aspects of the activity, among which the definition of the commercial offers and the specific configuration and territorial articulation of the network of charging stations managed and/or intermediated.

310. The reference made by Google to the European Commission's assessments for the definition of one of the relevant markets in Case No. 39740 - Google Search (Shopping)[374] is irrelevant, since none of the relevant markets in the precedent referred to concerns the present case. Moreover,

the two cases in question differ substantially in that the competitive relationship affected by the conduct under investigation, in the Commission's precedent, involved specialist services (comparative purchasing services) of Google and other parties, whereas, in the present case, it involves a generalist service of Google (Google Maps) and specialist services of Enel

X Italy (JuicePass *app*) and other developers375.

311. In fact, the peculiarity of the present case lies precisely in the fact that the competitive relationship affected by Google's conduct concerns a generalist service and specialised services. There is no reason why such a competitive relationship should escape the observation of the *anti-trust* authorities where, as in the present case, it is possible to clearly define

the boundaries of the competitive space of reference. This is all the more true if one considers that a given class of generalist apps may find itself in a competitive relationship with a plurality of classes of specialised *apps*, so that the competitive relationships potentially relevant for the purposes of competition law may be multiple.

374 See Commission Decision of 27 June 2017.

375 Incidentally, it is noted that, in the Commission's precedent as in the present case, the generalist service (in that case, generic search service; here, navigation *app*) and the specialist service (in that case, comparison shopping service; here, electric charging related service *app*) do not belong to the same relevant market.

V. 4 GOOGLE

'S DOMINANT POSITION The dominant position

312. According to well-established case law, the ability to hinder the unfolding of physiological market dynamics and the substantial independence of conduct vis-à-vis the competitive pressures emanating from the economic entities with which the undertaking is confronted constitute the characteristic elements of a dominant position. In particular, the dominant position held by an undertaking "*confers on* it *the power to prevent effective competition on the market in question by affording it the possibility of behaving to an appreciable extent independently of its competitors, customers and, ultimately, consumers* "[376].

313. Google holds, through Android, a dominant position on the market for the licensing of operating systems for smart mobile devices and, through Google Play, a dominant position on the market for portals selling Android applications (Android *app store*)[377]. Given that, in almost all cases, smart mobile devices use the iOS or Android operating systems, owners of smart mobile devices with an operating system other than iOS use Android and download and manage *apps* through Google Play. Moreover, considering that, in Italy, about three quarters of *smartphones* and about half of *tablets* (which are significantly less widespread than the former) use an Android operating system378 , a developer who wants to ensure the widest possible dissemination of his *app* cannot but focus on the Android programming environment.

314. Google's dominant position concerns digital products - the operating system and the *app store* - of such relevance for the distribution of *apps*, and the diffusion of such products is so wide that it makes Google a real *gatekeeper for app* developers who want to reach end users. This assessment is also supported by the fact that Google's operating system and *app store* are used worldwide, as well as by Google's considerable financial strength.

376 See judgment of the Court of Justice of 17 February 2011 in Case C-52/09 *TeliaSonera Sverige* (in particular, paragraph 24), where reference is also made to the judgments of 13 February 1979 in Case 85/76 *Hoffmann-La Roche v Commission* and of 14 October 2010 in Case C-280/08 P *Deutsche Telekom v Commission*.

377 See Commission decision of 18 July 2017 in Case AT.40099 - Google Android.

378 See StatCounter's GlobalStats statistics (doc. no. 194, record of acquisition of documents from the internet of 8 February 2021).

315. With reference to Google's argument that the concept of *gatekeeping* is extraneous to *antitrust* law and refers to the proposal for a regulation on fair and contestable markets in the digital sector (the so-called Digital Markets Act), it should be noted that the reference to the role of *gatekeeper*, far from referring to rules whose introduction is still subject to a specific approval procedure, is linked to the *body of* literature on the so-called digital economy. The concept of *gatekeeping is,* in fact, one of the main concepts to have emerged from the wide-ranging debate involving institutional, academic and professional actors on the challenges posed by the emergence and pervasive diffusion of digital services and applications379.

316. Gatekeeper is the operator who controls an access point (*gateway*). An operator holding a dominant position concerning an access point (*gateway*) to end users is also a *gatekeeper*. In the present case, Google's dominant position is at the point of access (operating system and *app* shop) of professional users (the *app* developers) to end users, and therefore adding that Google is a *gatekeeper* means emphasising that the dominant position in question puts Google in a position to decide which developers and which *apps* can reach end users and which cannot.

317. Dominance implies that Google bears a "special responsibility" in its market conduct380. In the case at hand, the reference to "special responsibility" has relevant implications for the safeguarding of competitive processes, since Google's dominant position constitutes *gatekeeping* vis-à-vis end users. Indeed, not only does Google's conduct determine the competitive confrontation between Google and its competitors, but also the very functioning of the market and its evolution as well as the introduction of innovative applications.

318. According to well-established case law, the "special responsibility" incumbent on an undertaking in a dominant position implies that the intentionality of the undertaking's anti-competitive conduct is irrelevant. In particular, "the *jurisprudence of the Court of Justice itself has affirmed (since the judgment of 9.11.83, in C- 322/81) the 'special responsibility' that*

379 Authorities responsible for the protection of competition and competitive processes have analysed the characteristics and dynamics of the so-called digital economy on several occasions. See, for example, the report "*Competition Policy for the digital era*" for the European Commission by Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitze (2019), the report "*Unlocking digital competition*" by the Digital Competition Expert Panel (2019), the study "*Online platforms and digital advertising*" by the Competition Market Authority (2020).

380 See, among others, Council of State, 15 May 2015, no. 2479, A428 - Wind-Fastweb/Condotte Telecom Italia: "*A dominant position represents a situation of strength with respect to competitors such that the company holding it is able to (and here lies the limit between use and abuse) obstruct the persistence*" of competitive conditions: such a position therefore generates "*special competitive duties, realistically linked to its particular market power and the consequent particular sensitivity of the market to its operations*".

It is for the dominant undertaking to ensure that its conduct does not jeopardise the development of effective and undistorted competition and, in this context, the psychological element of intent or negligence is irrelevant, since the abuse of a dominant position may occur even in the absence of an intentional element (see also: 6.12.12, C-457/10, 19.4.12, C-549/10, 17.2.11, C-52/09, 11.12.08, C-52/07). also: 6.12.12, in C-457/10, 19.4.12, in C-549/10, 17.2.11, in C-52/09, 11.12.08, in C-52/07) "[381].

The importance of Android Auto in the Android ecosystem

319. Android Auto is part of the Android ecosystem and, in the most recent versions (Android 10 and Android 11), an integral part of the Android operating system itself382. As we have seen, Android Auto allows *apps*, developed according to Google's requirements, to be used through the car's *infotainment* unit and with a simplified and limited user experience, so as to reduce the risks of distraction and to ensure safety in the use of *apps by* users driving a car. Consequently, Android Auto results in a user experience specifically built for the in-car user.
320. The evidence on the record contradicts the argument that Android Auto is an irrelevant product within Google. Android Auto is, in fact, the product that extends the reach of Android to the car environment. Moreover, Google has argued that Android Auto serves to maintain Android's competitiveness with iOS, since Apple has invested in the car environment by developing Apple CarPlay383. In addition, Google has recently launched an operating system for car *infotainment* equipment, the Android Automotive Operating System, which incorporates some features of Android Auto, such as the development of *templates for app* development and the presence of Google Maps as the system's native *app* (not developed through *templates*)[384]. Android Auto and Android Automotive Operating System testify to Google's interest and investment in extending the operation of Android to the car environment.
321. Therefore, the fact that Android Auto is free of charge cannot be an indication of its alleged lack of relevance. Moreover, the lack of a monetary consideration is a common feature of digital services which, moreover, are not free of charge.

381 See Tar Lazio, I, 26 September 2019, no. 11330, A508 - SIAE/Servizi intermediazione diritti d'autore.
382 See doc. no. 122 (Google's reply of 17 July 2020).
383 See doc. no. 23 (record of Google Italy's hearing of 16 July 2029) and doc. no. 36 (memorandum of Google Italy of 13 August 2019).
384 See doc. no. 122 (Google's reply of 17 July 2020).

accompanies, as in the present case, the acquisition of a user-generated data stream385.

Google's independence of behaviour from Android Auto app developers

322. In order for an *app* to be published on Android Auto, it has to be developed with the *ad hoc* programming tools (*templates*, *custom app* development collaboration, Actions-on-Google) defined and made available by Google. Google is the only source of such programming tools386. Moreover, in the case of *apps* developed using a *template*, Google reserves the right to verify the correspondence of the *app* with this *template* and to possibly deny publication387.

323. Google is in the position of deciding which *apps* can be published on Android Auto through ***(i) the*** definition of templates (in essence, pre-defined templates) defining the functionalities and features of entire categories of *apps*, ***(ii)*** decisions on the timing of the development and release of new *templates*, and ***(iii)*** the choice of developers with whom to establish *ad hoc* collaborations for the development of *custom apps*. Moreover, Google exercises the power to exclude *apps* which, although developed according to a *template* defined by Google for a given category of *apps*, pursue a purpose that Google considers extraneous to that category: Google has, in fact, denied the publication of some *apps*, including the *app* JuiceP ass (formerly Enel X Recharge), which used the *template* for messaging *apps* for purposes other than (or deemed different from) communication388.

324. Google explains its decision to develop Android Auto by defining predefined *app templates*, referring to the need to protect itself against any liability arising from the use of *apps by* users389. Apart from any other question concerning the allocation of liability between Google and other parties for

385 See, in particular, "*Indagine Conoscitiva sui Big Data*", conducted by the Authority jointly with the Autorità per le garanzie nelle comunicazioni and the Garante per la protezione dei dati personali, published on 10 February 2020.

386 See doc. no. 23 (hearing of Google Italy of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019) and doc. no. 122 (reply of Google of 17 July 2020).

387 This happened with the Enel X Italia *app* and in other cases where the *template* for messaging apps had been used for other types of *apps* (see doc. no. 122, Google's reply of 17 July 2020).

388 As regards Enel X Italia's *app, see* the second refusal (doc. DC5 and, inter alia, ISP57). As regards the refusal to publish other *apps* on Android Auto, see doc. no. 122 (Google's reply of 17 July 2020).

389 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).

the possible damages deriving from the use of *apps* on Android Auto, this choice implies a complete deprivation of the role of third party developers in relation to the definition of what can and cannot be done on Android Auto, and makes Google the only party deciding on the development and the specific configuration of the *templates.* Although Google sometimes collaborates with third party developers in order to develop *templates*, Google itself points out that the publication of the *app* on Android Auto is not a necessary result of such collaborations390 and states that it is not obliged to establish collaborations with any developer that asks it to391. In conclusion, Google decides in complete autonomy not only for which types of *app it* develops *templates* and with what timing, but also the specific configuration of the *templates.*

325. Google also claims its complete autonomy in deciding whether and with which operators to start collaborations for the development of *custom apps*, defending its choice to have pursued such agreements with car manufacturers and with only one other developer (for the Korean navigation *app* Kakao) and, on the other hand, not to have considered this solution for the *app* developed by Enel X Italia392. The question of whether Google's complete rejection of the custom *app* solution was justified in this case will be dealt with in the following paragraphs.

326. In conclusion, the possibilities and conditions for publishing an *app* on Android Auto depend on Google's choices, and developers can only abide by these choices. In this sense, Google plays the role of *gatekeeper* with respect to Android Auto, i.e. the specific Android feature allowing interoperability between smart mobile devices (running Android operating system) and car *infotainment* systems, on which car manufacturers and *app* developers have focused to meet the needs of buyers/end users. Indeed, as pointed out, the developer of an *app* intended to be used by users driving a car, cannot disregard Android and Google Play to reach users who do not use a smart mobile device with iOS operating system and, in any case, the widest audience of users. Similarly, the developer in hypothesis cannot disregard Android Auto to ensure

390 See doc. no. 170 (reply of Google Italy to Enel X Italia of 20 November 2020).
391 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
392 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019) and doc. no. 122 (Google's reply of 17 July 2020). See also Google's final submission of 24 March 2021.

easy and safe use of the *app* when the user is driving, in compliance with the safety and distraction reduction requirements of the industry regulations and adopted by Google393.

327. By virtue of being the *dominant* provider of IT solutions allowing the development of *apps* compatible with Android Auto, Google should have ensured the interoperability (in the broad sense) of that platform, that is to say, in the present case, the possibility for Enel X Italia to create a compatible *app*, in compliance with a principle of *level playing field, that is to say,* of non-discrimination. Moreover, interoperability, which is a tool designed to allow the presence of a plurality of players on the supply side, appears all the more relevant when a product reaches such a level of diffusion as to represent a market *standard*: in that case, in fact, the emergence and persistence of effective competition on the market depends on interoperability, that is to say, in the present case, the possibility for users of devices with the Android operating system to be able to actually choose whether or not to use the Enel X Italia *app* when they are driving a car.

V. 5 COMPARISON BETWEEN GOOGLE MAPS AND THE ENEL X ITALIA APP IN THE COMPETITIVE SPACE OF SERVICES RELATED TO ELECTRIC CHARGING PROVIDED THROUGH APPS

Strengthening Google Maps services in relation to charging stations

328. As is well known, Google Maps is a popular navigation *app* that enables the search for various points of interest (e.g., businesses and utility locations). As of 2018, electric charging stations were added to the points of interest covered and, subsequently, the search for such infrastructure was also enabled on Android Auto, on which Google Maps was already present.

329. In particular, the evidence on file shows how Google introduced and strengthened the provision of information on charging stations in Google Maps:

393 See doc. no. 23 (minutes of the Google Italy hearing of 16 July 2019) and doc. no. 36 (Google Italy memorandum of 13 August 2019). The European Road Safety Observatory, the US National Highway Traffic Safety Administration (NHTSA), the Alliance of Automobile Manufacturers and the Japan Automobile Manufacturers Association (JAMA) are mentioned among the actors that have developed legislation on driving safety.

- In October 2018, Google Maps started to show, in its version for *smartphones* and *tablets, the* location of the charging stations and some information on the charging stations394;
- during 2019, the above information was also made available in the version of Google Maps for Android Auto395;
- In April 2019, Google added to the information on charging stations, also visible in the Android Auto version, an indication of the real-time availability of charging stations, for the United Kingdom and the United States396.

330. With regard to coverage, as of 2018, Google concluded agreements with five operators to acquire datasets on charging points. In 2018, Google concluded agreements with *[Omissis]* and *[Omissis] that* allowed it to cover *[10-20%]* of the network of charging points present in Italy397. At the end of 2019, Google Maps had a coverage **of** *[60-70%]* [398] of the recharging points present on the Italian territory, fully comparable to that of the JuicePass *app* (formerly Enel X Recharge) which, at the end of February 2020, was *[60-70%].* Moreover, during 2020 Google concluded a further agreement, with *[Omissis]*, which certainly increased the coverage in absolute terms of the charging points present in Italy399.

331. The specific content of the GELFS format, developed for the management of data streams on charging stations, gives an account of the information that Google makes available to users or intends to make available to users (depending on the information that Google manages to acquire from third parties)[400] . This information concerns:
- location and technical and operational characteristics, such as number and type of outlets and opening hours; this type of information is necessary for the user to choose the outlet where to recharge;
- the real-time availability of outlets; this type of information fulfils the same function as the booking function allowed by the JuicePass app (formerly Enel X Recharge) and other *apps in* that it is

394 See doc. DC4 (supplement to Enel X Italia's report of 25 March 2019) and *post* "*Get charged up with Google Maps*" referred to via *links* in inspection documents ISP81 and ISP122 (see also doc. no. 194, report of acquisition of documents from the Internet of 8 February 2021).
395 See inspection documents ISP10 and ISP47.
396 See doc. no. 36 (Google Italy's submission of 13 August 2019) and *post* "*Finding a place to charge your EV is easy with Google Maps*" (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021).
397 See doc. no. 36 (Google Italy's submission of 13 August 2019).
398 See doc. no. 122 (Google's reply of 17 July 2020).
399 See doc. no. 122 (Google's reply of 17 July 2020).
400 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and inspection documents ISP62 and. ISP86.

intended to prevent the user, on reaching the chosen column, from finding it unavailable or in use by another user;
- details of the payment methods allowed in each charging station. charging station.
332. Google has pursued and is pursuing the objective of concluding agreements with *Mobi li ty Service Provi der* to feed the flow of data on the recharging columns, according to the GELFS401 format. To this end, contacts with Enel X Italia had already taken place in October 2018; the negotiations then intersected with that on the (failed) publication of the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto402.
333. Google's interest in the flow of data that Enel X Italia could bring to Google Maps is clearly evidenced by the fact that, at every stage of the *escalation of* the issue of the publication of the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto, Google has offered Enel X Italia the integration in Google Maps of the information on the charging stations (according to the GELFS format), as an alternative solution to the publication on Android Auto. And this despite the fact that Google knew that Enel X Italia was interested in having an unmediated relationship with users. In fact, Google itself confirmed that the integration in Google Maps of the information on the recharging stations covered by the JuiceP *app* would have provided it with exact data on these stations403.
334. In conclusion, at least as of 2018, Google has strengthened its offer of services related to electric recharging through Google Maps, both by expanding the information set available and by equipping itself with the tools (GELFS format) to continue to expand this information *set* and feed the flow of data on recharging stations. As a result, Google is in a position to offer an effective search function for charging stations, with the relevant information for charging, thus being able to mediate the operation of *apps* for services related to electric charging, such as JuiceP ass.
335. As far as future development prospects are concerned, Google Maps could be enriched with further functionalities related to charging stations. The expansion of the functions offered by Google Maps would not only be a consequence of the addition of charging stations to the points of interest covered, but would also be consistent with the trend observed in the development of Google Maps.

401 See doc. no. 122 (Google's reply of 17 July 2020). See also doc. ISP91.
402 See inspection documents ISP10, ISP25, ISP35, ISP47, ISP92 and ISP103. See also doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and doc. no. 43 (minutes of Enel X Italia's hearing of 10 October 2019).
403 See doc. no. 36 (Google Italy's submission of 13 August 2019).

of the Android ecosystem and, more generally, in Google's actions on the market, to 'incorporate' users' products and services as they appear on the market.

336. In particular, Google stated that in the future it might allow Google Maps users to access MSP *apps* and/or *websites in* order to enhance the user experience on Google Maps404 . In this case, Google Maps would strengthen its role as an intermediary between users and MSP *apps* and, in other respects, expand (albeit in a mediated form) its own offer of services related to electric charging.

337. In its final submission, Google pointed out that the introduction of new functionalities in the *mobile* version of Google Maps does not automatically entail the availability of such functions in Android Auto, since it is necessary for Google to verify their compatibility with the strict security *standards* it has adopted. This being said, the programming tools for Android Auto, which meet the aforementioned security requirements, are fully available to Google; moreover, Google Maps has been developed with '*full screen*' tools, i.e. without the limitations of the *template.* Moreover, Google is perfectly capable of carrying out safety and distraction reduction *tests.* Therefore, unlike any third-party developer, Google does not have to overcome any negotiation hurdle to introduce new features in Android Auto.

338. Moreover, although Google stated that it had no plans to offer booking functions405 , the evidence on file gives an account of the fact that within Google it is believed that it will eventually implement booking functions via Google Maps. This emerges, in particular, from a simple reading of an internal Google document preparing the answer to the request of the managing director of Enel X Italy: once it was clarified that the booking function was not allowed by Actions-on-Google, it was asked whether it would be possible to integrate it in Google Maps ("*i t could be in roadmap for maps?*") and the assessment expressed by a contact person of the commercial relations for the *automotive* sector is that this result will certainly be achieved ("*I'm sure that Google Maps will at some poi nt bui ld such a feature*")[406].

404 See doc. no 122 (Google's reply of 17 July 2020).

405 See doc. no. 122 (Google's reply of 17 July 2020).

406 See, in particular, doc. ISP36. See also doc. ISP100. The contact person for commercial relations with the automotive sector is *[GN, EMEA Partnerships, Head of Automotive]* and is the same person who, after a discussion with the contact persons for the technological development of the products ('*Coming out of a call with gTech (the folks that technically know what works and doesn't work for Assistant)*'), states that the booking function is not available on Actions-on-Google.

339. Similarly, although Google has stated that it has no plans to offer payment functions via Google Maps407 , it has been noted in the Android developer community that more recent versions of Google Maps contain instructions that are suitable for enabling payment functions via this *app408* . In addition, the GELFS format (for capturing data streams related to charging stations) deals with payment methods in great detail409.

340. The possibility of Google introducing booking and payment functions in Google Maps is suggested by the fact that, during the proceedings (July 2020), *Google* explained that '*Google's navigation template will in the future allow app developers to enable booking and payment of electric vehicle charging sessions through their apps within Android Auto*'[410]. It is, in fact, reasonable to assume that if Google is preparing to allow third party developers to integrate booking and payment functions in their *apps* (through the new *template* for navigation *apps*), Google itself will be ready to integrate these functions in its proprietary navigation *app* Google Maps, whose Android Auto version has been developed without the limitations of the *template* (i.e. '*full screen*').

341. On the whole, therefore, the evidence in the file makes it possible to foresee that, in the future, Google may integrate booking and payment functions in Google Maps (on Android Auto). In this hypothesis, Google would be in a position to offer Google Maps users the possibility to manage the whole charging experience of the electric car, thus de facto becoming a substitute for the *apps of* services related to electric charging.

The JuicePass app (formerly Enel X Recharge)

342. The *app* developed by Enel X Italia is intended to build a complete user experience with regard to electric recharging. It starts with the search for the location and information relevant to the choice of charging station and then moves on to booking, navigation, management of the recharge and payment411.

407 See doc. no 122 (Google's reply of 17 July 2029).
408 See documents no. 73 (Enel X Italia's application for precautionary measures) and 80 (Enel X Italia's reply of 16 March 2016).
409 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).
410 See doc. no. 122 (Google's reply of 17 July 2020).
411 See doc. DC1 (report of Enel X Italia) and doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019).

343. The JuicePass *app* has a high coverage of the network of charging points on the national territory (*[60-70%]* at the end of February 2020) and, moreover, is part of a group that is also strongly committed to the construction and management of charging infrastructures, through the *Charging Point Operator* (CPO) Enel X Mobility412. Therefore, Enel X Italia is a leading operator in the field of services related to electric charging.
344. In addition, the JuicePass *app* (formerly Enel X Recharge) has important distinctive features compared to Google Maps. Firstly, the JuicePass app responds to a specific need, that of facilitating and enabling electric recharging, while Google Maps responds to a generalist approach, whereby the same *app can be used to* search and access information on a variety of categories, including recharging stations. In addition, the JuicePass *app* offers the user a series of functions - including, in particular, the booking of charging stations - which are not available on Google Maps. The ability of the JuicePass app to distinguish itself from Google Maps means that the *app* itself can be recognisable to users.
345. Due to the fact that it supports the entire electric car charging experience and, in particular, provides additional and different services to those of search and navigation (booking, management and payment of the charging session), the *app* developed by Enel X Italy partly overlaps with Google and partly is new and different to Google Maps. The presence of JuicePass on Android Auto would allow users to choose between two different recharging experiences and, therefore, would constitute an extension and enrichment of the offer.
346. In other respects, it is reasonable to assume, on the basis of the evidence in the file, that Google may in the future expand its services relating to electric recharging by introducing booking and payment functions and/or by including in Google Maps *links* to *apps* and sites that manage the different phases of electric recharging. In this sense, the area of overlap between the Enel X Italia *app* and Google Maps seems destined to widen.

V. 6 REFUSAL TO PUBLISH ON ANDROID AUTO

An overview of Google's conduct

347. Google's conduct under investigation concerns its refusal to publish the JuicePass *app* (formerly Enel X Recharge) on Android Auto. This refusal means that, when Android Auto is activated on the mobile device,

412 See doc. no. 80 (Enel X Italia's reply of 16 March 2020).

in order to use the JuiceP ass app, the user must exit Android Auto, with all that this implies in terms of distraction and driving safety as well as the effective usability of the JuiceP ass *app.*

348. The refusal was initially a rejection of Enel X Italia's repeated request to publish the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto. In the context of Google's business decisions regarding the publication of *apps* on Android Auto, the refusal takes the form of a failure to implement appropriate solutions to allow the development of a version of the *app* that can be published on Android Auto (*template* or *custom app*) or that can be used on Android Auto in a secure manner through voice commands (Actions-on-Google). From a negotiation point of view, the refusal constitutes Google's obstructive attitude to circumvent Enel X Italia's main request (publication of an *app* on Android Auto) as well as some further requests for clarifications and/or commitments made by Enel X Italia itself in relation to a solution which, even if considered unsatisfactory, could have increased the usability of the JuiceP ass *app* (formerly Enel X Recharge) pending its publication on Android Auto.

349. In the present case, Google's refusal to do so constitutes an omissive conduct with respect to the "special responsibility" of ensuring the interoperability of Android Auto with regard to *app* developers, with specific reference to the possibility for Enel X Italia to develop a compatible version of its own JuiceP ass413 *app.* This conduct appears attributable to an exclusionary purpose for which the availability of Enel X Italia's *app* for Android Auto users was hindered and delayed. Considering the partial overlapping between Google Maps and JuiceP ass as well as the recognisability and novelty of JuiceP ass vis-à-vis Google Maps (in the competitive space of services related to electric recharging provided through *apps*), and taking into account the fact that Google Maps is on Android Auto while JuiceP ass is still excluded, Google's refusal should be placed within the framework of a refusal to allow interoperability (refusal to contract) which entailed a breach of the principle of *level playing field* consisting in an unfair advantage of Google's proprietary app to the detriment of the competitor's *app* Enel X Italia (discrimination).

350. The conduct, described schematically above, is fully attributable to Google. In fact, from the very beginning, the discussion on the issue raised by Enel X Italia involved several corporate functions, including those dedicated to Google Play and to Android and Android Auto,

413 See European Commission decision of 24 May 2004 in Case COMP/C-3/37.792 - Microsoft.

Google Italy, Google LLC and other companies controlled by it (see Annex 1).

Expressed waste

351. Enel X Italia requested the publication on Android Auto of its JuiceP ass *app* (formerly Enel X Recharge) at least from September 2018. This request was subsequently reiterated, as evidenced by the fact that
there were four refusals. Moreover, the evidence in the file shows that Enel X Italia exerted repeated and increasing pressure to convince Google to address in a proactive manner the request to publish the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto414.

352. Google announced that the Enel X Recharge *app* (now JuiceP ass) could not be published in Android Auto on four occasions: with *e-mails* from the
20 and 21 September 2018, 8 November 2018 and 18 January 2019415. The fourth refusal was the result of a request by the managing director of Enel X Italia to obtain a definitive written reply in relation to the publication on Android Auto of a version of its *app* allowing the booking and the starting of recharging in addition to search and navigation, and therefore a reduced *set of* functionalities compared to those allowed on the *mobile* version. When Google refused to publish the *app* developed by Enel X Italia on Android Auto, Google Maps and Waze were already available on the same platform for the car environment.

353. In these refusals, Google made no reference to the possibility that the Enel X Italia *app* might be published on Android Auto at a later date, leaving Enel X Italia in complete uncertainty as to whether and when it would be published. In the fourth refusal (reply to the managing director of Enel X Italia of 18 January 2019) Google goes so far as to state that, even if a new *template* for third-party navigation *apps were to be* developed, this could not be used for Enel X Italia's *app* as this would be a booking and payment app416; this last position was moreover contradicted by the fact that, in the course of the proceedings, Google stated that the publication of Enel X Italia's *app* on Android Auto could take place precisely because of

414 See, DC5 (supplementing Enel X Italia's report of 3 April 2019) and, among others, inspection documents ISP57 and ISP77.
415 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and, among others, doc. ISP57 and doc.ISP77.
416 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and ISP77.

the development of a *template* for a navigation *app* that also integrates booking and payment functions417.

Failure to activate programming tools for Android Auto

354. The publication policy on Android Auto, defined by Google itself, identifies five categories of publishable *apps:* ***(i)*** *media* apps and ***(ii)*** messaging apps, for which two *templates* have been defined; ***(iii)*** Google's proprietary navigation *apps,* namely Google Maps and Waze, to which is added the Kakao *app* (for South Korea), developed as a *custom app*; ***(iv)*** *apps* developed by car manufacturers, which the investigation has shown to fall under the *custom app* category; ***(v)*** *apps* based on Actions-on-Google418.
It follows that, in order to respond to Enel X Italia's request, Google could, in accordance with its own publication policy (***a)*** create a *template that would* allow the functions of search, navigation, booking of the charging columns and start of the charging session (as indicated by the managing director of Enel X Italia in the request of 21 December 2018 for a written and definitive response) or ***(b)*** collaborate with Enel X Italia to develop a *custom app* or ***(c)*** implement on the Actions-on-Google platform the actions necessary to allow the functions of search, navigation, booking of the charging columns and start of the charging session, through the *app* JuiceP ass (formerly Enel
X Recharge). These programming tools fully comply with Google's safety requirements: "[t]he *objective of the template is to govern and simplify the complexity and diversity of apps, to make them suitable for use while driving* "[419]; the development of a *custom app* requires safety tests420; solutions based on Actions-on-Google are considered safe as they are based on voice commands that reduce distraction while driving421.
355. The evidence in the file shows that, in order to implement one of the indicated solutions, Google would have had to make this solution a priority in its plans422 . This would have been feasible

417 See doc. no. 122 (Google's reply of 17 July 2020).
418 See inspection documents ISP10, ISP19, ISP31, ISP48, ISP57, ISP76 and ISP118.
419 See doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
420 See doc. no. 122 (Google's reply of 17 July 2020) and Google's final submission of 24 March 2021.
421 See documents ISP10 and ISP31.
422 See inspection documents ISP10, ISP47 and ISP57.

because the company's policy of publishing on Android Auto is fully available to Google itself and, as mentioned, meets the needs of safety when driving and reducing distraction. Moreover, Google had a clear interest in meeting Enel X Italia's requests: in fact, the Enel Group was a relevant commercial target for the provision of *cloud computing* services *ng423*. Not least, Enel X Italia had threatened to raise an *anti-trust* issue with regard to the fact that Google favoured its own *apps, and in* particular Google Maps and Waze, to the detriment of third parties' apps424. Therefore, Google was not only in a position to implement one of the proposed solutions, but also had a clear interest in doing so.

356. As is well known, Google has not implemented any of the applicable solutions. Although Google has identified the development of a *template* as the preferred solution to widen the category of *apps* that can be published on Android Auto, it has not yet released such a *template*. Moreover, Google has never mentioned to Enel X Italia the possibility of establishing a collaboration in order to develop the JuiceP ass *app* (formerly Enel X Recharge) for Android Auto as a *custom app*. Finally, Google, which has proposed to Enel X Italia a solution based on Actions-on-Google, has never considered extending and enhancing the actions available on such platform so as to allow the use of the characteristic functions of the Enel X Italia *app* on Android Auto.

357. In the course of the proceedings, Google stated that it is defining a *template* for navigation *apps* that also integrates booking and payment functions425. Moreover, in August 2020, Google publicly announced the opening of Android Auto to third-party navigation apps, electric charging apps and parking apps426. In October 2020, Google released a *beta* version of the *template* that should enable this opening of Android Auto427; the final version of the *template* has not yet been released, nor has Google given any indication as to when this might happen. Moreover, the question remains open as to whether the new *template* that Google is currently defining will actually allow the development of a version of the JuiceP ass *app that is* compatible with Android Auto and includes the functions of booking and starting charging (according to

423 See inspection documents ISP5, ISP10, ISP16 and ISP60.
424 See inspection documents ISP57, ISP58 and ISP67.
425 See, in particular, doc. no. 122 (Google's reply of 17 July 2020).
426 See *post* "*New ways to reach more drivers on Android for cars*" (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021).
427 See *post* "*Introducing the Android for Cars App Library*" (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021).

the request of the managing director of Enel X Italy dated 21 December 2018428).

358. In September 2020, Google also contacted Enel X Italia, proposing the possibility of bringing forward the development and publication of the JuicePass *app* (formerly Enel X Recharge), based on the *beta* version of the *template*, and requesting that a confidentiality agreement be signed for this purpose429. Enel X Italia did not agree to this proposal. The publication of the possible *beta* version of the JuicePass *app* would have taken place in an incomplete manner and in a dedicated section of Google Play to which not all users would have had access, but only a limited number of users willing to use an *app* still in the *testing phase430.* Therefore, Google's proposal would not have allowed a "full" publication of Enel X Italia's *app* on Android Auto, so that the proposal that Google has finally made to Enel X Italia does not constitute an effective solution to the question raised.

359. As Google itself explained in its final statement, the *beta* version of any *software* (and therefore also of a *template*) is by definition not definitive and must be *tested* to discover any blockages or malfunctions that could also cause damage to users. Moreover, a *beta* version of an *app* is not immediately available in Android Auto, so much so that Google explains that the developer can send *e-mails* to its users to inform them of the availability of a *beta* version for Android Auto, and provide instructions on how to download and use it. Therefore, Enel X Italia's assessment that a *beta* Android Auto *app* should be used in parallel with the *mobile* version and is intended for a limited group of users (willing to participate in this form of *testing*) is confirmed.

360. Google's conduct with respect to the release of the *beta* version of the new Android Auto *template* appears, moreover, to be substantially different from Apple's conduct with respect to the release of the *beta* version of the new iOS operating system, with which Apple CarPlay was opened to further types of *apps*. In fact, Apple immediately indicated that it would be possible to publish the final versions of the *apps as soon as the* final version of the new operating system was released, and that this would happen within a certain timeframe (autumn 2020, a deadline that was brought forward)[431]. Google, on the contrary, has not given any indication as to when the final version of the apps will be released.

428 see doc. DC5 and doc. ISP77.

429 See doc. no. 166 (communication of Enel X Italia to Google Italy of 14 October 2020) and doc. no. 170 (reply of Google Italy to Enel X Italia of 20 November 2020).

430 See document no. 173 (Enel X Italia's update note of 18 December 2020).

431 See doc. no. 173 (Enel X Italia's update note of 18 December 2020) and press release '*Apple reimagines the iPhone experience with iOS 14*' (doc. no. 194, record of acquisition of documents from the Internet of 8 February 2021).

final version of the new *template* that should allow the publication of the Enel X Italia *app* on Android Auto.
361. Google has used arguments to justify its decision not to propose to Enel X Italia a collaboration for the definition of a *template* for Android Auto432. This choice appears, however, to be irrelevant for the purposes of the present case, since Enel X Italia's request to Google concerned the publication of the JuiceP ass *app* on Android Auto with all the functions considered essential by Enel X Italia; such publication would have constituted a possible outcome of a collaboration aimed at developing a *template.* In any event, with regard to Google's argument that the JuicePass *app* is less widely used than the competing Charge Point and PlugShare *apps* (which are, moreover, used in several countries), it should be noted that Enel X Italia certainly represents a reference point for Italy, where the vast majority of the charging infrastructures covered by JuicePass are located; as regards Enel X Italia's alleged uncooperative attitude, it should be noted that it has repeatedly expressed its need to publish the JuicePass *app* on Android Auto without receiving a satisfactory response from Google.

The obstructive attitude

362. After the fourth refusal, on the occasion of a *call attended by* a senior figure from Google's EMEA Partnerships business function, Enel X Italia asked how it could test the use of its *app* according to the security *standards developed* by Google, declaring itself ready to carry out the necessary activities. In response to this request, Google replied that it was not possible to provide further information on the matter and that, in the final analysis, the product managers were against an extension of the types of *apps* present on Android Auto433.
363. On the occasion of the *call, which took place* on 28 February 2019 and was attended by the CEO of the Enel Group, the CEO of Enel X Italy and two *Vice Presidents* of Google, Google does not make any commitment regarding the publication of the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto and proposes two alternative solutions (integration of the information on charging stations in Google Maps and use of Actions-on-Google to activate the search for charging stations through the *app* by

432 See doc. no. 170 (Google's reply to Enel X Italia of 20 November 2020). See, also, doc. no. 56 (Minutes of the hearing of Google Italy and Google LLC of 13 November 2019).
433 See doc. ISP73.

Enel X Italia), knowing full well that they do not meet Enel X Italia's needs. Moreover, Google chooses an approach to the management of the meeting that highlights what could be done with the programming tools available - without any possibility of changing such tools - and shifts the issue from the need to develop programming tools for Android Auto (adequate to make available the functions requested by Enel X Italia for its JuicePass *app*) to the visibility of the same *app* on Google Play in the version not compatible with Android Auto434. Moreover, the purpose of the *call was* to unlock negotiations on *cloud* services, as clearly demonstrated by the internal Google documents relating to the genesis and preparation of the *call itself435*.

364. Following the *call* with the Chief Executive Officer of the Enel Group, Enel X Italia put forward specific requests aimed at making a solution proposed by Google available to users of JuicePass (formerly Enel X Recharge), pending its publication on Android Auto436. Enel X Italia also asks for a timeframe for the implementation of the solution in question. The internal comparison with Google shows that the latter does not intend to change its product development plans in any way in order to meet Enel X Italia's requests, nor does it intend to commit to a specific timetable437.

365. On the whole, on the occasion of the conference call of 28 February 2019 and in the exchanges following it, Google shows a collaborative and open attitude to Enel X Italia's needs and, nevertheless, does not change its working plans in any way. Indeed, the evidence in the record shows that Google's aim is to restart and conclude negotiations with the Enel Group on *cloud* services and certainly not to resolve the issue of the publication of the Enel X Italia *app* on Android Auto ("*We have such a huge untapped demand with Enel I think it is worth poking the bear :)*")[438].

366. In the course of negotiations, Google proposed to Enel X Italia three alternative solutions to the publication of JuicePass on Android Auto. None of these solutions constitutes an acceptable answer to the question raised.

434 See inspection documents ISP5, ISP10, ISP15, ISP47, ISP60, ISP62, ISP63, ISP71, ISP73, ISP74 and ISP106.

435 On the genesis see, in particular, documents ISP10 and ISP73, on the preparation see documents ISP10, ISP62 and ISP71.

436 See doc. no. 43 (minutes of the hearing of Enel X Italia of 10 October 2019). The solution in question concerned the integration in Google Maps of the information on the charging stations and, therefore, the intermediation of the JuicePass *app by* Google Maps (see doc. DC5, integration **of** Enel X Italia's report of 3 April 2019).

437 See inspection documents ISP47 and ISP106.

438 See doc. ISP10.

367. In particular, Google suggested to Enel X Italy to work with car manufacturers to develop versions of the JuiceP ass *app* compatible with individual car *infotainment* systems439. As highlighted, this is a prospect with very significant transaction and operating costs and, on the other hand, indeterminate outcomes due to the phase of development and evolution of *infotainment* systems and the uncertainties related to data connection in cars. Google proposed this solution at an early stage of the discussions with Enel X Italia (before the request by the managing director of Enel X Italia for a written and definitive answer to the request for publication on Android Auto), but then dropped it. The impracticability of the solution in question appears to be confirmed by the fact that, although Enel X Italia has concluded several agreements on electric mobility with car manufacturers and is a leading operator on the Italian scene both as a *Mobi lity Service Provider* and as a *Charging Point Operator*, the JuiceP ass *app* has not been integrated into any *infotainment* system.

368. Google also proposed a solution based on Actions-on-Google during the telephone conference of 28 February 2019440. However, the preliminary evidence showed that the development of such a tool is currently not adequate to allow the safe use of the Enel X Italia *app* in the car environment, since it is only possible to search for recharging stations441.

369. Moreover, Google proposed to Enel X Italia, at all stages of the discussions with the latter, to integrate the information on charging stations in Google Maps442. In this case, however, the relationship between Enel X Italia and users would have been intermediated by Google and, moreover, users would not have been able to make use of functions other than search and navigation.

V. 7 LEGAL FRAMEWORK OF GOOGLE'S CONDUCT The exclusionary purpose and effects of Google's conduct

370. Google's conduct, consisting of its refusal to publish the JuiceP ass *app* (formerly Enel X Recharge) on Android Auto, mainly understood as

439 See doc. DC1 (Enel X Italia report) and inspection documents ISP57 and ISP76.
440 See doc. no. 122 (Google's reply of 17 July 2020) and doc. ISP47.
441 See Doc. No. 122 (Google response of 17 July 2020) and inspection documents. ISP36, ISP47 and ISP100.
442 See documents DC1 (Enel X Italia's report), DC5 (supplement to Enel X Italia's report of 3 April 2019) and inspection documents ISP15, ISP47, ISP62, ISP63, ISP71 and ISP77.

The lack of definition and implementation of solutions that could have allowed this result and/or a safe use of the *app* through exclusively voice commands (Actions-on-Google), has had the effect of keeping, to date, the JuiceP ass *app* (formerly Enel X Recharge) outside the Android Auto platform. Unlike the Enel X Italia *app*, Google Maps is present on Android Auto and has been developed without the typical limitations of the *template.* The other navigation *apps* on Android Auto are Waze, also a navigation *app* owned by Google, and the Korean *app* Kakao, developed as a *custom app* and, therefore, the result of a business choice and development activity by Google.

371. This state of affairs has been going on for more than two years, starting from 20 September 2018, the date of the first express refusal opposed by Google. Most recently, on 15 October 2020, Google released the *beta* version of a *template* for developing new *apps* for Android Auto, including *apps* for electric charging. However, the final version of the Google template has not yet been released and, therefore, the exclusion of the JuiceP ass (formerly Enel X Recharge) *app* from Android Auto persists.

372. At least since 2018, and therefore for the entire period for which the Enel X Italia *app was* - unjustifiably - excluded from the Android Auto platform, Google has strengthened its offer of services relating to electric recharging via Google Maps, both by expanding the information *set* available, and by equipping itself with the tools, in particular the GELFS format, to continue to expand this information *set* and feed the flow of data on the recharging columns. Google itself has suggested that it could further expand its services related to electric charging through Google Maps, allowing users to connect to the sites or *apps* of the different *Mobi li ty Service Providers, which* would enable users to carry out a large part of the charging experience through Google Maps. In addition, it is reasonable to assume that Google may integrate booking and payment functions into Google Maps in the future.

373. The JuiceP ass *app* offers high coverage of the network of charging points in Italy and is owned by a leading operator in the Italian electric mobility sector. In addition, the JuiceP ass app is clearly distinguished from Google Maps, both for the fact that it is an *app* that responds specifically to the needs related to electric recharging, according to a specialist approach that is in contrast to the generalist and "all-inclusive" approach of Google Maps), and for the breadth of services offered to end users. In other words, with regard to services related to recharging

electricity, Enel X Italia is a major competitor and offers a service that is new and different to Google's.

374. Overall, Google's conduct appears to have an exclusionary purpose, having hindered and procrastinated the availability on Android Auto of the *app* developed by Enel X Italia, and resulted in a more favourable treatment for the proprietary *app* Google Maps (discrimination). This conclusion is based on ***(i)*** the competitive relationship between electric recharging service apps and navigation *apps* in the competitive space of electric recharging services provided through *apps*, ***(ii)*** Google's efforts to enhance its offer of electric recharging services through Google Maps and ***(iii)*** the characteristics of the JuicePass *app* (formerly Enel X Recharge) in the above competitive relationship with Google Maps. Moreover, given that Google Maps is a gateway to users and a source of data generated by users, (***iv)*** the generalist model of Google Maps requires that the widest spectrum of users' activities be covered by Google Maps, so that Google indeed pursues the objective of 'integrating' into Google Maps any activity that is relevant or intended to become relevant for users.

375. As already pointed out, the special liability of an undertaking in a dominant position implies the irrelevance of the intentionality of the unlawful conduct; the notion of abuse of a dominant position is, in fact, objective in nature, requiring that the undertaking in a dominant position takes steps not to distort the competitive processes. In the present case, therefore, it is not relevant whether Google has intentionally obstructed the publication of Enel X Italia's *app* on Android Auto or whether this is an unintended effect of a conduct marked by a closure to requests from third parties that do not fall within the company's priorities. In fact, the possibility for developers to program and distribute *apps* for Android Auto depends solely and exclusively on Google[443], which plays the role of *gatekeeper* with regard to the access of *app* developers, in particular those used for driving, to end users. Google should, therefore, have given due consideration to Enel X Italia's request for interoperability of its JuicePass *app* with Android Auto, placing it within the company's policy of publishing for Android Auto and adopting a collaborative attitude. The refusal to extend the interoperability of Android Auto, in the absence of objective justifications, resulted in the failure, in practice, of the

[443] As pointed out, Google decides as a matter of sole autonomy which programming tools for Android Auto to define and with what timing, thus determining which *apps* and which features can be published on Android Auto and when developers can access these programming tools.

level playing field (principle of non-discrimination) by not allowing Enel X Italia to develop its own JuiceP ass *app* for Android Auto with functions similar to those of the proprietary *app* Google Maps (*level playing field* in a static sense) or to introduce new and different functions, in addition to those already made available by Google Maps (*level playing field* in a dynamic sense).

The indispensability of Google's proactive conduct (development of programming tools for Android Auto)

376. The definition and provision by Google of programming tools for *apps* compatible with Android Auto is a prerequisite for third-party developers to be able to offer end-users *apps that* can be easily and safely used while driving. Indeed, Google is the only source of such tools. Moreover, the developer of an *app* intended for use while driving cannot ignore interoperability with Android Auto in order to reach the widest possible audience of users: Indeed, almost all smart mobile devices with an operating system other than iOS use Android and, in Italy, Android is used on about three quarters of *smartphones* and half of *tablets444*; moreover, as we have seen, for the driving user the user experience modified and simplified through Android Auto445 is not replaceable with the full and rich interaction experience of the *smartphone* and Android Auto is not replaceable with other technological solutions for the use of *apps* through the car *infotainment* units446.
377. Google argued that interoperability with Android Auto was not an indispensable element for Enel X Italia's *app*, and reported evidence of the number of *downloads of* this *app* as well as of the modest usage of Android Auto and of the version of Google Maps for Android Auto by users447. Google also stated that '*a*

444 See StatCounter's GlobalStats statistics (doc. no. 194, record of acquisition of documents from the internet of 8 February 2021).
445 See doc. no. 23 (record of Google Italy's hearing of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (record of Google Italy and Google LLC's hearing of 13 November 2019) and doc. no. 122 (Google's reply of 17 July 2020).
446 See doc. no. 194 (record of acquisition of documents from the internet of 8 February 2021). See also, doc. no. 125 (Mercedes-Benz reply of 20 July 2020), doc. no. 131 (PSA reply of 29 July 2020), doc. no. 133 (Volkswagen reply of 3 August 2020), doc. no. 135 (Renault reply of 4 August 2020), doc. no. 155 (FCA reply of 21 September 2020), doc. No 156 (FCA reply of 24 September 2020), Doc No 161 (Volkswagen reply of 25 September 2020), Doc No 162 (Renault reply of 29 September 2020), Doc No 163 (PSA reply of 30 September 2020) and Doc No 167 (Mercedes-Benz reply of 15 October 2020). See also doc. no 122 (Google reply of 17 July 2020) and doc. no 157 (Enel X Italia reply of 25 September).
447 See Google's final submission of 24 March 2021 and minutes of the final hearing of 29 March 2021.

large number of drivers' would continue to use the *apps* on their *smartphones* (in the *mobile* version). In addition, according to Google, it is not essential to book a charging station while driving, as the user can stop driving for between thirty seconds and one minute.

None of Google's arguments appear to be tenable.

378. First of all, as Google itself pointed out in a presentation shared with Enel X Italy, what counts for *apps* is their actual use by users, and *downloads* are not an indicator of this use: in fact, most downloaded *apps* are subsequently removed448. The actual use of the JuicePass *app* depends on the usefulness that users can derive from it and, therefore, on the usability in an easy and safe way while driving (availability on Android Auto) and on the breadth of services allowed (functionality of the Android Auto version), in other words, on the interoperability tools made available by Google.

379. Secondly, the data provided by Google do not allow us to state that Android Auto usage is modest. In fact, the indicator chosen by Google, i.e. the ratio between average monthly Android Auto users and the number of Android Auto compatible cars, appears to be weakly related to the phenomenon it wants to measure (Android Auto usage): the number of Android Auto compatible cars does not correspond to the number of owners of a smart mobile device running Android449 , nor to the number of (average monthly) Android users who used an *app* while driving. Even if one were to consider the indicator chosen by Google to measure Android Auto usage as reliable, its value in 2020, i.e. 12%, seems anything but modest when compared to the value of the indicator chosen by Google to measure the usage of the Google Maps version for Android Auto, i.e. 3.5% in the period mid-February to mid-March 2021. Yet Google felt it necessary to develop a version of Google Maps for Android Auto from the early stages of Android Auto development.

380. Thirdly, the fact that '*a large number of drivers*' would continue to use the *apps* on their *smartphone* (in the *mobile* version) is an argument in support of the indispensability of Android Auto for an effective

448 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019), in particular, presentation entitled "*Enel X & Google. Ideas for Enel X Recharge*".

449 For example, the owner of a car compatible with Android Auto could use a device with an iOS operating system. In most cases, cars are compatible with both Android Auto and Apple CarPlay.

use of JuiceP ass, as well as of all the *apps* intended to be used by users driving a car. In the course of the investigation and in its final memorandum, Google highlighted the fact that safety and limiting distraction while driving are at the basis of the development of Android Auto and of the programming tools made available to developers (*templates*, collaborations for the development of *custom apps* and Actions-on-Google)[450].

381. Fourthly, Google's argument that it would be sufficient to stop the car for between thirty seconds and one minute to reserve a charging station on JuiceP ass is unrealistic and contrary to the logic of safety and user-friendliness of the *apps on which* Android Auto is based. Indeed, the timeframe indicated by Google does not take into account the time needed to search for charging stations - a phase that necessarily precedes the booking - nor the time needed to find a space to park the vehicle. Moreover, the need to stop the car in order to use an *app makes for* a user experience that is anything but easy and distracting while driving.

382. In conclusion, Google's remarks in its final statement lead to the reaffirmation of the decisive importance of Android Auto in allowing an effective use of *apps* intended to be used while driving, among which the Enel X Italia *app* certainly falls. Moreover, as seen, Google is the only source of programming tools for Android Auto. Therefore, in the present case, the requirement of indispensability of the actual conduct of the undertaking in a dominant position, required by the case-law of the European Union for the purposes of establishing a refusal to contract in breach of Article 102 TFEU451, is met.

Suitability of the om issive conduct to eliminate effective competition

383. In the period of time for which Google has been able, and will be able, to keep the JuiceP ass *app* (formerly Enel X Italy) out of Android Auto, Google has had, and will have, the opportunity to build a user base for services related to electric charging via Google Maps (on Android Auto) and, at the same time,

450 See doc. no. 23 (minutes of the hearing of Google Italy of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019), doc. no. 122 (Google's reply of 17 July 2020) and Google's final memorandum of 24 March 2021. See also inspection documents ISP10 and ISP31.

451 See Judgment of the Court of First Instance of 17 September 2007 in Case T-201/04 *Microsoft Corp. v Commission* where reference is made to the Judgment of the Court of Justice of 6 April 1995 in Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* ('Magill Judgment') and the Judgment of the Court of Justice of 29 April 2004 in Case C-418/01 *IMS Health.*

Google has prevented, and will prevent, Enel X Italia from having this same possibility for the JuicePass *app* (formerly Enel X Recharge). The existence of network effects and the possibility of *winner-takes-all* phenomena imply that the postponement of the availability of the JuicePass *app* on Android Auto is likely to prevent the *app in question from* having an adequate user base to keep it among the *apps* actually used by users.

384. In fact, *apps* that provide services related to electric charging (including navigation apps) are intended to be used when the vehicle is in motion so as to allow a charging experience adapted to the needs of electric mobility and not frustrated by the so-called "charging anxiety "[452.] Therefore, in the Android ecosystem, the context of choice for the use of the JuicePass *app* is the controlled and simplified environment of Android Auto and not the complex and rich interaction context of the *smartphone* in its full potential. It follows that the use of the Enel X Italia *app* outside of Android Auto, and therefore when the vehicle is stationary, appears to be entirely residual and, in any case, not sufficient to support the spread of the *app* among users and the production of network effects that can lead to the construction and consolidation of a large and active user base.

385. For the reasons set out above, Google's conduct is likely to have effects on the structure of the market, not only by hindering and delaying the entry of a new operator, namely Enel X Italia, but also by leading to the definitive exclusion of the latter. In this regard, it should be noted that the JuicePass *app was* excluded from the Android Auto platform in 2020 and in the first months of 2021, i.e. at the beginning of the 2020-2025 multi-year period in which sales of electric vehicles (battery-powered and *plug-in* hybrids) are expected to grow [significantly453] , thus substantially limiting the possibilities for the *app* in question to build its user base. Should this exclusion continue, there is a risk that Enel X Italia will be definitively excluded from the context of the *apps* for services connected to electric recharging that are actually used by owners of electric vehicles.

452 See Doc. No 44 (Enel X Italia reply of 22 October 2019), Doc. No 125 (Mercedes-Benz reply of 20 July 2020), Doc. No 131 (PSA reply of 29 July 2020), Doc. No 135 (Renault reply of 4 August 2020), Doc. No 133 (Volkswagen reply of 3 August 2020) and Doc. No 155 (FCA reply of 21 September 2020).

453 See Energy & Strategy Group's September 2019 *Smart Mobility Report* study, Doc. No 125 (Mercedes-Benz reply of 20 July 2020), Doc. No 131 (PSA reply of 29 July 2020), Doc. No 135 (Renault reply of 4 August 2020), Doc. No 133 (Volkswagen reply of 3 August 2020) and Doc. No 155 (FCA reply of 21 September 2020).

386. In the present case, therefore, the requirement that the (omissive) conduct of the undertaking in a dominant position be capable of eliminating effective competition on the market is met for the purposes of establishing a refusal to contract in breach of Article 102 TFEU. In its judgment in the Microsoft case, the Court of First Instance clarified that the *rationale of* Article 102 TFEU is to "*preserve undistorted competition in the common market*" and that, therefore, the intervention of the *anti-trust* authorities must not "*wait until competitors have driven themselves out of the market, or such drive out is sufficiently imminent*". Furthermore, the Court stated that the preventive intervention of the *antitrust* authorities, with regard to the realisation of risks of elimination of a competitor, is all the more legitimate when the market "*is characterised by considerable network effects and such an elimination would therefore be difficult to reverse*". Finally, the Court stated that '*it is not necessary to demonstrate the elimination of any competitive presence on the market. What matters for the purposes of an infringement of Article 82 EC is that the refusal in question threatens to eliminate all effective competition on the market or that it does so. In this regard, it should be pointed out that the fact that the competitors of the dominant undertaking remain marginally present in certain "niches" of the market is not sufficient to claim that such competition exists* "[454].

The obstacle to the emergence of a new product for which there is potential demand is the following

387. As a result of Google's conduct, there has been an unfair difference in treatment between the JuiceP ass *app* and Google's proprietary *apps,* with particular reference to Google Maps, to the detriment of consumers; on Android Auto, consumers can satisfy their needs relating to electric recharging only by using the search and navigation services of Google Maps, losing the possibility of accessing the different and wider range of services offered by JuiceP ass, which offers a complete recharging experience specifically designed for the recharging of electric vehicles. In fact, owners of Android mobile devices, when driving and activating Android Auto, can search for a charging station via Google Maps and get the relevant information to decide where to charge, but they cannot do so.

454 See judgment of the Court of First Instance of 17 September 2007 in Case T-201/04 *Microsoft Corp. v. Commission, in* particular, paragraphs 561, 562 and 563.

search through the JuicePass *app* (formerly Enel X Recharge). Moreover, the same persons cannot benefit from the other distinctive features of the Enel X Italia *app,* including, in particular, the possibility of reserving a socket. Therefore, Google's conduct, by hindering and delaying the entry of an *app* which would have made it possible not only to search for a socket and obtain the relevant information for recharging but also to book the use of the infrastructure and carry out other activities functional to recharging, is likely to result in a reduction of consumer welfare and a restriction of the supply and choice of consumers, as regards the number of operators, the differentiation of services, and potentially, the very quality of services. Moreover, since the services in question are necessary for electric mobility, they could also be detrimental to the more rapid deployment of electric vehicles and, therefore, to the transition towards more environmentally sustainable mobility.

388. The definitive exclusion of Enel X Italia, as a consequence of the continuation of Google's conduct, would make structural the loss of welfare, already suffered for over two years by consumers, in terms of reduction of the offer, lower degree of differentiation of services and potential lowering of the quality level of services. Moreover, it would lead to a dispersion of the investments in technology made by Enel X Italia for the development of the JuicePass *app.*

389. Since users are a source of data and data on searches for recharging stations are of particular relevance for the analysis of the demand for recharging services, Google's conduct has deprived and could deprive in the future Enel X Italia of the possibility to acquire a valuable data flow to define its operations in the field of electric mobility and to improve the quality of the services offered. This would concern not only the definition of the commercial offers but also the technical configuration and the territorial articulation of the network of charging stations offered by Enel X Italia, in the role of *Mobility Service Provider*, and by the Enel Group (through Enel X Mobility), in the role of *Charging Point Operator.* It should be noted that the development of a network of recharging infrastructures capable of responding to the needs of consumers, and in particular of curbing so-called recharging anxiety, can contribute to the spread of electric mobility, with obvious benefits also in terms of environmental protection.

390. The long-term effects of Google's conduct would also concern the loss of a *business* model, based on the offer of specific services with respect to a given user need (i.e. electric recharging), different from the generalist one of Google Maps. The impoverishment in

in terms of *business* models could reduce the degree of innovation in the market as each *business* model corresponds to a different way of responding to consumer needs and dealing with market dynamics and competitive processes.

391. In view of the effects of Google's conduct in terms of hindering the use by users of a different and broader product, the risk of dispersion of investments in technology (for the development of an *app*), blocking the acquisition of an *input* (user-generated data) necessary for the definition of commercial offers and a network of infrastructures in a new and developing sector (electric mobility), as well as hindering the spread of a different *business* model, in the present case, the requirement of an obstacle to the emergence of a new product for which there is a potential demand, which the case law of the European Union has indicated as necessary for the establishment of a refusal to contract in violation of Article 102 TFEU, is met. These effects, individually and taken together, constitute an obstacle to technical progress.

392. *It* should be noted that the Court of First Instance, in its judgment in the Microsoft case, stated that '*the fact that the conduct at issue hinders the emergence of a new product on the market must be assessed in the light of Article 82(2)(b) EC, which prohibits abusive practices consisting in "limiting production, markets or technical development to the prejudice of consumers*'" and that '*the circumstance relating to the emergence of a new product ... cannot be the only criterion for determining whether a refusal to grant an intellectual property right may harm consumers within the meaning of Article 82(2)(b) EC. cannot be the only criterion for determining whether a refusal to grant a licence for an intellectual property right is capable of harming consumers within the meaning of point (b) of the second paragraph of Article 82 EC. Indeed, as is clear from the wording of that provision, this harm may occur if there is a limitation not only of production or outlets but also of technical development* "[455].

V. 8 ABSENCE OF OBJECTIVE JUSTIFICATION

393. The evidence in the file shows that Google's refusal to publish the Enel X Recharge *app* (now JuicePass) on Android Auto does not depend on technical issues but on a corporate choice regarding the publication of *apps* on Android Auto456. A corporate choice is, with all evidence, derogable

455 See judgment of the Court of First Instance of 17 September 2007 in case T-201/04 *Microsoft Corp./Commission* in particular, points 643 and 647.
456 See, in particular, doc. ISP57.

and modifiable by the company defining it, and therefore Google was in a position to accede to Enel X Italia's request.

394. Google should have departed from its own policy of publishing *apps* on Android Auto, since this provides for a differentiated and more favourable treatment for the proprietary *apps* Google Maps and Waze with respect to the other *apps* containing search and navigation functions, including the JuicePass *app. In* particular, Google should have defined and made available a solution allowing Enel X Italia to develop the JuicePass *app* (formerly Enel X Recharge) with search and navigation functions similar to those of Google Maps (*level playing field* in a static sense), but also with further functions, in particular the booking and the start of the recharging session, indicated as essential by Enel X Italia457 (*level playing field* in a dynamic sense).

395. Moreover, as noted above, the tools to allow the publication of the Enel X Recharge *app* (now JuicePass) on Android Auto and/or its safe use (exclusively) through voice commands, were part of the same corporate publication policy identified by Google (*template*, *custom app*, Actions-on-Google)[458.] These tools allow Google to open up the Android Auto platform to third-party *apps* in full compliance with safety requirements and containment of distraction while driving459. All Google would have had to do was to prioritise the solution it had identified and devote the necessary resources to implement it460.

396. The evidence in the file made it clear that the Enel Group was considered to be a primary *partner* within Google, both in terms of commercial objectives (*cloud* services and integration of information on charging stations in Google Maps) and in terms of relationships (to avoid a report to the *antitrust* authorities)[461.] Despite this, Google did not meet Enel X Italia's requests for the JuiceP ass *app* - as seen, it was in a position to do so - but, on the contrary, it showed interest in the same requests - without changing its own plans

457 According to what the CEO of Enel X Italia indicated in his request of 21 December 2018 for a written and definitive response (see doc. DC5, supplement to Enel X Italia's report of 3 April 2019 and doc.ISP77).

458 See inspection documents ISP10, ISP19, ISP31, ISP48, ISP57, ISP76 and ISP118.

459 See doc. no. 23 (minutes of the hearing of Google Italy of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019), doc. no. 122 (Google's reply of 17 July 2020) and Google's final memorandum of 24 March 2021. See also inspection documents ISP10 and ISP31.

460 See inspection documents ISP10, ISP47 and ISP57.

461 On the relevance to commercial objectives, see inspection documents ISP5, ISP10, ISP16 and ISP60. On Enel X Italia's threat to report to the *antitrust* authorities, see inspection documents ISP57, ISP58 and ISP67.

to cultivate the relationship with the Enel Group in order to reach an agreement on *cloud services462*.

397. Google stated that the number of users of Android Auto and JuiceP ass was low; therefore, further investments to expand the range of *apps* on Android Auto would not have been worthwhile and, moreover, the non-publication of Enel X Italia's *app* on Android Auto would not have limited its diffusion among end users463. However, as highlighted above, Google's conduct should be seen in a prospective perspective, given the fact that both the electric mobility sector and that of IT solutions for *infotainment* units are going through a phase of development and evolution464. The evidence in the file, in particular, showed a clear interest of car manufacturers and *app* developers in Android Auto and the expectation of a significant growth in sales of electric cars and, therefore, in the demand for services related to electric recharging465. Moreover, Google itself has shown a strong interest and a deep attention to the relevant growth potential of the use of *apps* in the car environment and of services related to electric charging, by investing in Android Auto and in Android Automotive Operating System and by enhancing services related to electric charging through Google Maps.

398. As to the availability of resources, it is sufficient to note that Google is one of the four or five so-called Big Tech companies, recognised as world leaders in the field of digital equipment and services466 . As regards the availability of resources, it suffices to observe that Google is one of the four or five so-called *Big Tech companies*, recognised as world *leaders* in the sector of digital equipment and services466 , and is endowed with a very considerable financial strength that would enable it to attract, in a short time, any technical resources it might lack. Moreover, Google could have legitimately asked Enel X Italia to contribute, to a not disproportionate extent, to the increase of resources dedicated to Android Auto, in financial terms and in terms of technical resources made available. Moreover, following the fourth refusal, Enel X Italia had made itself available to test the use of its *app in* accordance with the security *standards of the Android Auto app.*

462 See inspection documents ISP10, ISP62, ISP71 and ISP73. See also inspection documents ISP36, ISP48, ISP100 and ISP118 on the preparation of the response to the CEO of Enel X Italia of 18 January 2019.

463 See doc. no. 36 (Google Italy's submission of 13 August 2019) and doc. no. 122, (Google's reply of 17 July 2020).

464 See, among others, doc. no. 122 (Google's response of 17 July 2020) and the "*Smart Mobility Report*" study of September 2019 by Energy & Strategy Group.

465 See doc. no 125 (Mercedes-Benz reply of 20 July 2020), doc. no 131 (PSA reply of 29 July 2020), doc. no 133 (Volkswagen reply of 3 August 2020), doc. no 135 (Renault reply of 4 August 2020), doc. no 155 (FCA reply of 21 September 2020) and doc. no 167 (Mercedes-Benz reply of 15 October 2020). See also doc. no 194 (Record of acquisition of documents from the internet of 8 February 2021)).

466 Such is the relevance of *Big Tech* that, internationally, acronyms are used for the set of such firms: in particular, Google, together with Apple, Amazon and Facebook is part of the set referred to as with GAFA; if Microsoft is also considered, the set becomes GAFAM.

developed by Google, but the latter did not comply with this request[467].

399. Google's refusal does not depend on technical issues related to the specific functionalities of JuiceP ass, as stated in Google's internal comparison ("*It's a publishing policy*")[468]. Moreover, the company's policy on publishing *apps* on Android Auto identifies, as seen, the tools that allow Google to address and manage safety issues related to the use of *apps* while driving (*templates*, custom *apps* and Actions-on-Google)[469]. In particular, there cannot be any insuperable safety issues related to the functionalities characterising the Enel X Italia *app* (reservation, top-up management and payment), which are additional to the search and navigation functionalities that are already available on Android Auto through Google Maps. In fact, for the purposes of driving safety, the modes of interaction between the user and the *app are* relevant, and not the purpose of those actions (e.g. selecting a music album or booking a charging station), while the modes of interaction depend on the programming tools defined by Google.

400. The same objectives of limiting distraction and maintaining driving safety, which are at the basis of Android Auto and of the development of *templates*, only make sense if they are related to the way the *apps are* used, while the reference to categories of *apps*, broadly identified according to the purposes of use, can only be a tool for the pursuit of these objectives. Moreover, Google's own policy for the publication of *apps* on Android Auto, which it has itself defined, contains two categories of *apps*, those developed by car manufacturers and those based on Actions-on-Google, which do not refer to any particular purpose of use. In addition, the category of *apps based on* Actions-on-Google refers precisely to a mode of interaction between user and *app* (exclusively through voice commands).

401. In any case, although Google's internal documents talk about '*publishing policy*', the identification of categories of *apps for* publication on Android Auto remains an exercise in approximation. When the precise definition of what constitutes an *app was* debated within Google, it was discussed.

467 See doc. ISP73.

468 See doc. ISP57.

469 On programming tools for Android Auto and the company's publication policy, see inspection documents ISP10, ISP19, ISP31, ISP48, ISP57, ISP76 and ISP118. On the compliance of these programming tools with the requirements of driving safety, see doc. no. 23 (minutes of the hearing of Google Italy of 16 July 2019), doc. no. 36 (memorandum of Google Italy of 13 August 2019), doc. no. 56 (minutes of the hearing of Google Italy and Google LLC of 13 November 2019), doc. no. 122 (Google's reply of 17 July 2020) and Google's final memorandum of 24 March 2021, as well as inspection documents ISP10 and ISP31.

of navigation (and what it is not), the laconic conclusion was that no such definition exists470. Moreover, although Google argued, in particular in its reply to the CEO of Enel X Italia of 18 January 2019, that the *app* developed by Enel X Italia is not a navigation *app* but an *app* that uses navigation functionality to offer different services471, during the proceedings Google stated that the publication of the JuicePass *app* (formerly Enel X Recharge) on Android Auto could take place precisely thanks to the development of a *template* for a navigation *app* that also integrates booking and payment functions472.

402. Last but not least, Google's refusal to publish the JuicePass *app* (formerly Enel X Recharge) on Android Auto seems unjustified in view of the fact that the *app* in question is designed specifically for use by users driving an electric vehicle. Indeed, the need to recharge arises precisely because of the use of an electric car and, moreover, the possibility of providing for this need in an easy and safe way is a key element in overcoming what has been called 'recharging anxiety'[473]. It is no coincidence that Google itself offers services related to electric recharging through its Google Maps *app* and, among the information (in the GELFS format) on recharging stations, there is the real-time availability of sockets which, as pointed out, responds to the same function of use as the reservation allowed by the Enel X Italia *app.*

403. Google's argument that the user could (safely) use the JuicePass *app* when the vehicle is stationary is therefore entirely specious. This argument is, moreover, contradicted by the fact that Google offers services related to electric charging via Google Maps, which is present on Android Auto, and by the fact that Google is developing a *template* that will allow third-party developers to program *apps* for electric charging that can be published on Android Auto, including booking and payment functions.

404. In conclusion, Google's conduct, consisting in its refusal to publish on Android Auto the *app* developed by Enel X Italia - a refusal understood, in particular, as meaning the failure to implement the solutions which would have enabled that publication or, in any event, the use of the *app* exclusively for that purpose - is a breach of the principle of proportionality.

470 See inspection documents ISP19, ISP48 and ISP118.
471 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and doc.ISP77.
472 See doc. no. 122 (Google's reply of 17 July 2020) where it is stated that '*Google's navigation template will in the future allow app developers to enable the booking and payment of electric vehicle charging sessions via their own apps within Android Auto*'.
473 See Doc. No 44 (Enel X Italia reply of 22 October 2019), Doc. No 125 (Mercedes-Benz reply of 20 July 2020), Doc. No 131 (PSA reply of 29 July 2020), Doc. No 135 (Renault reply of 4 August 2020), Doc. No 133 (Volkswagen reply of 3 August 2020) and Doc. No 155 (FCA reply of 21 September 2020).

via voice commands - does not appear to be supported by objective reasons. Moreover, the arguments put forward by Google in the individual instances of refusal also appear contradictory and/or unsupportable and, ultimately, neither reasonable nor proportionate.

405. On the first three occasions, Google justified its refusal on the grounds that only two categories of *apps* could be published on Android Auto, namely *media* (audio content) and messaging apps474. It is only in the fourth refusal (in January 2019) that Google accounts for the presence on Android Auto of its navigation *apps*, Google Maps and Waze, but conceals - consciously - that a third navigation *app* (Kakao, available in South Korea) is published on Android Auto475.

406. As pointed out above, in the four refusals expressed by Google, the latter was entrenched in the absence of a *template* corresponding to Enel X Italia's *app* and did not envisage the concrete possibility that the publication of Enel X Italia's *app* on Android Auto could have taken place at a later stage; nevertheless, Google could well have identified in the development of a new *template* the solution to Enel X Italia's request, giving an indication (even approximate) of the relevant timeframe. Moreover, since Android Auto also contained Google's proprietary navigation *apps* -developed with so-called "*full screen*" programming tools that do not have the limitations of *templates*- as well as an *app* (Kakao) developed as a *custom app*, the programming tools that Google should have taken into consideration were not limited to *templates* but also included the collaboration to develop a *custom app*.

407. In the fourth refusal, Google states that 'for reasons *of user safety and other technical reasons*' Google does not make other categories of *apps* available on Android Auto, nor third-party navigation *apps*; an extension of the *app* categories '*would require the use of significant technical resources that Google does not yet have available for Android Auto*'[476]. However, the evidence in the file shows that security issues can be overcome through *templates*, the development of a *custom app*, or by implementing actions on the Actions-on-Google platform. As to the "*substantial technical resources*" that Google would not have had at its disposal to develop a new *template*, the reasons why this argument does not appear to be relevant have been highlighted above.

474 See, DC5 (supplementing Enel X Italia's report of 3 April 2019) and, among others, inspection documents ISP57 and ISP77.
475 See doc. ISP36.
476 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and doc. ISP77.

plausible.
408. Equally unjustified is Google's closed attitude towards Enel X Italia's request, following the fourth refusal, to know the procedure for testing the security of its *app* according to the requirements identified by Google itself477 . In fact, Enel X Italia's request was prompted by the very reasons Google had put forward in support of its refusal.
409. Finally, Google's dismissal of the possibility of modifying its internal plans and committing itself to respect certain timeframes in relation to Enel X Italia's requests for one of the solutions proposed by Google itself in the course of the *call* with the Enel Group's CEO478 does not appear to be justified. In fact, the *call* was aimed at settling the differences with Enel X Italia (which were taken over by the Enel Group) and Google was aware that both the proposed solutions were not satisfactory for Enel X Italia479. Such circumstances should have induced Google to an attitude of co-operation and openness and, instead, Google remained firm in its approach of total closure towards Enel X Italia's requests.

V. 9 CONCLUSIONS

410. Android and Google Play are must-have products for *app* developers wishing to reach users who do not use a smart mobile device with the iOS operating system and, in any event, the wider audience of smart mobile device users. Similarly, Android Auto is a must-have product for developers of *apps* intended to be used by drivers, as Android Auto provides a user experience (easy and safe use of the *app*, meeting safety requirements and reducing distraction while driving) that has no substitute in the Android ecosystem or in other technological solutions for the interoperability of *apps* with car *infotainment* units. The

477 See doc. ISP73.
478 See doc. DC5 (supplementing Enel X Italia's report of 3 April 2019) and inspection documents ISP47 and ISP106.
479 See, in particular, doc. ISP10. The awareness that the solutions put forward during **the** telephone conference on 28 February 2019 (based on the integration of information on charging stations in Google Maps and on Actions-on-Google) did not meet Enel X Italia's requests had already matured when preparing the reply to the CEO of Enel X Italia on 18 January 2019; see doc. ISP36. Enel X Italia also explained that it was interested in such solutions with **a** view to being able to publish its *app* on Android Auto and with the intention of increasing the usability of its *app* for users in the time needed to achieve this goal (see doc. no. 43, minutes of Enel X Italia's hearing of 10 October 2019).

Publishing an *app* on Android Auto depends exclusively on the business choices of Google, which is the sole source of programming tools for Android Auto, while the developer can only adapt to the technological environment developed by Google.

411. Google refused to publish on Android Auto the *app* developed by Enel X Italia and, in particular, did not implement the IT solutions which could have allowed the development of a version of the *app which* could be published on Android Auto or used on Android Auto exclusively by means of voice commands. Moreover, in its contacts with Enel X Italia, Google acted in an obstructive manner, circumventing Enel X Italia's main request (publication of an *app* on Android Auto) as well as some further requests made by Enel X Italia itself (in relation to the procedure for verifying the compliance of an *app* with the security *standards* identified by Google and to a transitional solution to be implemented in view of the publication on Android Auto).

412. Google's conduct consists in a refusal to allow the interoperability of a third party's *app* (Enel X Italia) on the Android Auto platform. This conduct appears to be attributable to an exclusionary purpose that resulted in a more favourable treatment for the proprietary *app* Google Maps. In fact, Google Maps is linked by a competitive relationship with clearly defined contours (actual competition, potential competition, competition for users and data) to the *apps of* services related to electric recharging and, in particular, to Enel X Italia's *app.* In addition, Enel X Italia emerges as a clearly prominent player in the sector of electric mobility in Italy and its *app* presents distinctive features compared to Google Maps.

413. The aforementioned conduct of Google has already produced, for more than two years, detrimental effects in terms of reduction of the offer and therefore restriction of the possibilities of choice for users. Moreover, this conduct is likely to make such effects permanent, thus altering the structure of the market, with regard to services related to electric recharging offered through *apps*, with the consequent dispersion of the investments in technology made by Enel X Italy and the loss of an alternative *business* model to that of Google Maps. All of this represents an obstacle to innovation in the sector of services related to electric mobility, in a crucial phase of the latter's start-up, and may also affect the development of a network of charging infrastructures for electric cars adequate to the needs of demand, thus potentially jeopardising a more rapid spread of electric vehicles and the transition towards a more environmentally sustainable mobility.

414. Google's rejection of Enel X Italia's request does not appear to be

supported by objective justifications. This conclusion is based on the overall picture of the *apps* available on Android Auto, on Google's corporate guidelines with regard to the publication of *apps* on Android Auto, on the purpose of Android Auto to allow easy and safe use of *apps* when the user is driving and on the specific features of the *app* developed by Enel X Italia.

VI. INJURY TO EURO-UNIFYING TRADE

415. The contested conduct falls within the scope of application of EU competition law and, in particular, within the scope of Article 102 of the TFEU, relating to the prohibition of abuse of a dominant position, being potentially capable of affecting trade within the European Union.
416. According to the European Commission Notice '*Guidelines on the concept of effect on trade between Member States contained in Articles 81 and 82 of the Treaty*' (2004/C 101/07), the concept of effect on trade within the European Union must be interpreted by taking into account the influence, direct or indirect, actual or potential, on the pattern of trade between Member States.
417. The contested conduct appears capable of appreciably restricting trade between Member States, in breach of Article 102 TFEU, since it affects the entire national territory, which is a relevant part of the EU internal market, hindering the activity of a competitor, innovation, the development of new *business* models and technical progress. In this respect, it should be noted that Enel X Italia is also active in other Member States and that Google is active in all other Member States.

VII. GRAVITY AND DURATION OF THE INFRINGEMENT

418. With regard to the gravity of the infringement, several factors are taken into account, such as the nature of the conduct, the role and market representativeness of the undertakings involved and the context in which the infringement took place.
419. The contested conduct consists of an exclusionary abuse whose effects affect consumer welfare and market structure and may hinder innovation in e-mobility related services provided through *apps*. Furthermore, the contested conduct is capable of influencing the development

a neighbouring sector, i.e. electric mobility, at a crucial stage in the start-up of the latter, with regard to the development of a network of infrastructures for recharging electric cars adapted to the phase of growth and evolution of the demand for recharging services, with repercussions also on a more rapid diffusion of electric vehicles and the transition towards a more environmentally sustainable mobility.

420. Google's notoriety and economic importance are undisputed. As noted, Google is one of the four or five so-called 'Big Tech' companies recognised as world leaders in the field of digital devices and services. As noted, Google is one of the four or five so-called '*Big Tech' companies* recognised as world *leaders* in the field of digital devices and services. Google's products - the search engine that gives the group its name, YouTube, Android, Chrome, Google Play, Google Maps, Google Assistant and others - are famous and used throughout the world. Through these products, Google addresses a very wide range of end users and a varied and equally wide range of *business* users. Google is, in fact, an absolute protagonist of what is called the digital economy.

421. The market context in which Google's alleged conduct takes place is characterised by strong innovation and rapid evolution. Moreover, the sectors in which Google's conduct is likely to produce effects are those of digital applications for the offer of services to end users - in this case, services connected to electric recharging provided through *apps* - and of electric mobility: these are sectors destined to grow in the future and on which the plans for the "green" and digital development of the European Union's economy are based.

422. In view of the nature of the conduct, Google's role and representativeness on the market, and the context in which it operates, the conduct of Google must be regarded as a very serious breach of the competition rules.

423. In relation to the duration of the infringement, it is considered that it began at least as from 20 September 2018, when Google made its first express refusal to Enel X Italia. In fact, since the first refusal expressed, Google has adopted a conduct of closure with respect to Enel X Italia's request, not proposing any effective solution and even less indicating a clear and reasonable timeframe for its implementation.

424. The infringement is still ongoing because Google has not implemented an adequate solution to allow the publication of the *app* developed by Enel X Italia on Android Auto, in a final version and that maintains the essential features of the same *app* (as highlighted by the request of the CEO of Enel X Italia dated 21 December 2018). In fact, as illustrated above, the release of the *beta* version of the new *template* that

should allow the development of a version of the Enel X Italia *app* compatible with Android Auto is not equivalent to the release of the final version, which is the only one that can give certainty about the publication on Android Auto with the characteristics of accessibility and ease of use provided for the *apps* already present or publishable on Android Auto. In addition, it is not certain that the new *template* (currently in *beta* version) allows the *set of* functions (including booking and start of recharging) that Enel X Italia has indicated as essential.

VIII. QUANTIFICATION OF THE PENALTY

425. Article 15(1) of Law No. 287/90 provides that, in cases of serious infringements, taking into account their gravity and duration, the Authority shall order the application of a pecuniary administrative sanction, up to ten percent of the turnover achieved in each undertaking or entity in the last financial year closed prior to the notification of the warning adopted as a result of an investigation procedure. In the present case, the monetary amount of this edictal limit is calculated on the consolidated worldwide turnover achieved by the company Alphabet Inc., which in 2020 amounted to approximately €160 billion ($182.6 billion)480.

426. As a preliminary remark, it should be noted that the circumstances of "*complexity of the legal and factual context*" and of "*novelty of the case*" invoked by Google in support of the request for the application of a symbolic or minimum penalty are not met. In fact, the examination carried out on Google's conduct does not concern regulatory issues but rather issues of technology and interoperability, of which Google has full knowledge and control. Moreover, the case at issue is not new and all the notions referred to are well established in case law.

427. *In order to* quantify the sanction, it is necessary to take into account the provisions of Article 11 of Law no. 689/1981, as referred to in Article 31 **of** Law no. 287/90, as well as the interpretative criteria set out in the "*Guidelines on the method of application of the criteria for quantifying administrative fines imposed by the Authority in application of Article 15(1) of Law no. 287/90*" (hereinafter referred to as the Guidelines)[481].

428. Pursuant to Article 11 of Law No 689/1981, as referred to in Article 31 of Law No 287/90, the following must be considered to be seriousness

480 In 2020, the average dollar/euro exchange rate was 0.8768.
481 Adopted by Authority Order No. 25152 of 22 October 2014.

of the infringement, the economic conditions, the conduct of the undertakings involved (personality of the person) and any initiatives aimed at eliminating or mitigating the consequences of the infringements. In the present case, the following should be noted: the infringement alleged against Google is a very serious one; Google is one of the leading technology companies in the world and enjoys a very significant financial strength; Google has already been accused of three abusive conducts by the European Commission482; Google has not taken any action aimed at limiting the effects of the conduct at issue in these proceedings.

429. *As* regards the relevant turnover for the purposes of the sanction, the Guidelines provide that the sanctions "*should be calculated starting from the value of the sales of the goods or services which are the subject, directly or indirectly, of the infringement, made by the undertaking in the relevant market(s) in the last year*

of participation in the same infringement" (points 8 and 9 of the Guidelines)[483]. In the present case, this value consists of the turnover achieved, in whatever capacity, by Google in Italy in relation to Android, Google Play and Google Maps in the year 2020 (hereinafter, relevant turnover). In fact, Android and Google Play are the products to which Google's dominant position refers; Google Maps is the Google product that belongs to the competitive space in which the effects of the contested abuse have been produced and is the product that, in the final analysis, Google intends to protect from the competitive pressure deriving from Enel X Italia's *app.*

430. In order to obtain the numerical value of the relevant turnover as identified above, Google was asked to indicate:

- the values of the turnover realised, in whatever capacity, in Italy in 2020, in relation to Android, Google Play and Google Maps;
- the criteria which had to be applied in order to produce estimates of the required turnover values484.

431. Google's reply to the above-mentioned request for information485 contains turnover figures which appear to be unreliable and, in any event, not sufficiently representative with respect to the information contained in Alphabet's consolidated financial statements for 2020. In addition, Google has not made available the criteria actually applied for the estimation of the values provided, so that it is not possible to retrace the logical *process* followed by Google, let alone replicate the calculations.

482 See European Commission decisions of 27 June 2017 on case AT.39740 - Google Search (Shopping) and of 18 July 2018 on case AT.40099 - Google Android). See also European Commission press release on the decision of 20 March 2019 on case AT.40411 - Google Search (AdSense).

483 This value will be considered net of VAT and other taxes directly related to sales.

484 See request for information to Google of 2 April 2021.

485 See Google's reply of 20 April 2021.

carried out.

432. The unreliability and insufficient representativeness of the turnover figures provided by Google clearly emerges from the fact that, while in the reply to the request for information Google indicates a zero turnover for Android, in the consolidated financial statements for 2020 Google states that Android generates revenues. Moreover, the same financial statements show that Android is a product which contributes to the generation of revenues of other products and, therefore, also of Google Play and Google Maps; since the estimation criteria adopted by Google for the revenues of Google Play and Google Maps have not been made available, it is not possible to verify whether or not these values include the contribution attributable to Android.

433. In particular, in the sections of the consolidated financial statements dedicated to the analysis of revenues, it is stated that Android is part of the so-called Google Services, which include (among others) Chrome, Google Search and YouTube as well as Google Play and Google Maps. Google Services generate revenues which are mainly - but not exclusively - advertising revenues486.

434. By stating that Android generates revenues within the scope of Google Services, the consolidated financial statements essentially state that Android contributes revenues that are allocated, from an accounting perspective, to other products. Moreover, the aforementioned analysis of revenues does not distinguish according to the type of device used by users, thus affirming a unitary vision of Google's activity. This unitary view is found in the analysis of the risks to Google's business - an analysis also contained in the consolidated financial statements - which states that Google's business is based on the ability of users to access the *Internet487* and that there is an increasing variety of devices through which users access the *Internet, including* (among others) *desktops*, *smartphones, wearable* devices, *smart TVs* and cars488. It should be noted that Android is the *software of* reference not only for
smart mobile devices but also for *wearables*, *smart TVs* and cars.

435. The unified view of Google's business, stated in the consolidated financial statements, appears consistent with the characteristic of digital services, often provided

486 In the sections dedicated to revenue analysis, Google identifies three macro-sets of activities: Google Services, Google Cloud and Other Bets. "*Google Services includes products and services such as ads, Android, Chrome, hardware, Google Maps, Google Play, Search, and YouTube. Google Services generates revenues primarily from advertising; sales ofapps, in-app purchases, digital content products, and hardware; and fees received for subscription-based products such as YouTube Premium and YouTube TV*". (Alphabet's consolidated financial statements for 2020, page 33 and page 90)

487 '*Our products and services depend on the ability ofour users to access the Internet*' (Alphabet's consolidated financial statements for 2020, page 17).

488 '*People access the Internet through a growing variety of devices such as desktop computers, mobile phones, smartphones, laptops and tablets, video game consoles, voice-activated speakers, wearables, automobiles, and television-streaming devices*' (Alphabet's consolidated financial statements for 2020, page 14).

free of charge, to use the data generated by users as *input* for collateral revenue-generating activities (e.g. *website* advertising intermediation services) and thus to extract the economic value of the same data489. Indeed, the breadth of the range of products offered by Google and the stated purpose of tracking users in their activities on the *Internet* and/or based on digital devices appear to be functional to an activity that is overall based **on the** collection and extraction of the economic value of the data generated by users.

436. Since the turnover data provided by Google are not reliable and do not provide an adequate representation of the contribution of Android, Google Play and Google Maps to the turnover realised in Italy in 2020, it is deemed necessary to estimate the relevant turnover, in accordance with point 9 of the Guidelines. This estimate starts from the data and information contained in Google's consolidated financial statements for 2020 in order to calculate a relevant turnover which takes into account the revenues generated by Google Services, the incidence of the revenues realised in Italy and the incidence of the revenues relating to Android, Google Play and Google Maps.

437. Revenues generated by Google Services, to which Android, Google Play and Google Maps belong, amount to USD 168,635 million in 2020, corresponding to approximately EUR 147,859 million490.

Google's consolidated financial statements do not contain a breakdown of revenues by individual countries, with the exception of the United States, but rather refer to macro-regions, including Europe, the Middle East and Africa (EMEA), which accounts for 30% of revenues. In the absence of further information on the incidence of the turnover generated in Italy on Google's global revenues, it is deemed possible to estimate such incidence at *[omissis] in* consideration of the fact that Italy is among the most densely populated countries in the EMEA macro-area and that the use of digital services and applications is widespread. The estimate in question also appears proportionate in view of the fact that it coincides with that indicated by Google491.

In view of the relevance of Android to Google's business and the consolidated and widespread diffusion of Google Play and Google Maps among the

489 On the economic value of data, see, for example, Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects of contracts for the supply of digital content and services where it states "*The supply of digital content or digital services often involves the consumer providing personal data to the economic operator when not paying a price. Such business models are used in various forms in a considerable part of the market. ... This Directive should therefore apply to contracts where the economic operator provides, or promises to provide, digital content or services to the consumer and where the consumer provides, or promises to provide, personal data*' (recital 24).

490 In 2020, the average dollar/euro exchange rate was 0.8768.

491 See Google's response of 20 April 2021. The request for information to Google of 2 April 2021 contained a specific question on the proportion of turnover generated in Italy to total turnover.

end-users, the cumulative impact of these products on the total turnover generated by Google Services is estimated at 10%.
Taking into account the revenues generated by Google Services, the incidence of revenues generated in Italy and the incidence of revenues related to Android, Google Play and Google Maps, the relevant turnover is estimated at EUR *[omissis]*.

438. For the purpose of calculating the basic amount of the sanction, the relevant turnover is taken as a reference and a percentage determined according to the gravity of the infringement is applied to this amount and multiplied by the duration of the infringement (point 7). In particular, the percentage applied to the relevant turnover may reach a maximum of 30% (point 11 of the Guidelines).

In the present case, in view of the gravity of the infringement and the need to ensure effective deterrence of the sanction, taking into account that Google controls important access points to end-users and that the contested conduct has already led to the exclusion of one competitor and may lead to further effects detrimental to consumer welfare and hindering technical progress, the percentage applied is *[10-20%]*.
The duration of the infringement is 2 years, 7 months and 7 days.

439. In order to give the Authority's sanctioning power the necessary character of effective deterrence, the Authority may add to the basic amount an additional amount, between 15% and 25% of the relevant turnover (so-called *entry fee*), with specific reference to the most serious restrictions of competition, regardless of their duration and their actual implementation (point 17 of the Guidelines).

In the present case, in view of the need to ensure effective deterrence of the sanction and taking into account the fact that Google has engaged in very serious conduct, it is considered that an additional amount of *[15-25%]* of the relevant turnover should be applied.

440. The basic amount of the sanction may be adjusted upwards or downwards to take account of specific aggravating or mitigating circumstances with particular reference to the role played in the infringement, the conduct during the investigation as well as the behaviour of the companies involved (personality of the person) and any initiatives aimed at eliminating or mitigating the consequences of the violations (point 19 et seq. of the Guidelines), also in the light of the provisions of Article 11 of Law no. 689/81.

It is considered that there are no aggravating or mitigating circumstances in this case. In particular, the circumstance highlighted by Google of the existence of an internal legal opinion, which ruled out profiles of unlawfulness in Google's conduct and with which it would have complied, cannot constitute a mitigating circumstance since the conduct at issue lasted well beyond the start of the proceedings.

the present proceedings to show that Google did not question that opinion but, on the contrary, continued to conduct itself in accordance with it.
441. The Authority may increase the fine by up to 50% if the undertaking responsible for the infringement had, in the last financial year ending before the notification of the warning, a total worldwide turnover which is particularly high in relation to the value of the sales of goods or services to which the infringement relates, or if it belongs to a group of significant economic size (point 25 of the Guidelines).
In the present case, taking into account the fact that Google achieved a turnover of approximately EUR 160 billion in 2020 and the absolute importance of Google at global level, it is considered appropriate to apply an increase of 50% of the amount of **the** penalty.
442. The amount of the penalty calculated as indicated above is equal to
EUR 102,084,433.91
(one hundred and two million eighty-four thousand four hundred and thirty-three/91 euros).
That amount is lower than the legal limit calculated on the worldwide consolidated turnover of Alphabet Inc. in 2020, or, more specifically, 0.064% of that turnover.

IX. IMPOSITION OF OBLIGATIONS ON GOOGLE

443. In the present case, in order to ensure the effectiveness of the *anti-trust* action, it appears necessary to prevent the conduct complained of by Google from continuing to result in the exclusion of a competitor, which could lead to a change in the market structure, the dispersion of Enel X Italia's investments in technology, a structural reduction in the supply to end users, also in terms of diversity of the model of response to their needs, as well as detrimental effects on the development of the network of infrastructures for the recharging of electric cars. To this end, it is considered necessary to impose obligations on Google itself to carry out specific activities aimed at promptly restoring a *level playing field* with regard to *apps* offering services connected to electric recharging on Android Auto. This is because, as it clearly emerged from the investigation, the definition of the programming tools for Android Auto and the timing of their release to third-party developers are solely dependent on Google.
444. As regards the content of the obligations to be imposed on Google, it should be noted that the latter has developed a *beta* version

of a new *template* that should allow the development of electric charging *apps.* That being said, there remains uncertainty as to when the final version of such *template* will be released and as to the actual suitability of the same *template* to allow the development of the *set of* functions, including the booking and the start of the recharge, which Enel X Italia considers indispensable (according to what was indicated by the CEO of Enel X Italia in the request for a written and definitive reply dated 21 December 2018). Moreover, Google indicated that the development of a *template was* the most appropriate technical solution to allow the publication of Enel X Italia's *app* on Android Auto, while the development of such *app* as a *custom app* was deemed not feasible in practice.

445. As regards the modalities for the definition and, subsequently, the monitoring of the obligations to be imposed on Google, in view of the markedly technical nature of such obligations, it is considered necessary for the Authority to rely on the advice of a trustee (a person in charge of the implementation and monitoring of the obligations). The latter will have to:

- be in a position of independence from Google and its subsidiaries;
- have the necessary qualifications to carry out their mandate, and in particular have proven knowledge and experience in application development;
- not having, or having been exposed to, a conflict of interest with respect to Google and its subsidiaries, and in particular not having held any significant position on behalf of Google in the year preceding his appointment.

446. The trustee for the implementation and monitoring of the obligations shall carry out the following activities:

- in the event that Google has not already released the final version of the *template for the* development of electric charging *apps*, submit a report on the time required for this to happen, for approval by the Authority;
- assess whether the aforementioned *template* is suitable to allow the development of the JuiceP ass *app* for Android Auto including all the functionalities, in addition to those of search and navigation, considered essential (according to the request of the Managing Director of Enel X Italia for a written and definitive answer dated 21 December 2018) or whether it is necessary to implement the missing functionalities by integrating the *template* or developing a new one, submitting a report for approval by the Authority;

- if it is necessary to develop further functionalities of the *template*, draw up a plan of the necessary actions with an indication of the relevant timeframe to be submitted to the Authority for approval;
- monitor any activity by Google with regard to the release of the final *template* and the development of further functionalities if necessary;
- act as a point of contact for any request from Enel X Italia in relation to the obligations imposed;
- comply with the Authority's instructions regarding the verification of the implementation and monitoring of obligations;
- to submit monthly reports to the Authority on its activities with respect to the implementation and monitoring of the obligations imposed on Google; in the first report the Trustee shall set out a detailed work plan and in subsequent reports shall explain any issues with the work plan and any changes to the work plan;
- inform the Authority of the full implementation of the obligations;
- promptly inform the Authority of any relevant facts relating to the obligations imposed on Google.

447. The name, *curri culum* and mandate of the trustee for the implementation and monitoring of the obligations will have to be approved in advance by the Authority. To this end, Google shall submit to the Authority a proposal for the appointment of a trustee within 30 days from the notification of this measure, also specifying the criteria for the determination of the remuneration.

The proposal must contain sufficient information to enable the Authority to verify that the person proposed as trustee meets the requirements specified above and must include:

(i) the terms of the proposed mandate, which will include all provisions necessary to enable the trustee to fulfil its obligations;

ü) an outline of a work plan describing how the trustee will carry out the assigned tasks.

The Authority shall have the power to approve or reject the choice of the proposed Trustee and to approve the proposed mandate or to amend it as appropriate to enable the Trustee to carry out its functions.

The trustee's fee will be paid by Google.

448. Without prejudice to the contribution of the Trustee for the implementation and monitoring of the obligations in the precise definition of the obligations, Google shall, firstly, ***(a)*** release without delay the final version of the *template for the* development of electric charging apps and, secondly, where such *template* does not allow the development of the Enel X Italia *app* including

(b) complete the *template with the* missing functionalities or develop a new *template* including the same functionalities.
The obligation *under* ***b)*** is of a contingent nature as it should only apply in the event that the *template for the* development of electric charging apps would not allow the development of an Android Auto version of the JuiceP ass *app* including all the functionalities, in addition to the search and navigation ones, considered essential by Enel X Italy, namely the booking and the start of the charging session (as indicated by the Managing Director of Enel X Italy in the request of 21 December 2018 for a written and final reply).
In addition, Google shall provide the Monitoring and Enforcement Trustee with access to all information and resources necessary to perform its assigned task. Google shall also provide the Trustee with such cooperation and assistance as may be required.
449. The above mentioned obligations appear, as a whole, necessary and proportionate with respect to the objective of the timely restoration of a *level playing field* with regard to *apps* offering services connected to electric charging on Android Auto, also in consideration of the already significant duration of the conduct under examination in the context of the rapid evolution of the technological markets concerned. In fact, the obligation *under* ***a)*** serves to ensure that Enel X Italia, as well as the other developers of *apps* for services related to electric recharging, can, in a short period of time, develop the relevant *apps*, according to a definitive *template* and with a definite time of publication; the obligation *under* ***b)*** is only possible and serves to ensure that the JuiceP ass *app* for Android Auto includes all the functions, in addition to those of search and navigation, that Enel X Italia has indicated as necessary (i.e. booking and start of the recharging session).
450. Moreover, in the light of what has emerged from the investigation, it is not possible to identify different or, in any event, less stringent obligations that would ensure the same results, also with reference to the requirement of timeliness, which is particularly relevant in the context of the markets concerned. Indeed, the obligations set *out in paragraphs* ***(a)*** and ***(b) above are*** based on a development activity that Google is already carrying out (*templates* in *beta* version) and concern the programming tool (*template*) which Google has indicated as the only one proportionate to allow the publication of new types of *apps* on Android Auto.

All of the above

DELIBERATION

a) that the conduct engaged in by Alphabet Inc., Google LLC and Google Italy S.r.l., consisting in hindering and delaying the publication of the *app* developed by Enel X Italia on the Android Auto platform, constitutes an abuse of dominant position in breach of Article 102 TFEU;

b) that Alphabet Inc., Google LLC and Google Italy S.r.l. immediately put an end to the conduct distorting competition referred to in paragraph *a)* above and refrain in the future from engaging in conduct similar to that which is the subject of the infringement found in the preceding paragraph;

c) that Alphabet Inc., Google LLC and Google Italy S.r.l. promptly implement the obligations set out in Section IX of this measure and, therefore,
c1) release the final version of the *template for the* development of electric charging *apps;*
c2) where the aforementioned *template* does not allow the development of the Enel X Italia *app* including the functions indicated as essential (according to the request of the Managing Director of Enel X Italia for a written and final reply dated 21 December 2018), proceed to the development of the missing functions by integrating the aforementioned *template* or by developing a new one;
c3) within thirty days from the notification of this measure, submit to the Authority a proposal for the appointment of the Trustee for the implementation and monitoring of the obligations - including the name, *curriculum*, terms of reference, outline of the work plan and criteria for the determination of the remuneration - in accordance with Section IX of this measure. The appointment of the Trustee shall require the prior approval of the Authority;
c4) allow the trustee for the implementation and monitoring of the obligations access to all information and resources necessary for the performance of the assigned task and provide cooperation and assistance as required;

d) to impose, jointly and severally, on the companies Alphabet Inc., Google LLC and Google Italy S.r.l. a total administrative fine of EUR 102,084,433.91 (one hundred and two million eighty-four thousand four hundred and thirty-three/91 euros);

e) that Alphabet Inc., Google LLC and Google Italy S.r.l. inform the Authority of the steps they have taken to comply with points b) and c) above. the
Authority of the initiatives taken to comply with the requirements set out in points *b)* and *c)* above, by submitting a specific written report, within ninety days from the notification of this measure and subsequently on a quarterly basis until the obligations set out in point *c*) have been fully implemented.

The administrative penalty referred to in point d) above must be paid within the term of ninety days from the notification of this measure, using the tax codes indicated in the attached F24 form with identification elements, as per Legislative Decree no. 241/1997. The payment must be made telematically by debiting one's bank or postal account, through the *home banki ng* and CBI services made available by banks or by Poste Italiane S.p.A., or by using the telematic services of the Revenue Agency, available on the website *i nternet* www.agenziaentrate.gov.it, or by bank transfer (in euro) in favour of the State Budget, using the IBAN code IT04A0100003245348018359214 (BIC code: BITAITRRENT), which corresponds to the accounting tern 18/3592/14.

Once the aforementioned deadline has passed, for the period of delay of less than six months, interest on arrears must be paid at the legal rate from the day after the deadline for payment until the date of payment. In the event of a further delay in payment, pursuant to Article 27(6) of Law no. 689/81, the sum due for the penalty imposed shall be increased by one tenth for each six-month period starting from the day after the expiry of the deadline for payment and up to the day on which the role is forwarded to the collection agent; in this case the increase absorbs the interest on arrears accrued in the same period. The Authority must be immediately informed of the payments made, by sending a copy of the form certifying the payment made.
Pursuant to Article 26 of the same law, undertakings in difficult economic circumstances may apply for payment of the penalty in instalments.

This measure will be notified to the interested parties and published in the Bulletin of the Antitrust Authority.

Appeals against this measure may be lodged with the Lazio Regional Administrative Court, pursuant to Article 135(1)(b) of the Administrative Procedure Code (Legislative Decree 104 of 2 July 2010), within 60 days of the date of communication of the measure, without prejudice to the longer terms provided for in Article 41(5) of the Administrative Procedure Code, or an extraordinary appeal may be lodged with the President of the Republic pursuant to Article 8 of Presidential Decree 1199 of 24 November 1971, within 120 days of the date of notification of the measure.

THE SECRETARY-GENERAL THE PRESIDENT
Fi lippo Arena Roberto Rustichelli