





COMPETITION COMMISSION OF INDIA

Case No. 07 of 2020

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XYZ (Confidential) Informant

And

Alphabet Inc. Opposite Party No. 1

Google LLC Opposite Party No. 2

Google Ireland Limited Opposite Party No. 3

Google India Private Limited Opposite Party No. 4

Google India Digital Services Private Limited Opposite Party No. 5

With

Case No. 14 of 2021

In re:

Match Group, Inc. Informant

And

Alphabet Inc.

Google LLC

Google Ireland Limited

Google India Private Limited

Google India Digital Services Private Limited

Opposite Party No. 3

Opposite Party No. 4

Opposite Party No. 5

With

Case No. 35 of 2021

In re:

Alliance of Digital India Foundation Informant





And

Alphabet Inc.

Google LLC

Google Ireland Limited

Google India Private Limited

Google India Digital Services Private Limited

Opposite Party No. 3

Opposite Party No. 4

Opposite Party No. 5

CORAM:

Mr. Ashok Kumar Gupta Chairperson

Ms. Sangeeta Verma Member

Mr. Bhagwant Singh Bishnoi Member

Present:

For Alphabet Inc., Google LLC, Google Ireland Limited, Google India Private Limited and Google India Digital Services Private Limited (Opposite Parties/Google) Mr. Sajan Poovayya, Senior Advocate with Mr. Karan Chandhiok, Ms. Deeksha Manchanda, Ms. Raksha Aggarwal, Ms. Avaantika Kakkar, Mr. Kaustav Kundu, Ms. Ruchi Verma and Mr. Tarun Donadi, Advocates along with Ms. Auraellia Wang, Mr. Thomas Bohnett and Ms. Smita Ann Andrews, Representatives of Opposite Parties

For Match Group, Inc. (Match Group)

Mr. Jayant Mehta, Senior Advocate with Ms. Sonam Mathur, Ms. Dinoo Muthappa, Mr. Abir Roy, Mr. Dhruv Dikshit, Advocates along with Mr. Mark Buse, Representative of Match Group





For Alliance of Digital India Foundation (ADIF)

Mr. Abir Roy and Mr. Vivek Pandey, Advocates along with Mr. Tom Thomas, Representative of ADIF

Order under Section 27 of the Competition Act, 2002

- 1. The Information in Case No. 07 of 2020 was filed on 21.02.2020, under Section 19(1)(a) of the Competition Act, 2002 (the 'Act') by XYZ (the 'Informant') against Alphabet Inc., Google LLC, Google Ireland Limited ('Google Ireland'), Google India Private Limited ('Google India') and Google India Digital Services Private Limited ('Google Digital Services') alleging contravention of various provisions of Section 4 of the Act. The opposite parties are hereinafter collectively referred to as 'Google/ Opposite Parties'.
- 2. The Information in Case No. 14 of 2021 was filed by Match Group, Inc. ('Match Group') under Section 19(1)(a) of the Act against the Opposite Parties alleging contravention of the provisions of Section 4 of the Act. It was stated in the Information that Match Group, through a portfolio of companies it owns, is engaged in the provision of dating / companionship products, available in over 40 languages to users in more than 190 countries, through apps and websites. Match Group is also stated to have one indirect, wholly owned subsidiary in India, MTCH India Services Private Limited ('Match India'). Match Group's brands stated to be operating in India are Tinder, Hinge, OkCupid, and Ablo.
- 3. The Information in Case No. 35 of 2021 was filed by Alliance of Digital India Foundation ('ADIF') under Section 19(1)(a) of the Act against the Opposite Parties alleging contravention of the provisions of Section 4 of the Act. The Informant is stated to be an alliance of individuals which aims at improving the start-up ecosystem in India and actively helps in identifying and dealing with the





issues concerning the growth and functioning of start-ups in India. It was further stated in the Information that ADIF as a body represents the interests of various stakeholders such as start-ups, app developers, etc. and espouses the objective of improving the start-up ecosystem of the country.

About the OPs

- 4. Alphabet Inc. is a multinational technology conglomerate holding company. It was created through a restructuring of Google on 02.10.2015 and became the parent company of Google and several former Google subsidiaries. Google LLC is a Delaware (USA) limited liability company and wholly owned subsidiary of Alphabet Inc. It has been submitted by the Opposite Parties that Google's core products and services including Google Play and Android OS are developed, provided, and administered by Google LLC. In addition, all policies relevant to the Google products are framed, developed, and enforced by Google LLC. It has been further submitted that Google's core products and platforms include Chrome, Gmail, Google Drive, Google Maps, Google Play, Android, Search, and YouTube.
- 5. Google Ireland Limited is a legal entity formed under the laws of Ireland. It has been submitted by the Opposite Parties that Google Ireland generates its revenue primarily by delivering relevant, cost-effective, online advertising on Google properties and Google Network Members' properties. It is also stated to be responsible for providing most of Google's consumer services to users in the European Economic Area and Switzerland with effect from 22.01.2019.
- 6. Google India Private Limited ("Google India") is a company incorporated in the year 2003 under the Companies Act. It has been submitted by the Opposite Parties that since 01.04.2016, Google India has been appointed by Google Asia Pacific Pte Ltd, Singapore ("Google Singapore") as a non-exclusive authorised reseller of online advertisement space in India provided by Google Asia Pacific Pte Ltd through Google Ads program to advertisers in India (prior to that time it was the





non-exclusive reseller of online advertising space appointed by Google Ireland Limited). Google India also acts as a non-exclusive reseller of standardized Google enterprise products (currently known as Google Workspace), to customers in India. In addition, it also provides a limited set of Information Technology Services ("IT services"), and Information Technology Enabled Services ("ITES") to other overseas group companies.

7. Google India Digital Services Private Limited ("Google Digital") is incorporated as a private limited company under the Companies Act. It has been submitted by the Opposite Parties Google Digital undertakes the commercial operation of the "Google Pay" (formerly known as "Tez") application in India.

Facts as stated in the Information in Case No. 07 of 2020

- 8. The Informant averred that Google's business model is based on interaction between, the online products and services it offers free of charge to users on one hand and, on the other, its online advertising services, from which it derives majority of its revenues. The Informant further averred that other than Android and Google Search, Google's core products include, a web browser (Google Chrome), an online video streaming service (YouTube), a web-based e-mail service (Gmail), an online mapping, navigation and geolocation service (Google Maps), an app store (Play Store), *etc*. These services are part of Google Mobile Services (GMS) *i.e.*, the bundle of Google apps and services that Google licenses to smartphone manufacturers/Original Equipment Manufacturers (OEMs).
- 9. The Informant further stated that in addition to the core products of Google, on 18.09.2017, Google launched a Unified Payment Interface (*UPI*) based payment app called Tez in India, which was rebranded as *Google Pay* on 28.08.2018 in order to unify Google's payment offerings globally under the 'Google Pay' brand.





- 10. The Informant gave a detailed background of the Android ecosystem *w.r.t.* smart mobile devices highlighting the importance of Play Store in the overall Android architecture. The Informant alleged that Google, through its control over the Play Store and Android Operating System (OS), is favouring Google Pay over other competing apps, to the disadvantage of both *i.e.* apps facilitating payment through UPI, as well as users. As per the Informant, this amounts to abuse of its dominant position by Google in violation of various provisions of Section 4 of the Act.
- 11. For the purpose the present matter, the Informant submitted that the following relevant markets should be considered:
 - a) market for licensable mobile OS for smart mobile devices;
 - b) market for app stores for Android OS; and
 - c) market for apps facilitating payment through UPI.
- 12. In relation to market for licensable mobile OS for smart mobile devices, the Informant submitted that from a demand-side perspective, basic and feature phone OS cannot be installed on smart mobile devices because of their extremely reduced functionalities. Further, even from a supply-side perspective, the differences in functionalities mean that the development of a smart mobile OS requires significant time and resources, regardless of whether the OS developer in question has already developed a basic and feature phone OS. The Informant also averred that there is no substitutability between mobile OS for smart mobile devices and desktop/computer OS. Further, from the perspective of the OEM, a non-licensable mobile OS made by a vertically integrated developer for its own products, is not a substitute for a licensable mobile OS for smart mobile devices. Therefore, non-licensable mobile OS are not part of the same market as that of licensable mobile OS for smart mobile devices. The Informant also placed reliance on decision of the European Commission (EC)¹ wherein the EC

¹ European Commission (EC) decision in Case AT 40099 – Google Android (EC Android Decision)





recognised that the markets for smart mobile OS and basic and feature phone OS, are separate markets. The Informant has also placed reliance on the order of the Commission dated 16.04.2019 passed under Section 26(1) of the Act in *Re: Umar Javeed & Othrs AND Google LLC & Othrs* bearing Case No. 39 of 2018 (Google Android Order) for this market.

- 13. In relation to market for app stores for Android OS, the Informant submitted that app stores are digital distribution platforms that are dedicated to enabling smart mobile device users to download, install and manage a wide range of diverse apps from a single point in the interface of the smartphone. The Informant *inter alia* averred that sideloading and web apps (offered through browser) are not a substitute for apps offered through app stores and app stores form a separate platform for smart mobile device users to access apps as well as for app providers to reach an audience with their content or services. Further, there is no substitutability between app stores of other licensable and non-licensable mobile OS for smart mobile devices and Android App Stores. The Informant also placed reliance on EC Android Decision as well as Google Android Order of the Commission, for the same. Accordingly, the Informant averred that another relevant market in the present case should be the market for app stores for the Android mobile OS.
- 14. In relation to market for apps facilitating payment through UPI, the Informant submitted that users could conduct digital payment transactions from a variety of channels *viz*. internet banking, credit/debit cards, wallets, UPI enabled apps, *etc*. However, market for apps facilitating payments through UPI is separate from markets for all other modes of digital payment solutions like cards, wallets, internet banking, *etc*. For the said purpose, the Informant brought forward distinct features offered by apps facilitating payments through UPI as compared to the other modes of digital payment solutions. The Informant claimed that UPI based digital payment apps are more convenient, secured, economical, *etc*. over other





digital payment solutions. Based on such distinct features, the Informant averred that the market for apps facilitating payment through UPI is a separate relevant market as users do not regard apps facilitating payment through UPI as interchangeable or substitutable with other modes of digital payment.

- 15. In relation to relevant geographic market, the Informant submitted that the relevant geographic market for the markets mentioned above is national in scope and the same is evident from Google's own internal structuring, which created a separate entity to run India operations. The Informant also placed reliance on Google Android Order of the Commission for the same. The Informant also stated that even if the worldwide markets for licensable OS for smart mobile devices and app stores for Android are considered as the relevant geographic markets, there would be an insignificant to no change in the assessment of dominance of Google and therefore, detailed analysis of market definition is not necessary.
- 16. The Informant also averred that Google enjoys a dominant position in the relevant market(s) for licensable mobile OS for smart mobile devices in India, and the market for app stores for Android mobile OS in India. It was also averred that Google enjoys a position of strength in both of these markets which enables it to operate independently of competitive forces and to affect its competitors/consumers as well as these markets in its favour.
- 17. The Informant *inter alia* alleged that Google is abusing its dominant position in the markets for licensable mobile OS for smart mobile devices and app stores for Android OS by (a) mandating apps to use Play Store's payment system and Google Play In-App Billing for charging their users for purchase of apps on Play Store and In-App purchases (which privileges Google Pay over other apps facilitating payment through UPI and mobile wallets), if they want to be listed on the Play Store; (b) unfairly privileging Google Pay *inter-alia* by pre-installing and prominently placing Google Pay on Android smartphones at the time of initial set-





up resulting in a "status-quo bias" to the detriment of other apps facilitating payments through UPI as well as other methods of payment; etc.

Directions to the Director General (DG)

- 18. Based on the material available on record, the Commission, *vide* its order dated 09.11.2020, formed a *prima facie* view that the Opposite Parties have contravened various provisions of Section 4 of the Act. Accordingly, the Commission directed the DG to cause an investigation to be made into the matter under the provisions of Section 26(1) of the Act.
- 19. Subsequently, the Commission received another Information bearing Case No. 14 of 2021 against the Opposite Parties. The Commission considered the said Information in its ordinary meeting held on 13.07.2021 and noted that the subject matter of the allegations made in the instant Information was substantially same to Case No. 07 of 2020, which was under examination before the DG. Accordingly, in terms of proviso to Section 26(1) of the Act, the Commission, *vide* its order dated 13.07.2021, decided to club this case with Case No. 07 of 2020. Resultantly, the DG was directed to investigate this case also along with Case No. 07 of 2020 and submit a consolidated investigation report in the matter.
- 20. Thereafter, the Commission received another Information bearing Case No. 35 of 2021 against the Opposite Parties. The Commission considered the said Information in its ordinary meeting held on 02.11.2021 and noted that the subject matter of the allegations made in the instant Information also was substantially the same with the subject matter under examination before the DG in an ongoing investigation in Case No. 07 of 2020 and Case No. 14 of 2021. Accordingly, in terms of proviso to Section 26(1) of the Act, the Commission, *vide* its order dated 02.11.2021, decided to club this case with Case Nos. 07 of 2020 and 14 of 2021. Resultantly, the DG was directed to investigate this case also along with Case No.





07 of 2020 (and Case No. 14 of 2021) and submit a consolidated investigation report in the matter.

21. Accordingly, the DG submitted confidential as well as non-confidential versions of its consolidated Investigation Report on 16.03.2022.

Investigation by the DG

- 22. The investigation involved detailed information collection from the Informants, OPs and the third parties. Further, the Investigation also collected information/data/ market reports, which were available online, the same are referred/annexed in the Investigation Report at appropriate places.
- 23. It is also noted that apart from the Opposite Parties, during the investigation the DG identified certain other parties which were concerned with the products of Google (like Google Play Store and Google Play Billing System) within the scope of the present investigation. These other parties related to Google are (a) Google Asia Pacific Pte Ltd., Singapore ("Google Singapore") which is responsible for

; and (b) Google Payments India Private Ltd ("GPIN") which
is incorporated in India and responsible for

- 24. Based on the analysis of various factors mentioned in the Act, following relevant markets were delineated by the DG:
 - i. Market for licensable mobile OS for smart mobile devices in India;
 - ii. Market for App Stores for Android OS in India; and
 - iii. Market for apps facilitating payments through UPI.





- 25. On analysis of various factors, the DG found that Google is dominant, in terms of explanation (a) to the provisions of Section 4 of the Act, in the relevant markets for licensable mobile OS for smart mobile devices in India and the market for App store for Android OS in India.
- 26. In the light of the analysis of the various evidence, the DG concluded that Google has made the use of GPBS mandatory and exclusive for processing of payments for apps and in-app purchases for the apps downloaded from Google Play Store. Moreover, the DG found that Google is following discriminatory practices by not using GPBS for its own applications *i.e.*, YouTube. Therefore, Google imposes unfair and discriminatory conditions in violation of the provisions of Section 4(2)(a)(i) of the Act.
- 27. The DG also found that service fee charged by Google is unfair and discriminatory as:
 - i. Many payment aggregators *e.g.*, Razorpay, PayU, Mobikwik, PhonePe, Paytm, *etc.* in India charge a fee within a range of 0 3% only. Google charges excessive service fee (up to ______ as that of payment aggregators) to the App developers for same kind of services as provided by payment aggregators. The DG also stated that Google does not provide any additional services to the paid apps and apps selling in-app contents.
 - ii. Some apps of Google which are selling in-app contents are not following GPBS for processing of the payments, hence, they are not paying 15 30% service fee. Some apps of Google like YouTube have arrangements with third party payment aggregator and pay a fee to the tune of
 - iii. Further, Google even does not negotiate 'service fee' with the app developers, thus, making it 'take it or leave it' situation for the app developers.





Thus, the DG found that Google imposes unfair and discriminatory prices in violation of the provisions of Section 4(2)(a)(ii) of the Act.

- 28. The DG also found that Google's restrictions for mandatorily using GPBS would have significant negative effect on the improvements and innovative solutions that third party payment processors / aggregators are able to bring to the market. Further, mandatory imposition of GPBS also discourages app developers from developing its own in-app payment processor. As per the DG, the same tantamount to limiting technical development in the market for in-app payment processing services in violation of the provisions of Section 4(2)(b)(ii) of the Act.
- 29. Further, as per the DG, Google's Payments Policy requiring mandatory and exclusive use of GPBS denies the payment aggregators/ payment gateways access to the market for processing of payments and allied services availed by App developers who sell in-app contents. Thus, Google was found to be following the practices that results in denial of market access for payment aggregators in violation of the provisions of Section 4(2)(c) of the Act. Further, by forcing app developers to exclusively use GPBS, Google was found to be leveraging its dominance in market for licensable mobile OS and app stores for Android OS, to protect its position in the market for Android in-app payment processing in violation of the provisions of Section 4(2)(e) of the Act.
- 30. The DG further concluded that Google has excluded other UPI apps as effective payment option on the Google play Store. As per the DG, Google follows a discriminatory approach towards other UPI apps, while making payment on Google play Store. Google Payments Platform enabled the intent flow with the Google Pay UPI App, whereas other UPIs were integrated with more cumbersome collect flow method for payment on Google Play. Therefore, Google was found to be imposing unfair and discriminatory conditions in violation of the provisions of Section 4(2)(a)(i) of the Act.





- 31. The DG also noted that Google's conduct is also resulting in denial of market access to competing UPI apps since the market for UPI enabled digital payment apps is multi-sided, and the network effects will lead to a situation where Google Pay's competitors will be completely excluded from the market in the long run. As per the DG, such conduct amounts to violation of the provisions of Section 4(2)(c) of the Act. Further, being the gateway to Android smartphones due to dominance in the markets for licensable mobile OS and app stores for Android OS, Google was found to be uniquely placed to (and is) leveraging its dominance in favour of Google Pay UPI App in violation of the provisions of Section 4(2)(e) of the Act.
- 32. The DG also observed that Google Pay UPI app is preinstalled in around mobiles sold in India in the year 2020. However, the facility of preinstalling their apps is also available to other competing UPI apps viz. PhonePe, Paytm, Amazon Pay, etc. As such, no exclusivity was observed by the DG in the agreements entered into by Google with Original Equipment Manufacturers (OEMs) so far as pre installation of competing UPI apps is concerned. Thus, Investigation has not find sufficient evidence to indicate that Google has abused its dominant position so far as the issue pertaining to preinstallation of Google Pay UPI App is concerned.

Consideration of the Investigation Report by the Commission

33. The Commission considered the Investigation Report(s) in its ordinary meeting held on 16.03.2022 and directed to forward an electronic copy of the non-confidential version of the Investigation Report to the parties *i.e.*, the Informant(s) and Google, for filing their respective objections/ suggestions thereto, if any. The parties were also directed to mutually exchange copies of their respective objections/ suggestions in advance, before filing the same with the Commission.





- 34. The Commission received an application dated 24.03.2022 from the learned counsel representing the Informant in Case No. 07 of 2020. *Vide* the said application, the learned counsel intimated about the demise of the said Informant, which was stated to have taken place on 23.04.2021 on account of complications arising from COVID-19. It was further averred in the application that the spouse of the Informant wishes to pursue the captioned case as legal representative. Accordingly, it was requested that the spouse of the Informant be taken as the *Confidential Informant* on record in the captioned matter on account of the demise of the Informant. The Commission considered the said application in its meeting held on 04.04.2022 and for the reasons detailed therein, rejected the same. The Commission also ordered that no further communication shall be made with the Informant in Case No. 07 of 2020.
- 35. Further, the Commission, *vide* its order dated 18.04.2022, directed setting up of a Confidentiality Ring to grant access to the confidential case records, as prayed for by Google, subject to the stipulations made therein. Pursuant to setting up of the Confidentiality Ring, the Commission, *vide* its order dated 14.06.2022, *inter alia* directed to forward electronic copy of the confidential version of the Investigation Report to Google through one of its Confidentiality Ring Member (CRM), with the stipulation that the access thereto shall be limited *only* to the CRMs of Google, subject to the observations and directions of the Commission as contained in the order setting up Confidentiality Ring and subsequent orders as well as the observations detailed in the said Order.
- 36. Google was also given liberty to make its submissions on the quantum of penalty which may be levied by the Commission in the event Google is to be held in contravention of the provisions of the Act, during the oral hearing as also in the written objections.





- 37. The respective objections/ suggestions of the parties to the Investigation Report, have since been received and taken on record.
- 38. Subsequently, the matter was listed for final hearing 02.08.2022, 24.08.2022, 25.08.2022 and 26.08.2022, through video conference. The learned senior counsel(s) appearing on behalf of Google as well as the Informant(s) in Case Nos. 14 of 2021 and 35 of 2021 made their respective arguments and concluded the same. After conclusion of hearing, the Commission invited the learned senior counsel of Google to make arguments on the quantum of penalty which may be levied by the Commission in the event Google is to be held in contravention of the provisions of the Act. The learned senior counsel sought leave of the Commission to make written submissions on this aspect. The Commission allowed Google to make written submissions on this aspect, as prayed for, and granted time till 10.09.2022 to make the same. Further, as prayed, the parties were also allowed to file brief synopsis of their oral arguments, by 10.09.2022, if so desired. In view of the above, the Commission also decided to pass an appropriate order in due course.
- 39. Thereafter, all the parties filed a synopsis of their oral arguments with the Commission. In addition, Google also filed written submissions on quantum of penalty in the event it is found to be in contravention of the provisions of the Act, on 12.09.2022. The same has been taken on record.

Replies/objections/suggestions by the Parties

- 40. The Informants in Case Nos. 14 of 2021 and 35 of 2021, in their respective replies to the Investigation Report, concurs with the conclusions and findings of the DG.
- 41. Google filed its reply filed on 01.08.2022, which was refiled on 02.09.2022 after complying with the requirements laid down in the Competition Commission of





India (General) Regulations, 2009 and Practice Direction issued in this regard. Google in its reply has contested the findings of the DG. The averments made by Google as well as the Informant(s) would be referred to in this order and dealt with while analysing the matter on merit.

Analysis and findings of the Commission

Relevant Market and Assessment of Dominance

- 42. In terms of Section 2(r) of the Act, relevant market is defined as "the market which may be determined by the commission with reference to the relevant product market or the relevant geographic market or with reference to both the markets."
- 43. Further, Section 2(t) of the Act defines 'relevant product market' as "a market comprising all those products or services which are regarded as interchangeable or substitutable by the consumer, by reason of characteristics of the products or services, their prices and intended use." Moreover, Section 19(7) of the Act provides a list of factors to be considered by the Commission for determination of the relevant product market, which includes physical characteristics or end use of the goods, price of goods or services, consumer preferences, etc.
- 44. A relevant geographic market has been defined under Section 2(s) of the Act as "a market comprising the area in which the conditions of competition for supply of goods or provision of services or demand of goods or services are distinctly homogenous and can be distinguished from the conditions prevailing in the neighbouring areas". In this regard, Section 19(6) of the Act lists various factors which may be given due regard to by the Commission while determining the relevant geographic market viz. regulatory trade barriers, local specification requirements, language, transport costs, consumer preferences, etc.





- 45. As observed by the Hon'ble Supreme Court of India in in Civil Appeal No. 6691 of 2014 in the case of *Competition Commission of India v. Co-ordination Committee of Artists and Technicians of WB. Film and Television and Ors.*, market definition is a tool to identify and define the boundaries of competition between firms. It serves to establish the framework within which competition policy is applied by the Commission. The main purpose of market definition is to identify in a systematic way the competitive constraints that the undertakings involved face. Further, the objective of defining a market in both its product and geographic dimension is to identify those actual competitors of the undertakings involved that can constrain those undertakings behaviour and of preventing them from behaving independently of effective competitive pressure.
- 46. After delineation of the relevant market(s), the next step for assessing the alleged abuse of dominant position in terms of Section 4 of the Act, is to examine whether the concerned entity holds dominant position in the relevant market(s), so identified. The explanation to Section 4 of the Act provides that "dominant position" means a position of strength, enjoyed by an enterprise, in the relevant market, which enables it to operate independently of competitive forces prevailing in the relevant market; or affect its competitors or consumers or the relevant market in its favor. Further, Section 19(4) of the Act lists out various factors which are be considered while determining, whether an enterprise enjoys a dominant position for the purposes of Section 4 of the Act
- 47. Based on its assessment of abovementioned statutory scheme, the DG in its investigation Report has delineated three relevant markets *i.e.*,
 - a.) Market for licensable mobile OS for smart mobile devices in India,
 - b.) Market for app stores for android OS in India, and
 - c.) Market for apps facilitating payments through UPI in India.





- 48. The DG has also found Google to be dominant in the first two relevant markets *i.e.*, market for licensable mobile OS for smart mobile devices in India and market for app stores for android OS in India.
- 49. The reasoning and findings of the DG, the submissions of the parties and the analysis of the Commission, in this regard, is given in succeeding paragraphs.

A. Market for licensable OS for smart mobile devices in India

50. The Commission notes that Operating Systems (OSs) are complex software products that control the basic functions of the device on which it is installed and enable the users to make use of such device. Accordingly, smart mobile OS are designed to support the functioning of smart mobile devices and other compatible software applications (apps). It enables the user to make use of such mobile device and run application software on it. Mobile OS is a crucial part of any smart mobile device. Moreover, smart mobile OSs typically provide a graphical user interface ('GUI'), application programming interfaces ('APIs'), and other ancillary functions. These are required for the operation of a smart mobile device and enable new combinations of functions to offer richer usability and innovations. Further, the mobile OS comes pre-installed on mobile devices.

Relevant Market

51. The DG has examined various aspects for the purpose of delineating relevant market related to mobile operating systems. Based on the analysis of the provisions of the Act and submissions of the parties, the DG has concluded that there is no substitutability between (a) basic feature phones OS and smart mobile OS, (b) smart mobile OS and desktop/computer OS, and (c) licensable smart mobile OS and non-licensable smart mobile OS. Accordingly, the first relevant market delineated by the DG, in the present case, is the 'market for licensable OS





for smart mobile devices in India'. The observations of the Commission in this respect are as follows:

- i. <u>Substitutability between the OS for basic feature phones and for smart</u> mobile devices
- 52. The DG has observed that from a demand side perspective, a user buying a smart mobile device requires a smart mobile OS to activate the various enhanced functions of the device and OEMs cannot substitute a smart mobile OS with a feature phone OS, as they neither have the same characteristics nor do they serve the same intended use; and OEMs that manufacture feature phones cannot substitute feature phone OS with smart mobile OS for its feature phone handsets and vice versa.
- 53. Even from the perspective of an OS developer, *i.e.*, a supply-side perspective, the development of a smart mobile OS requires significant time and resources, even if the OS developer in question has already developed a basic and feature phone OS, and therefore, it is evidently not easy to switch between the two OS. This is confirmed by the fact that no developer of a feature phone OS has successfully launched a smart mobile OS in the last five years, and the most successful smart mobile OS developers (Google and Apple) do not develop feature phone OS.
- 54. In this regard, it is apt to refer to the submissions made by following third parties:
 - 54.1. Amazon Development Centre (India) Private Limited (Amazon), the relevant extract of which is reproduced below:
 - "...The OSs for feature phones, smart phones and tablets depend upon the utility of the phones and the technology including the internet capabilities. Feature phones generally refer to earliergeneration phones that were developed in the era of 2G mobile services. Their appearance and interface were different from modern





smartphones. They usually had a small screen with a keypad and limited internet access options. Smartphones and tablets are more versatile, combining the functions of feature phones (call and text), cameras, and computers (work, entertainment, internet access). They typically come without a keypad and enable the user to interact via touchscreen (there are exceptions to this, e.g., certain BlackBerry devices) ... "

- 54.2. Vivo Mobile India Private Limited (Vivo), an OEM has stated that,
 - '... The user interface is different from the basic/feature mobile phone. The user can perform touch screen processing with fingers and gestures to issue various instructions...

Users can access & install various applications through the smartphone OS, and the system provide users with unified management like process management, memory management, and authority management ...

With higher-performance processor, the smartphone OS can help users meet entertainment needs through audio, video, and image frame rate analysis capabilities on the basis of functional machines meeting communication requirements...'

- 54.3. Xiaomi Technology India Private Limited (Xiaomi) another OEM has stated that,
 - "... Mobile OSs also differ on the features provided to its users such as user interface, security, software updates, application compatibility etc. Additionally, Mobile OSs for feature phones are generally limited in functionality and features as compared to Mobile OSs for smartphones...".
- 55. On the other hand, Google has contended that Android OS faces significant competitive constraints from the OS for basic feature phones. It has been stated that modem basic feature phones are more intricate and support greater functionalities, which are traditionally supported only by smartphone devices. The relevant extracts from the submission are reproduced below:
 - '... feature phones increasingly boast the advanced features that were traditionally associated with smartphones and tablets. For example, the





Jio Phone 2 and Nokia 8810 – popular feature phones in India - provide processing speeds of up to 1 GHz and 1.1 GHz (respectively), access to 4G internet, apps, and photo and video recording. Feature phone OSs are increasingly sophisticated, and support many of the features traditionally supported by smartphone and tablet OSs. KaiOS, for example, a licensable feature phone OS that brings the best of smartphones to affordable devices", supports powerful hardware with video and graphics processing functionality web APIs that enable developers to develop apps such as WhatsApp and Facebook for KaiOS, and cloud capabilities and software updates beyond the point of sale. KaiOS carries over 952 apps, in addition to apps from Google and Facebook...'

- 56. The Commission notes that smart mobile device OS provide features of both a basic feature phone and computers. Further, smart mobile OS enables user to interact with touchscreen and voice rather than keyboard like the basic feature phones. The operating system for smart mobile devices is different from OS of feature phones as the latter is endowed with greater functionalities to support availability of APIs, cloud capabilities, advanced video and graphics processing, and more powerful and integrated third-party apps. Other than this, smart mobile devices have powerful hardware in terms of RAM, screen size and power requirements compared to basic feature phone devices. This further implies development of OS for smart mobile devices requires greater amount of time and resources compared to its counterpart for basic feature phones. Moreover, the smart mobile devices are expensive compared to basic feature phone due to these functionalities.
- 57. The Commission is of the view that due to these significant differences in the capability of the smart mobile devices *vis-à-vis* feature phones, an OEM cannot use feature phone OS on a smart mobile device and vice versa.
- 58. Further, from supply side perspective also, the suppliers of feature phone OS are different from smart phone OS suppliers as the development of a smart mobile OS requires significant time and resources. Even if the developer in question has already developed a basic and feature phone OS, it will take significant investment





both monetary and non-monetary to develop a smart phone OS. Thus, there are substantial barriers of entry associated with development of smart mobile OS. The Investigation has also not revealed any instance where a feature phone OS developer has launched a smart phone OS, on the other hand, some smart phone OS developers *viz*. Microsoft Windows Phone OS, have exited the market.

- 59. Based on the foregoing analysis, the Commission finds that basic or feature phone OSs are different from smart phone OSs and thus, are not substitutable.
 - ii. Substitutability between mobile OS for smart mobile devices and desktop/computer OS
- 60. The DG has also examined the substitutability between mobile OS for smart mobile devices and desktop/ personal computer OS. The DG has noted that Computer operating systems are not designed for usage on mobile. Mobile OS are additionally optimized to run under minimal power & Random Access Memory (RAM) requirements and have feature to prevent energy loss. Furthermore, the development of OS for smart mobile devices requires considerable investment in R&D and lead time. The DG has further stated that in addition to the traditional features of a desktop, smart mobile devices also have other peculiar features which a smart mobile OS needs to factor in.
- 61. In this regard, it is apt to refer to the following submissions of third parties:
 - 61.1. Microsoft Corporation (India) Pvt. Ltd. (Microsoft) has submitted that:
 - '... Windows Phone OS, which was designed to primarily run on smartphones and smaller tablets, is different and distinct from the classic Windows OS, which is designed to run on larger devices such as desktops, laptops and larger tablets...'
 - '... Microsoft estimates that it spent approximately a year on R&D activities related to Windows Phone OS while it was active





in the space, in addition to the **Exercise** it spent to acquire the Devices & Services business of Nokia...'

- 61.2. Some of other aspects differentiating mobile OS and desktop/ computer-based OS are portable nature of hardware, usage scenario and interactions methods of different OS. Mobile devices use more screen clicks, presses, and slides for execution of command whereas desktop OS rely on mouse and touch-based interaction for execution of the same. Furthermore, mobile OSs are endowed with capabilities for usage over wireless networks. In this perspective, Vivo has submitted that:
 - '... Based on the portable characteristics of mobile phones, the corresponding hardware volume of mobile phone systems is relatively limited, and the hardware resources are not as good as computers, which may result in relatively low system computing power ...Based on the hardware characteristics of mobile phones, there are differences in the interaction methods supported by mobile phone systems. Mobile phone systems use more screen clicks, presses, and slides to complete command triggers, while PCs/Laptops rely more on mouse and touch versions... Based on the user's usage scenario, the system needs to support such as communication wireless radio frequency management and control capabilities (including SIM card), health detection related sensor data interpretation capabilities, etc. ...'
- 62. It is also noted that Google itself, has developed Chrome OS, for licensing to computer manufacturers to produce PCs/ laptops whereas, Android OS is licensed for smart mobile devices. Google does not license Chrome OS for smartphones. Further, smart mobile OSs, also require functionalities that are specific to smart mobile devices and are different from those of PC/ laptop OSs *viz*. in terms of touchscreen, processing capabilities, smaller screen sizes, memory, display, and power management, wireless functions, and apps that are better suited for simpler mobile devices rather than PC OSs which are designed for higher performance CPUs, larger screens and greater hard disc storage capabilities.





- 63. Based on the above, the Commission concurs with the finding of the DG that owing to technological differences and differences in intended usage and characteristics, there is no substitutability between smart mobile OS and desktop OS, and they form part of separate relevant markets.
 - iii. Substitutability between licensable and non-licensable mobile OS for smart mobile devices
- Before adverting to this issue, the Commission, based on the information available on record, notes that smart mobile device OSs can be broadly categorised into two groups viz. licensable and non-licensable. As the name suggests, licensable smart mobile device OSs are those which are available for licensing by the OS developer/ owner with or without a licensing fee. Google's Android OS is a licensable smart mobile device OS as it is made available by Google for licensing to third party device OEMs i.e., Samsung, Xiaomi, Vivo, etc. Few other licensable smart mobile device OSs are Windows Phone OS, Amazon's Fire OS, etc. The other category, i.e., non-licensable smart mobile device OSs, includes those that are not licensed by the OS owner and thus, are not available to third party OEMs for installation in their respective smart devices. The prime example of this category is iOS, which is developed by Apple Inc., a vertically integrated OEM, for captive use in their own smart mobile devices. In other words, Apple does not license its iOS to third party smart mobile device OEMs and uses the same in manufacturing its own smart mobile devices i.e., iPhone and iPad. Another example in this category was Blackberry OS which was used captively by Blackberry in its devices.
- 65. Google in its submission argued that licensable and non-licensable OSs compete to attract users and developers. Further, it was claimed that the intense rivalry for developers and users between Apple and Android has fuelled innovation and benefited consumers and developers. The DG has examined this issue in detail for





the purpose of delineation of relevant market and concluded that all licensable smart mobile OSs belong to the same product market, but non-licensable OS do not belong to the same relevant market.

- In this regard, the DG has noted that out of the two prominent non-licensable 66. operating systems for smart mobile devices i.e., Apple and BlackBerry, the latter has negligible market share of 0.01%. Therefore, iOS is the only significant nonlicensable OS for smart mobile devices which is used by vertically integrated Apple, for captive use in their own smart mobile devices. In other words, Apple does not license its iOS to third party smart mobile device OEMs and uses the same in manufacturing its own smart mobile devices i.e., iPhone and iPad. In this relation, the Commission observes that from a demand side perspective, third party smart device OEMs viz. Xiaomi, Vivo, Oppo, Samsung, etc. can only install those smart mobile device OSs in their respective devices, which are available for license by the OS owner/ developer (viz. Google's Android, etc.). Such OEMs cannot obtain non-licensable OSs (viz. Apple's iOS and BlackBerry OS) as the same is not granted by the OS owner. Thus, from the perspective of the OEMs, switching to such non-licensable OSs is not an option and thus, cannot be considered as a potential substitute to licensable OSs.
- 67. In this context, it is important to note the following submissions of few third parties:

67.1. Xiaomi has stated that:

"Further, certain Mobile OSs are licensable, and others are non-licensable. To illustrate, Google's Android OS is freely licensable and can be used by different mobile manufacturers. Apple, however, does not license its operating system, iOS, and therefore its Mobile OS cannot be used (by) other mobile manufacturers and iOS is available only for Apple Mobile Devices."

67.2. Oslabs Technologies (Indus OS) in its submission, has stated that:





"Broadly we can categorise the OS to be a non-licensable OS if it is developed by an OEM as a vertical integration, for use on its's own device for creating a unique user experience. Non-licensable OS therefore are proprietary work, and are private.

Licensable OS which we find in the market are either in open source or are build as proprietary work, example of which is Android or Microsoft..."

67.3. InfoEdge (India) Limited (InfoEdge) has submitted that:

"... Application of one platform cannot be used on any other OS since they all are developed on different languages so they do not support each other's APKs. Therefore, they are not portable from one OS to another. Therefore, it is not possible to submit apps made for one OS to another OS...'

67.4. Zomato Private Limited (Zomato), another app developer, in its submission has stated that:

'...Most mobile operating systems provide somewhat similar basic functionality and some platform specific differentiating features... Across OSs, there are differences like the choice of programming language used to develop applications, the APIs that the OS allows app developers to access device and user information e.g. geolocation, device identification, etc...'

67.5. C.E. Infosystems Private Limited (Map my India), another app developer, has submitted that:

- '... There are several differences between the apps developed for Android OS and other operating systems such as iOS, Windows phone OS, etc. As an illustration, we have listed below some of key differences between app development for Android and iOS:
- Programming language: Java and C++ are the most common computer programming languages adopted by Android app developers. Additionally, developers can use Kotlin, a programming language managed by the Kotlin Foundation (a group created by JetBrains and Google). It is an open-source, statically-typed programming language which supports object-oriented and





functional programming. On the other hand, iOS app developers use Objective - C and Swift as the official programming languages.

- Development tools: To create an app for Android, the developers use Android Studio. For iOS, the developers use XCode.'
- 68. Based on the above submissions, it is noted that non-licensable OS such as iOS can only be used in Apple mobile devices, thus the same is not substitutable with licensable OS. Further, even from the app developer perspective also, there are multiple technical differences between Android and iOS *viz*. programming languages, development tool kits, testing and interface requirements, *etc*. The app developer cannot simply port the app developed for one OS onto another OS due to these technical differences. In view of the above submissions, highlighting the factors differentiating operating systems such as programming language, platform specific capabilities and development tools, it is concluded that there are significant switching costs both for app developers (discussed in more detail subsequently) and users in shifting from one OS to another.
- 69. The DG has further noted that since the apps, in-app content and many other products are designed and compatible only with a particular mobile OS, switching may result in denial of access to the same. Even if the app content is available on different OS ecosystem, switching from one OS to another may result in loss of data. Furthermore, mobile OSs have different designs, controls and functions that consumers learn to navigate and are familiar with over time. The learning curve to navigate a different mobile OS is part of consumers' switching costs.
- 70. Based on the above analysis, the Commission agrees with the findings of the DG and holds that all licensable smart mobile device OSs are part of the same relevant market; however, non-licensable OSs do not belong to the same relevant market as that of licensable OSs.





- 71. With respect to relevant geographic market, it is noted that the terms & license conditions of OS for smart mobile device, from the point of view of handset manufacturers ('OEMs'), is homogeneous across the country. Moreover, the consumer's preference, availability of mobile applications in local languages and location-based applications and services as also other specifications of smart mobile OS are uniform across the Indian geographical area. Thus, as per the DG, the conditions for supply and demand of smart mobile OS are homogenous and distinct in 'India'. Accordingly, the territory of 'India' is considered to be the relevant geographic market for market for licensable mobile OS for smart mobile devices, in accordance with the provisions of Section 2(t) read with Section 19(6) of the Act.
- 72. In view of the aforesaid, the Commission delineates the *market for licensable OS* for smart mobile devices in India as a distinct relevant market in terms of the various provisions of the Act.

Assessment of Dominance of Google

73. The DG has examined the dominance of Google in the abovementioned market on the basis of various factors such as high market share, availability of applications, entry barriers, high dependence of App developers on Android OS, high switching cost, indirect network effects and lack of countervailing buyer power, *etc.* The DG has concluded that Google enjoys a dominant position in the relevant market of licensable mobile OS for smart mobile devices in India. The observations of the Commission in this respect are as follows:

a.) Market Share

74. The Investigation has revealed that Android enjoys high market share in the market for licensable mobile OS for smart mobile devices in India. As per the





data of statcounter.com, as of January 2022, in the broader segment for smart mobile OS in India (which includes even iOS which is not part of the relevant market), Android OS' market share was approximately 95.06%.² Similar inference can be made from the data available on statista.com (tabulated below).

Market share of mobile operating systems in India from 2012 to 2020 ³							
Year	2015	2016	2017	2018	2019	2020	
Android	61.6	70.73	79.04	88.57	92.06	95.23	
iOS	1.61	2.37	2.8	2.95	2.67	3.21	
KaiOS	0	0	0	1.29	3.68	1.1	
Samsung	4.4	2.31	0.99	0.64	0.42	0.16	
Tizen	0.19	0.53	0.87	0.5	0.28	0.1	
Windows	2.04	1.77	0.94	0.45	0.17	0.04	
Series 40	10.23	3.91	1.18	0.56	0.19	0.03	
Symbian OS	2.54	1.02	0.37	0.19	0.06	0.01	
Linux	0.41	0.41	0.08	0.02	0.01	0.01	
BlackBerry OS	0.25	0.17	0.08	0.03	0.01	0.01	
Sony Ericsson	0.32	0.21	0.07	0.03	0.01	0	

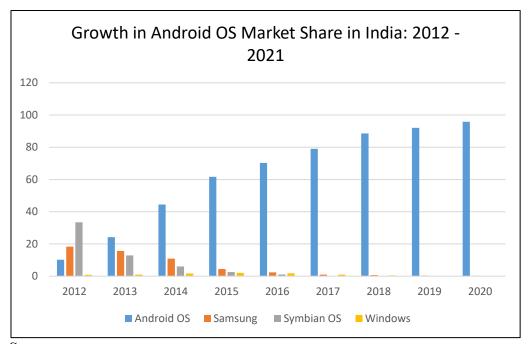
75. The Commission further notes that Android has enjoyed such high market shares consistently over a long period of time. The exponential growth of Android OS in India, as against other licensable smart mobile OS, can be demonstrated from the chart below:

² https://gs.statcounter.com/os-market-share/mobile/india

³ https://www.statista.com/statistics/262157/market-share-held-by-mobile-operating-systems-in-india/







Source: statcounter.com

- 76. Thus, Google's Android occupies an un-assailable position in the relevant market with a market share of more than 95%. It is further added that the abovementioned data includes data pertaining to the other OSs such as iOS, Blackberry which are not part of the relevant market of licensable smart mobile device OS. Despite that Android OS enjoys a significantly high market share. If the data pertaining to the other OSs such as iOS, Blackberry is excluded, then probably Android would be close to a monopoly in the relevant market in India.
- 77. Based on the above analysis of the market share data, it is noted that the market of licensable smart mobile device OS, is heavily concentrated in favour of Google's Android due to its dominant, persistent, and increasing share in the domestic market. In other words, Android which is controlled by Google has the largest installed user base of smart mobile devices. Microsoft's Windows phone OS which entered the market in 2010 could not compete and had to exit the business of smartphone OS (and smartphones) in 2016. Even otherwise, Windows





Phone OS had a negligible market share, and it could never pose any serious competitive threat to Google's Android OS.

b.) Google's control over Android OS

- 78. The Investigation has revealed that even though the source code for the Android mobile OS is released by Google for free under an open-source license, the Android based device manufacturers (OEMs) are highly dependent on Google. Google as the sponsor of the Android platform enforces platform rules through a combination of compatibility provisions, contracts, and trademark licenses. While device manufacturers can freely use the code under the AOSP, they need a certificate from an authorized testing facility and, arguably, Google's final written approval if they want to use a suite of proprietary apps known as Google Mobile Services (GMS). GMS includes a variety of Google apps, such as Google Maps, YouTube, Google Play, and Google Search. The Android Compatibility Program requires handset manufacturers to comply with certain specifications and contract terms.
- 79. Further, Google owns the intellectual property rights (IPR) of the Android OS. Perusal of the brand guidelines⁴ revealed that 'Android' is a trademark of Google LLC. The use of the 'Android' trademark on hardware, packaging or marketing materials of device is restricted to Android-compatible devices only. Google is responsible for release for every new version of Android mobile OS. Similar scrutiny of Android Compatibility Program⁵ revealed that each version of Android requires the compliance with a separate Compatibility Definition Document ('CDD') and Compatibility Test Suite ('CTS'). It is only after

 $^{4}\ \underline{https://developer.android.com/distribute/marketing-tools/brand-guidelines.}$

⁵ https://source.android.com/compatibility/overview





complying with the CDD and passing the CTS that the device of an OEM is Android compatible.

- 80. Google has contended before the DG that OEMs can customize and modify Android OS to build differentiated versions, thereby offer competition to Android OS. However, this is irrelevant to determine Google's dominant position in the market for licensable mobile operating system for smart mobile devices in India. Customized versions of OEMs also need to comply with Android Compatibility program, released by Google from time to time if they need to pre-install GMS provided under MADA and use the IPR related to Android. Therefore, the customized Operating System of the OEMs cannot be considered to pose any competitive constraint on Google's market power in the market for licensable mobile operating system for smart mobile devices.
- 81. Thus, the Commission notes that Google holds a significant, unparalleled and incontrovertible influence in the development of Android OS and its updates. Further, the above discussion also reveals that OEMs are highly dependent on Google as they have to ensure that all the hardware and software features of their smart mobile devices are compatible with the latest versions of Android released by Google from time to time, otherwise none of the apps developed by Google or third-party app developers would be functional on such incompatible devices. Further, OEMs are also dependent on Google for using IPR related to Android. Thus, the Commission notes that though Android OS is an open-source project, it is actually controlled by Google.

c.) Availability of Applications

82. The Commission notes that one of the parameters for user's preference for a mobile OS is the ability of the OS to run applications as well as the number of applications available for that OS. Smart mobile device OS markets exhibits





network effects *i.e.*, on one hand, the OS which can run/ perform maximum number of applications would be most popular among the users and thus would attract the greatest number of users. On the other hand, the app developers would prefer to develop apps for the OS which has the maximum number of users because access to the large user base as would result in substantial economies of scale, given the heavy fixed costs and very low marginal cost associated with development of such apps. Thus, there is an 'indirect network effect' between users of an OS and app developers for such OS.

- 83. It is also relevant to mention here that the apps are written for specific platforms, and app makers naturally focus on the most popular mobile platforms in order to reach as many users as possible. Furthermore, apps are written to platform specific APIs which enables apps to interface correctly with OS. However, there are certain switching costs such as convenience, loss of time or financial terms associated with porting of apps from one OS to another. In addition, there is an indirect network effect in occurrence as platform's attractiveness increases when number of service provider's (app developers) rises. Thus, availability of large number of Apps on Play Store is also a reason for Android's growth. Google Play store is a marketplace for apps and services is a collection of more than 3 million apps.
- 84. Google also provides its Google Mobile Service (GMS includes widely used Google apps including Google Maps, Gmail and YouTube) suite for Android devices, which mainly includes the application store Google Play, working with Google Play Services (GPS), which is a software component that ensures that apps using Google APIs are properly communicating with Google online services. In order to have access to these Google's proprietary apps, OEMs need to sign MADA which involve a number of restrictions on the applications that can be preinstalled on their mobile devices.





- 85. In this connection, it would be apposite to refer to the experience of competitors in mobile OS market, who have exited the market, to better understand the significance of applications in promoting greater usage of an OS. Microsoft's experience with its Windows Phone OS, has demonstrated that Windows phone devices potentially suffered because of the 'app gap'. The relevant reply of Microsoft is reproduced herein under:
 - "... During the time it was operational, Windows Phone devices (having the in-built Microsoft App Store), potentially suffered because of the so-called "app gap." App developers did not find it economical to port and support their most popular apps for Windows Phone OS given its low market share compared to iOS and Android. As a result, the Windows Phone OS platform did not have many of the popular mobile apps on which consumers had come to rely. Without these apps, Windows Phone had trouble attracting and retaining users..."
- 86. Similarly, Amazon, another competitor in the relevant market stated that there are multiple factors affecting utility of an OS, out of which robust app and technology ecosystem is one of them. The relevant extracts are reproduced below:
 - "... Several factors determine the utility and success of an OS, including (a) the presence of a significant number of active apps (which is important for competing with other OS providing popular apps to the consumers); (b) the willingness of Original Equipment Manufacturers ("OEMs") and original design manufacturers ("ODMs")/ contract manufacturers ("CMs") to manufacture devices running on the new OS; (c) user preference for the new OS.

Further, the success of a new OS depends on users having access to a robust app and technology ecosystem. This refers to the network of developers who create apps compatible with a particular OS, thereby making it attractive for users. Such an ecosystem often displays indirect network effects. For example, OEMs/ODMs/CMs would be more incentivized to manufacture devices that run a particular OS if there are more users of such OS. Similarly, more users would be attracted to a particular OS if more developers create apps for such OS and vice versa. Therefore, developing an attractive app and technology ecosystem requires a sufficient number of app developers, OEMs/ODMs/CMs, technology providers and users. Accordingly, developers of new OSs have to overcome two significant





barriers to entry in order to be able to viably compete with existing OSs such as Android OS. Firstly, the developer of a new OS would require the technology-related capability to develop a new OS. Secondly, the developer would have to overcome ecosystem -related barriers to entry, particularly, those related to developing an ecosystem which renders the OS commercially viable.

In United States v. Microsoft, the US Court of Appeals upheld the District Court's observation that this "applications barrier to entry" stems from two characteristics of software markets: (1) most consumers prefer an OS for which a large number of applications have already been written; and (2) most developers prefer to create applications for an OS that already has a substantial user base. This "chicken-and-egg" situation arising out of the applications barrier to entry means that applications will continue to be written for existing OS, which in turn ensures that consumers will continue to prefer it over new entrant OSs...."

- 87. Apart from design, functionality and features of Android OS, the main reason for its demand among the mobile users is rich app as compared to any other competing OS. Likewise, the significant numbers of the users of Android OS incentivises the app developers to write/ develop apps for Android OS as they can target a large audience by writing a single app. The large bouquet of apps thus reinforces demand for Android OS, augmenting Google's dominant position and thereby perpetuating app developers' incentives to write apps mainly for Android OS. This self reinforcing cycle can also be referred to a 'positive feedback loop'.
- 88. Further, as depicted by the example of Amazon and Microsoft, the developer of a new OS would not only require the technology related capability to develop the OS from scratch but would have to overcome various other barriers to entry, particularly, the application barriers to entry discussed above. The OS developer have to convince the app developers to write apps for the new OS. However, app developers may find it prohibitively expensive to develop/ write apps for a new smart mobile OS, whose user base is not large enough. Moreover, due to variation in the architecture of various licensable OSs, the conversion of an app from one licensable OS to another OS would be resource intensive and the app developer





may not have incentive to do so without presence of adequate user base on the new OS. Likewise, the end users would not prefer to use the smart mobile OS which is having a limited number of apps available on its platform. Similarly, OEMs would also prefer a licensable OS which not only has sufficient user base but also sufficient app developer base.

- 89. Based on the above, it is noted that commercial success of an operating system is dependent on the willingness of mobile app developers to develop apps for the OS, willingness of OEMs to sell devices based on new OS and user preference for the new OS. The network effects operating in the relevant market operate as an entry barrier and makes it difficult for a new OS to enter the market and achieve a commercial and viable scale.
- 90. Accordingly, the Commission notes that the application barrier of entry associated with development of alternate OS, further consolidates Google's dominant position in the relevant market.
 - d.) Switching Costs
- 91. The DG has also examined the switching costs associated with shifting onto a competing OS such as consumer inertia, satisfaction with the characteristics of Android devices and brand loyalty which may prevent any switching to the competing OS. It is noted that users face considerable switching cost while changing an operating system. This factor further adds to the hegemony of Google in the delineated relevant market for licensable OS for smart mobile in India.
 - e.) Barriers to Entry in market for mobile OS
- 92. The Investigation has also revealed that development of mobile operating system requires significant amount of capital and investment in Research and Development both at stage of launch and further in marketing of OS. In addition,





periodic investments are also needed for maintenance, release of newer versions and development of updates and new functionalities.

- 93. Google has stated that has been spent in developing Android, and even more in the Android ecosystem as a whole (including the open-source OS and Google's proprietary Android apps). Further, it continues to incur significant costs annually in maintaining and updating the Android platform.
- 94. In this regard, it is also apposite to refer to submissions of following third parties:
 - 94.1. According to Microsoft, R&D, upkeep, and maintenance activities necessary to create and run a smart mobile device OS are comparable to those necessary for R&D on any other type of OS. Necessary R&D and maintenance activities include maintaining a large corpus of software developers, engineers, user experience designers, marketers, business people, and others to write code, design user interfaces, create a store, work with app developers, and perform tasks related to the design, testing, maintenance, debugging, patching, and updating of the OS and associated apps, along with the necessary infrastructure to deliver and update the OS. As a rough estimate, it was submitted that approximately was spent on R&D activities related to Windows Phone OS while it was active in the space, in addition to the \$7.2 billion spent to acquire the Devices & Services business of Nokia.

94.2. Samsung stated that,

... a new player in the market of smart mobile Operating System may take substantial time to gain acceptability from users. Maybe even developing a new Operating System would require considerable research & development and expenditure of capital. Any new player, as also in almost any industry, is likely to face stiff competition from the already established current players especially where any current player(s) enjoys high customer loyalty."





94.3. Vivo stated that,

"... If new players need to build a new operating system that can benchmarking the market, they need to recruit a large number of professionals to carry out code development, platform, application functions and experience design... If new players use the Android open source system for secondary development and launch to the market, they need to obtain Google's core authorization, including but not limited to application pre-installation authorization, GMS authorization, capability authentication authorization, etc. ..."

94.4. Xiaomi indicated that,

"... Developing a new OS for smartphones requires significant investment in research and development, in terms of time, effort, resources and capital. The extent of the time, effort, resources and capital required in the necessary engineering work would broadly depend on (a) the complexity of the smartphone for which the OS is being developed; and (b) the targeted user base. For example, Kai OS is a simpler and lighter OS than the Android OS, and hence requires lesser investment in research and development. For any new entrant with sufficient capital, time, and resources, developing an OS is not a significant challenge. However, the ecosystem of existing app developers may pose a greater challenge for a new player trying to develop a smartphone OS. App developers must be willing to develop apps compatible with the new OS to enable the new OS to compete with existing operating systems in the market. This requires time and effort on the part of the App developers, who would ordinarily prioritize developing and updating apps for a more popular OS than a new OS. Accordingly, a new OS may face a barrier to entry in the form of an unwillingness of App developers to develop apps for their OS. "

94.5. Karbonn has explained the various entry barriers faced by a new entrant in market for mobile OS. The relevant extracts of his submission are reproduced below:

"The investment of capital and technology, sunk cost, gestation period, recurring expenses, cost on new innovation etc. are really not the entry barrier rather these are important aspects and new entrant would plan for wile entering in to this space. Kindly note that smart mobiles are smart because of the Applications support it has, for the Operating System.





It may further be noted that for any new player to enter this segment of Smart Mobile operating system, there is an immediate competition from players like Google and Apple who has invested more than 15 years to build this Application ecosystem. The challenges start from convincing the developers to make their Application available on newly developed platform. One of the other barrier is "Balancing the Experience", which can be well understood with a small example of Facebook Application. Facebook's experience on both Android and iOS is balanced/similar. Developer need to work extra on this new platform to ensure their App Experience is further balanced for this newly developed platform, and at times it becomes very difficult to convince these developers to put efforts for the new operating systems since there is no immediate user acquisition that they foresee. The success of their Application is purely depending upon the success of New Operating System provider's success."

94.6. Oppo stated that,

"... System ecology is the major entry barrier for a new player in the market of smart mobile Operating system as end users tend to choose system with more function and more third-party applications. There are less users, and third-party developers are unwilling to develop applications, resulting in users not having enough thirdparty applications to use. Moreover, main obstacle to the late comers of the system is the shortage of the third-party applications and new features."

- 95. Based on the above submissions, it is noted that development of a new operating system requires enormous amount of investment in terms of physical, financial and human capital along with overcoming the problem of ensuring wider acceptability of the new OS among the OEMs, app developers and specially users.
- 96. In the context of entry barriers in the relevant market, it is important to appreciate the impact of the restrictions imposed by Google on use of Android through its agreements with OEMs (*i.e.*, MADA and Anti-fragmentation Agreement (AFA)/ Android Compatibility Commitment (ACC)). In this regard, following submissions made by Amazon's Fire OS (which is based on Android source code AOSP) are important:





"... Developers using the AOSP to develop a fork faced significant difficulties in entering the market because of Google's anti-fragmentation restrictions. All developers were required to agree not to take "any actions that may cause or result in the fragmentation of Android OS". This restriction appeared in various forms: the separate GMS licensee AFA, as a clause in the MADA under which OEMs obtain GMS and as "click-through" terms in at least some versions of the SDK License for app developers.... Under the MADA, Google had the right to approve a GMS licensee's device before launch "to ensure adherence to the terms and conditions of [the MADA], including but not limited to the Google's Mobile Branding Guidelines". These restrictions mean that GMS licensees cannot distribute Android devices if they do not comply with Google's Android CTS and CDD, as the MADA makes the GMS license contingent on devices being Android Compatible Devices... Google alone administers the CTS and CDD, and retains broad discretion to veto or block distribution of devices. Amazon understands that Google requires GMS licensees to submit all Android devices to Google for approval (described above), regardless of whether the devices include GMS or are based on the open source version of Android. The MADA means that licensees relinquish the 'freedom' under the open source Android license by having to comply with the Google-controlled CTS and CDD..."

- 97. Therefore, the restrictions imposed on OEMs make it difficult for developers of Android forks in finding OEMs that are willing to install their operating system. This significantly reduces the viability of Android forks and therefore restricts what would otherwise be an alternative platform on which rivals provide apps and services that compete with Google's own apps and services. Thus, despite the free availability of AOSP license, requirement of complying with MADA and AFA for OEMs indicate that these Agreements foreclose the entry of new entrants thus, works as significant barriers to entry in the relevant market.
- 98. Amazon further contended that the APIs used by app developers for interacting with hardware and software layers in Android OS are not made available to competing Android forks and also Google has architected its APIs in a way that prevents interoperability and has made it impossible for Amazon to provide a solution that enables switching between Google APIs and Amazon APIs without additional work by app developers. Relevant extracts are reproduced below:





- "... As Google makes its advanced APIs available only through the GMS suite, and refuses to make them available to Fire OS devices, Amazon has had to create alternative APIs for Fire OS devices. And while Amazon has sought to develop its APIs in a way that reduces switching costs for developers, Google has architected its APIs in a way that prevents interoperability and has made it impossible for Amazon to provide a solution that enables switching between Google APIs and Amazon APIs without additional work by app developers. As a result, it could take weeks or months, depending on the number of APIs used and the complexity of the app, to modify an app if created for Fire OS (that uses APIs that are not part of the base Android OS), to work with Google's APIs..."
- 99. Thus, it is noted that there are significantly high entry barriers in the market for licensable smart mobile operating system in India. Further, Google's practices restrict interoperability of apps between Android OS and forked version of Android OS, and even between the versions of Android OS. Such conduct does enhance inability of new players to enter and sustain their presence in the market for licensable mobile OS for smart mobile devices in India.
- 100. It is further noted that despite free availability of AOSP license, a large number of OEMs have signed AFA/ ACC and MADA and obtained Google's APIs, which evidences that Google's Android is not constrained by instant and free availability of AOSP and the same is not a substitute of Google's Android.
- 101. Further, as revealed by the Investigation, no new OS developer has been able to enter the market of licensable smart mobile OS in the last five years. On the contrary, the exit of Microsoft's Windows Phone OS the market in 2016 and inability of Amazon's Fire OS to make any footprint in the Indian market has further consolidated the market power of Android OS thereby leaving the OEMs much more dependent on Google. This further evidence the existence of entry barriers in the relevant market.

f.) Indirect Network effect





- 102. As already stated, Operating Systems exhibit indirect network effects *i.e.*, the benefit to users of an operating system increases with the volume and quality of native apps they can access on that operating system, and similarly the benefit to app developers increases with the number of users they can access on an operating system. The presence of indirect network effects is likely to act as a barrier to new entry and expansion as it creates a 'chicken and egg' problem *i.e.*, an operating system needs a critical mass of users to attract app developers, but also need a critical mass of app developers to attract users.
 - g.) Lack of Countervailing buyer power
- 103. It is noted that OEMs are the direct customers for operating systems. The large established user base of Android devices, contributing to strong network effects, makes the ecosystem attractive to OEMs and App developers. Given the fact that Android OS enjoys significant consumer demand in India, OEMs are not able to develop/ identify alternatives to compete with Android OS. All major OEMs in Indian market with Android OS smartphone comply with MADA & AFA and Android Compatibility Program and are reliant on Google for Android OS and its new releases and along with Google Mobile Suite. Thus, the Commission concurs with DG that OEMs lack sufficient countervailing buying power *vis-à-vis* Google. As already elaborated, the relevant market has not seen any new entry, but rather encountered exits by the rivals of Google. This has left the OEMs much more dependent on Google.
- 104. From the perspective of smart mobile device users, it is noted that the only alternative available with them is iOS-based devices which is significantly high as compared to starting price at which Android based devices are available in the market. The users of smart mobile devices in India face considerable switching cost to shift to iOS primarily due to huge price difference between Android and iOS (and the need to download and purchase existing apps for the new smart





mobile OS). As such iOS, which otherwise also is not a part of the relevant market of licensable smart mobile device OS, do not exercise sufficient competitive constraints on Android.

- 105. Google has argued that instead of focusing on substitutability from the point of view of app developers and users (*i.e.*, the relevant consumers), the DG improperly defined a market by focusing on OEMs. Thereafter, the alleged anticompetitive effects of Google's conduct were examined on completely different parties, *i.e.*, app developers and users. Google further avers that from the point of view of developers, licensable and non-licensable OS are substitutable channels for distributing apps. In their responses to the DG, multiple developers confirmed that they make their apps available across both iOS and other OS such as Android OS.
- 106. The Commission is of the view that there is no dispute that from the mobile OEMs' viewpoint, only licensable mobile operating systems constitute the set of alternatives that they can rely on, for manufacturing mobile handsets. Thus, from the OEMs' perspective, licensable mobile operating systems is indispensable and cannot be substituted with non-licensable OSs.
- 107. Looking at situation from end user perspective, the Commission notes that smart device ecosystem of Apple (based on iOS) and Google (based on Android OS) have emerged as the two major mobile ecosystems, former being non-licensable and closed source whereas latter being licensable and open source. Some consumers may have preference for closed ecosystem like Apple and others may have a preference for open ecosystems like that of Google. Thus, in some limited sense, the end consumer may have the choice of a smart device based on an alternate OS (*i.e.*, whether to buy iOS-based device or Android based device) and that too at the time of buying a smart device. Thereafter, the end consumer is





locked-in to the OS and faces substantial switching costs, primarily in terms of cost of new smart device.

- 108. In this regard, the Commission notes that price of the alternate device is an important parameter for switching decision by the users. There is no denial of the fact that users preferring low-priced devices would not switch to Apple devices due to considerable price differences. Users of high-priced devices may be in a position to switch to Apple devices, however, in that case user would need to learn the new interface, transfer the existing data on devices, the need to download and purchase existing apps for the new smart mobile OS, *etc.* In this regard, the Commission also notes that Apple markets its devices based on its privacy friendly policies. Thus, some degree of brand loyalty of the users towards the OS cannot be denied. All these will operate as switching costs for the users. Thus, the users of smart mobile devices in India face considerable switching cost to shift to iOS between Android and iOS (and the need to download and purchase existing apps for the new smart mobile OS).
- 109. In relation to understanding the extent of competition between Google's Android ecosystem and Apple's iOS ecosystem, it is also important to note the difference in the two business models which affect the underlying incentives of business decisions. Apple's business is primarily based on a vertically integrated smart device ecosystem which focuses on sale of high-end smart devices with state of the art software components. Whereas Google's business is found to be driven by the ultimate intent of increasing users on its platforms so that they interact with its various free services which is monetized through online advertising services by Google. The Commission further notes that competition between devices based on iOS and Android, from end users' perspective, is primarily a competition between OEMs, i.e., Apple for iOS based devices and numerous OEMs (viz. Samsung, Oppo, Xiaomi, Vivo, OnePlus, Google through pixel series, etc.) offering Android based devices. In the decision tree of the users, device OS is not





the sole criteria but a multitude of other parameters also viz. hardware configuration, price of the device, after sales services, etc. and OS is one of such criteria. Therefore, the competition between two ecosystems cannot be limited to OS alone.

110. For app developers, app stores have become a necessary medium for distribution of their apps to the end users. Now, availability of an app store is dependent on OS installed on a smart device i.e., an app developer cannot use Apple's App Store for distributing apps to Android users and vice versa. Thus, from the app developers' perspective, the app store available on Android OS (a licensable mobile operating systems) cannot be substituted with an app store available on iOS (a non-licensable OS). Google's assertion that from the point of view of developers, licensable and non-licensable OS are substitutable channels for distributing apps based on the fact that multiple developers make their apps available across both iOS and Android OS (i.e., multi-homing) is completely misdirected and reflect incorrect understanding of the market. Multi-homing by app developers should not be confused with demand side substitution. Even if app developers' multi-home across licensable and non-licensable mobile operating systems, such multi-homing does not tantamount to substitutability as they cannot substitute one operating system for the other. The Android users and iOS users are two different and distinct set of customers. The app developers, in order to maximise their reach to these set of consumers, would not like to confine their offerings exclusively to one of the ecosystems as it would imply losing a sizable portion of the potential consumers' revenue who are available on the other platform. Consequently, Google's claim that Apple iOS competes with Android to attract users and app developers cannot be accepted. Thus, the contentions raised by Google are rejected. This aspect from app developers' perspective is discussed in more detail while analysing the market for app stores and assessing Google's dominance.





- 111. As stated above, the app stores are important channels for distribution of apps and the availability of app store(s) is directly dependent on OS installed on a smart device. Therefore, it becomes important to define a market for smart mobile device OSs in order to set a context, to understand the nuances of the app store market.
- 112. An appreciation of the market dynamics in licensable mobile operating system in India makes it evident that Google's Android OS has successfully reaped the indirect network effects that characterize the market of operating systems, which essentially are multi-sided platforms. With its large user base, Android OS is the most preferred licensable OS for app developers and with a large universe of apps developed for the platform, it is the most valued licensable operating system for any new OEM. All relevant factors that define competition landscape, in unison, indicate that the relevant market of licensable mobile operating systems in India has tipped in favour of Google Android OS.
- 113. Thus, the Commission has no hesitation in concluding that Android OS and thereby, Google, enjoys a dominant position in the relevant market of licensable operating systems for smart mobile devices in India.

B. Market for app stores for Android OS in India

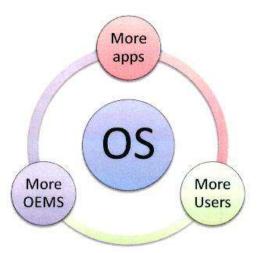
114. Mobile app stores are digital marketplaces and are multisided platforms that connect app developers with device owners who are interested in those apps. Like any other marketplace, the viability of an app store is characterized by its capacity to attract enough app developers and app users while maintaining the platform's trust and integrity. A digital marketplace grows more desirable to customers as more high-quality vendors join. Similarly, a digital marketplace grows more desirable to vendors as it attracts more consumers. This property of digital





marketplaces is known as an "indirect network effect", which primarily governs the success of the marketplace.

115. Referring to a report published by *The Netherlands Authority for Consumers & Markets*⁶, the DG has also observed that a greater number of apps that are available for a particular OS also attracts users to that OS, which in turn further creates a larger audience for app developers to sell more apps. The number of apps available on a particular OS also incentivises OEMs to install such OS on their mobile handsets, since they are aware that this will attract a larger number of users; the more OEMs install an OS the more users run their smartphones on this mobile OS, and the larger the potential audience is for apps that are available for that OS. This virtuous cycle of scale can be demonstrated, by way of following image:



116. App stores can also be characterised as multisided platforms, consisting of different interdependent groups *i.e.*, OEMs, users of smartphones and app developers. Referring to a report published by UK's Competition and Markets

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⁶ The Report titled "Market study into mobile app stores" by the Netherlands Authority for Consumers & Markets dated 11.04.2019 (hereinafter referred as "**Market study into Mobile App Stores**"), https://www.acm.nl/sites/default/files/documents/market-study-into-mobile-app-stores.pdf





Authority (UK CMA),⁷ the DG has further observed that the benefit to users of an app store increases with the volume and quality of apps they can access through that app store and similarly the benefit to app developers increases with the number of users they can access through an app store. In other words, app stores are only attractive to users if they have enough developers and vice versa.

- 117. It is also noted that app stores also offer tools and services to support developers to build apps for the app store. Further, app stores have rules that govern the types of apps permitted in the app store, conduct of app developers, how users pay for apps, the distribution of revenue between the app and the app store, and other details regarding the relationship between the app store operator and the app developers that distribute apps through the app store.
- 118. Google Play Store is Google's app marketplace for Android devices. Google licenses Google Play as part of a suite of Google apps to device manufacturers to preinstall on their devices under MADA. The Investigation has revealed that Google Play Store has more than a billion active users in 190+ countries around the world. Users can find and install, through a single interface, from amongst millions of applications offered by hundreds of thousands of independent developers, which range in size and sophistication from individual developers to global corporations.

Relevant Market

119. The DG has examined various aspects for the purpose of delineating relevant market related to app stores. Based on the its analysis and examination of the

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⁷ Interim Report published by the Competition and Markets Authority (CMA) of UK, on Mobile Ecosystems dated 14.12.2021 (hereinafter referred as CMA Interim Report): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1048
746/MobileEcosystems InterimReport.pdf





submissions of different third parties, the DG has concluded that 'app stores for Android OS in India' should be assessed as a distinct relevant market because there is no substitutability between (a) app stores of other non-licensable smart mobile OS and app stores for Android OS; (b) sideloading and app stores for Android OS; (c) web apps and apps downloadable from app stores for Android OS; and (d) pre-installation of apps and downloading apps from app stores for Android OS. Further, the DG has found Google to be dominant in this relevant market.

- 120. Google on the other hand has contested both the market delineation as well as determination of Google's dominance in the said market. Google claims that Play Store is one of numerous distribution channels where developers can distribute their apps and digital content and where users can access and/or purchase such content.
- 121. The Commission has perused the findings of the DG along with the evidence collected, objections filed by Google and other material on record. The observations of the Commission in respect of delineation of relevant market are as follows:
 - i. <u>Substitutability of app stores for non-licensable OS and App Store for</u> Android OS
- 122. The Commission notes that apps are written/ developed for a particular OS and cannot be automatically ported to another OS due to various platforms' differentiating features which includes programming language, APIs and other technical parameters. Thus, app stores for non-licensable OS such as iOS and Blackberry cannot be run on Android as they have been specifically developed for these OSs. The OEMs who have installed Android OS on their respective smart mobile devices cannot provide an app store which is technically incompatible





with Android OS. In other words, availability of app store on a device is restricted to its compatibility to the OS.

- 123. Due to these technical differences between the different OSs and then resultant un-availability of the incompatible app store, the user's choice of the app store is also restricted to the alternative app store which is compatible with a specific OS. This implies users can only use an app store specifically developed for the OS for downloading the apps. Similarly, the app developer can only use app store specifically developed for the OS for distributing their apps to the users.
- 124. Further, from a supply side perspective also, the developers of app stores for other licensable or non-licensable smart mobile OSs are unlikely to switch to Android as the development of an app store for a particular OS requires considerable time and resources. Therefore, Microsoft which offered Windows Phone Store or Apple which offers App Store (for their respective OSs), are unlikely to start developing app store for Android OS. These players cannot be considered as a competitor of Google's Play Store which is developed and designed only for Android OS. In fact, neither Apple nor Microsoft have developed or announced any plan to develop and licence an app store for Android. Therefore, as rightly observed by the DG, the competition in the app store market is essentially confined to the alternative app stores for Android OS.
- 125. These assertions have been further corroborated from the submissions of the app developers, as extracted below:
 - 125.1. Amazon in its reply stated that:

"App stores for licensable smart mobile OS, such as Android, are available on all devices by OEMs who are licensing the relevant OS. This enables them to access a wide user base. With regard to Android, manufacturers find it commercially important to pre-install the Play Store on their devices. It is preinstalled on the large majority of Android devices and is not available for download by





end users. Also, end users cannot download other app stores from the Play Store.

App stores developed for non-licensable smart mobile OS, on the other hand, tend to be part of closed/proprietary ecosystems. Apple, for example, operates a closed proprietary ecosystem on iOS devices, which includes the App Store - the only app store and the sole channel for app distribution on iOS. The App Store has greatly contributed to the success of iPhones, by attracting thousands of app developers whose apps add significant value for iOS device users. Apple operates a closed ecosystem, which includes its hardware, software and services. Apple's business model is based around vertical integration, with Apple present at all layers - hardware, operating systems, software and services. On the one hand, this tight integration has contributed to user convenience and user experience. On the other hand, it impairs the ability of consumers to switch to competitors' products and services; this is sometimes referred to as the 'Apple Ecosystem Lock'.."

125.2. InfoEdge, in its submission, stated that:

"... Application of one platform cannot be used on any other OS since they all are developed on different languages so they do not support each other's APKs. Therefore, they are not portable from one OS to another. Therefore, it is not possible to submit apps made for one OS to another OS..."

125.3. Zomato, in its submission has stated that:

'... Across OSs, there ore differences like the choice of programming language used to develop applications, the APIs that the OS allows app developers to access device and user information e.g. geolocation, device identification, etc. In general, porting apps from one platform to another is only marginally easier than developing it from scratch as mostly the platforms use different technologies, libraries and at times offer different APIs for similar things like Camera, GPS etc. The only advantage when porting is to have a reference app. Apart from this, the developer has to do everything else themselves...'

126. Based on the submissions by App Store and App developers, it is noted that applications developed for one OS cannot be run on another OS because various platform differentiating factors, such as programming languages and APIs offered





by OS to app developers. In this regard, Zomato has stated that porting applications across OS is tiresome task and requires significant efforts.

- 127. In this regard, the DG has also referred to the CMA Interim Report and noted that "the App Store and Play Store do not represent strong competition for each other, as alternatives for users or app developers. The largest app developers are available on both app stores and see them as complements rather than substitutes due to their size and because most App Store users do not use the Play Store and vice versa...". Further, from the perspective of the end users, the CMA Interim Report further notes that: "...users generally do not have both iOS devices and Android devices. This means that an iOS user would need to purchase a new device in order to access the Play Store, and an Android user would need to purchase a new device in order to access the App Store ... such switching is limited in practice...". Thus, app store made for non-licensable OS are available within that ecosystem only and the same are not available for licensable OS.
- 128. Based on the above examination and analysis, the Commission concurs with the finding of the DG that there is no substitutability between app stores of non-licensable smart mobile OS (*e.g.*, iOS) and app stores for Android OS.
 - ii. <u>Substitutability of sideloading of an app with downloading an app on Android OS app stores</u>
- 129. Side-loading is the installation of apps on a smartphone without using the app's official distribution channel (*i.e.*, an app store). However, the Investigation has revealed that it is an onerous process with several drawbacks. Sideloading from other sources requires several additional steps to be followed by users than is required for downloads from an app store. In addition, it is extremely difficult for side loaded apps to roll out updates, fix bugs, *etc*. Such automatic updates are important from both the users as well as the app developer's perspective, and therefore, this makes side loading a less viable option.





130. The Investigation has also revealed that Google tries to deter side loading through an array of technological hurdles, including a complicated multi-step process requiring the user to make changes to the device's default settings and manually granting various permissions, while encountering multiple security warnings that suggest side loading is unsafe. A user has to go through multiple steps and faces several warnings that are worded in a way that is likely to reduce the likelihood of users sideloading apps. This is further corroborated by submission of app developers, which are enumerated below.

130.1.			

130.2. Oslabs Technology India Pvt Ltd (App Bazaar), in its submission, has stated that:

"...App Bazaar cannot reach users directly through a sideloading (which allows the user to add APK file of App Bazaar on his/her device), and can reach the consumers either through Google Play Store or through preloading by OEMs....Google Play Store does not





- 131. Google on the other hand vehemently opposed the findings of the DG and argued that objective data contradict the Investigation Report's conclusion that sideloading is not a viable substitute to Android app stores. Google has referred to few examples in support of its arguments. Whereas, both the Informants have supported the findings of the DG and have submitted that side-loading of thirdparty apps is a cumbersome process which may endanger the device's security and may lead to loss of user's personal data, which users may not be willing to do. Further, there are warnings which are displayed when users try to side load. It has also been explained during the oral hearing as well as through written submissions that sideloading in some cases, requires 16 or 17 steps or more, including requiring the user to make changes to the device's default settings and manually granting various permissions while being warned that doing so is dangerous. Google also admits that side-loading requires additional steps, though not 16-17, as claimed by the Informants. Google also states that devices that install apps from sources other than Google Play are more likely to be affected by Potentially Harmful Applications (PHAs), a risk that is recognised by industry commentators. In view of the above, the Commission has no doubt in holding that Google deters the users from side-loading the apps and thus, side-loading is not an effective constraint on Google.
- 132. The Commission notes that apps downloaded from the app stores (including Google Play Store) gets automatically updated and the users/ app developers are not required to undertake any significant efforts to achieve the same. Such automatic updates are important from both the users as well as the app developer's perspective. However, in relation to updating side-loaded apps, the investigation has revealed that such updation requires repeating the entire process





again, as updates for such apps are not rolled out by Google Play. Submissions by App Bazaar (a third-party app store) also indicate that these drawbacks pertaining to side loading applications on device makes third-party app stores less attractive to users and developers.

- in October 2021) allows the automatic updating of an app distributed outside of Google Play, where users have given the appropriate consent. Google avers that with this change, from a user's perspective, updating apps will be the same on and off Google Play. In this relation, the Commission notes that *firstly*, the Commission is examining the conduct of Google on ex-post basis *i.e.*, where it was difficult to sideload the apps and users were not opting for side-loading. *Secondly*, Android 12 which has apparently allowed automatic update of side-loaded apps, was released only in October 2021. The impact of such change, if any, on the user behaviour and the app developers' option for distribution channels would manifest in future. There is no evidence as of now whether such change, as well as the manner in which such change would be implemented, will result in favour of the users and the app developers.
- 134. In this regard, the DG has also noted that the above finding is also confirmed from the Market study into Mobile App Stores by Netherlands Authority for Consumers & Market wherein it noted that only users who are already familiar with an app and are willing to look for it outside an app store (here it specifically considered the Play Store) will sideload it. In other words, whilst well known apps may still be actively searched for by users (such as apps for banks, *etc.*), this will not hold true for smaller, lesser well-known apps.
- 135. The app developers especially smaller ones do not have the resources and strategy to offer their app outside the Play Store successfully, because of the increased costs due to: (i) the need to develop its own download platform, and





host the app, and (ii) the need to create their own update regimes - which is a lot harder since updating sideloaded apps is only possible when users download a new APK file (and are not able to update through Google Play Services).

- 136. Google has also argued in favour of file sharing through apps like Dropbox, SHAREit, *etc.* is another alternative for users to download apps. However, the Commission do not find any merit in this argument. As submitted by Match Group, file sharing applications like SHAREit, are not intended to be used for app distribution and therefore are not substitutable with app stores by reason of consumer preference, intended use and characteristics. Such platforms necessarily require multiple devices *i.e.*, they are mainly for cross-platform sharing across devices and do not allow direct downloads like the Play Store. They are peer-to-peer software distribution / file share platforms. It requires a user to first download the app from the app store, and only then can such apps be shared / uploaded / distributed through such fora. Further, the same security, malware, issues as in the case of sideloaded apps, would be faced by users from apps obtained from such fora. The Commission is of the view that developers cannot rely on these technical alternatives to distribute their apps.
- 137. Based on the above analysis, the Commission is of the view that sideloading is not a viable substitute for downloading apps as compared to app stores for Android OS.
 - iii. Substitutability between web apps and apps downloadable from app stores for Android OS
- 138. It is noted that web applications are internet-enabled apps that may be accessed using the web browser on a mobile device. To use these online apps, users do not need to download and install the app on their devices. Moreover, web apps are considered to be less user friendly, have fewer options for unique functions. Further, there is no central store, where all the available web apps are displayed.





Additionally, web apps aren't designed to work on smart phones. As a result, they function poorly and take longer to load in the form of websites in the browser, and they cannot be accessed offline. Content supplied to end user by such apps is static *i.e.*, without any need to be modified, created and processed, thereby limiting user experience.

- 139. In this regard, the DG has referred to the findings of Interim Report of Australian Competition and Consumer Commission (ACCC) on Digital Platform Services Enquiry⁸, which infers that:
 - "... Ultimately, native apps appear to benefit in performance from tighter integration with the OS and hardware. They provide a richer user experience and provide better access to the mobile device's OS and hardware features such as camera, microphone, GPS, sensors and swipe based controls. Web sites and web apps do not have the same level of centralised distribution and discoverability as native apps. Users are overwhelmingly choosing to spend time with native apps over websites and web apps..."
- 140. Further, performance of native apps (apps available on app stores) is better than the apps downloaded from the apps downloaded from web as former are better integrated with OS and device. Referring to the CMA Interim Report, the DG also noted that
 - "...web apps, which in principle allow developers to offer their apps directly to users circumventing the app stores, are not currently a suitable alternative to native apps for most app developers. In particular, web apps do not currently provide the same features and functionalities as native apps... Overall, the evidence suggests that web apps are not currently a viable alternative to native Android apps for many app developers".

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⁸ Interim Report No. 2 – App marketplaces released by ACCC (**ACCC Interim Report**) as part of its Digital Platform Services Enquiry:

https://www.accc.gov.au/system/files/Digital%20platform%20services%20inquiry%20-%20March%202021%20interim%20report.pdf





- 141. Further, in its Market Study into Mobile App Stores, the Netherlands Authority for Consumers & Market found that several news apps, which tested browsers and web-apps as alternatives to their 'native apps' (*i.e.*, the apps they offered on app stores), lost users when they switched to web apps, and as a result, reverted to offering their services through native apps.
- 142. Google claims that the DG was wrong to exclude web apps, particularly modern progressive web apps (PWAs), from the relevant market. Google avers that the Investigation Report disregarded evidence of substitutability between web apps and native apps from a user's perspective. Google also provided examples of such substitutability in its submissions. The Informants on the other hand supported the findings of the DG.
- 143. The Commission is of the view that compared to web apps, native apps *i.e.*, the ones downloaded from app stores are better in performance and user experience, since such apps are more integrated with OS and hardware functionalities. This is also evident from the fact that very limited app developers have offered their apps through web apps and continue to be make their content available to users only through native apps. The Commission also find merit in the argument of the Informants in this regard that if PWAs were effective substitutes to native apps, all large app developers (Amazon, Uber, Ola, Zomato, Swiggy) would have changed their app-business model to PWAs. A web app developer needs significantly more resources to attract users on their platform as compared to easy access through an app store. Further, web apps do not have centralised distribution and discoverability as native apps.
- 144. Based on the above analysis, the Commission concurs with the findings of the DG that web apps are not an alternative to apps downloadable from app stores for Android OS.





iv. Substitutability of pre-installed apps with apps downloaded from app stores

- 145. Pre-installation of the app on the smart devices by the OEMs is another possibility for app developers to reach out to the end users. In this regard, referring to the ACCC Interim Report, the DG has found that pre installation of apps is not considered any commercially viable option by app developers because the app developer would have to get into arrangements with a large number of OEMs in order to reach the same audience through pre-loading (as through an app store). This would be prohibitively expensive, since pre-loading often necessitates a commercial agreement between the app developer and the OEM, as well as a hefty price.
- 146. The Investigation has also revealed that once an app (including an app store) is loaded on an Android device, third-party app developers need a way to distribute updates to their apps, whether to add new features, fix bugs, or maintain compatibility with operating system changes. App updates are critical for the app's continuous operation and commercial sustainability, as well as for making continual enhancements. This renders option of pre installation of third-party apps less desirable to both users and app developers.
- 147. Similar inferences are drawn by the DG from the CMA Interim Report which stated that, "...pre-installation of third-party native apps on Android devices does not appear to be a viable alternative to the Play Store for the vast majority of app developers and thus does not constrain the Play Store...".
- 148. Google claims that pre-installation is a viable distribution channel as OEMs have an incentive to earn additional revenue through pre-installation agreements and developers do not need to contract with a large number of OEMs to reach a significant audience. Together, Xiaomi (26.4%), Samsung (17.5%) and Vivo (15.1%) account for nearly 60% of mobile devices sold in India. Entering into just





three agreements could therefore provide a developer with distribution across a significant majority of devices.

- 149. The Commission is of the view that given the limited space on the devices, OEMs generally prefer to pre-install only popular apps or its own apps or apps with which it has revenue sharing arrangements. Moreover, to reach a significant scale, the app developers have to sign agreements with all or majority of OEMs for preinstallation of their apps. The app developers with access to sufficient resources can attempt to take that route but, it is a not a commercially viable alternative for relatively smaller app developers. Moreover, given the presence of 3 million apps, how many apps can secure pre-installation on the devices. The Commission is of the view that pre-installation as an alternative cannot be generalised and thus, cannot be considered as a substitute of access through app store.
- 150. Moreover, OEMs which use Android OS are required to assign prominent placement to Google's own application through MADA, thus, OEMs are less attracted to pre-install more apps. Additionally, allowing pre-installation of third-party apps occupies excessive disk space and memory, which is not liked by users as they are provided lesser space for their own preferred apps.

v. Substitutability between different app stores for Android OS

151. The Commission notes that there are multiple app stores for Android OS which includes, Samsung Galaxy App Store, Xiaomi App Store, Huawei App Store, Oppo App Store, Amazon App Store, Aptoide App Store, etc. These other app stores are primarily OEM specific (with very few exceptions viz. Aptoide) and are pre-installed by the respective OEM only, alongside Google's Play Store on their smart device. E.g., Samsung Galaxy App Store is installed by Samsung in its devices only and is not installed by other OEMs. Thus, these other Android app stores though are substitutable with Google's Play Store individually, but in a





limited manner only. This aspect is further elaborated while examining the dominance of Google in this market.

- 152. The Commission is of the opinion that all these app stores belong to the same relevant market as an OEM, in principle, can choose to pre-install its own app store along with Google Play Store, on its Android devices.
- 153. Thus, based on the above analysis, the Commission is of the view that second relevant product market in this case can be defined as 'the market for app store for Android OS'.
- 154. Google argues that in defining the market as app stores for Android OS, the Investigation Report errs by focusing on substitutability from the perspective of OEMs and ignoring demand-side substitutability from users' and developers' points of view. Google avers that Google Play is one of numerous distribution channels where app developers can distribute their apps and digital content and where users can access and/or purchase such content. Google Play faces fierce competition from these different channels. The Commission is of the view that the boundaries of the relevant market in the instant matter *i.e.*, the competitive constraints on Google Play Store remains the same irrespective as to whether the market is defined from the perspective of OEMs or app developers or for that matter, from the perspective of end users. Various other distribution channels, which are claimed to be a substitute with Google Play Store *i.e.*, side-loading, web apps, file sharing, *etc.*, have already been found to be only theoretical possibilities and without any significant usage for the app developers. Further, Apple's App Store is also found to be non-substitutable with Google Play Store.
- 155. When the market is defined from the perspective of OEMs, the nomenclature is the *market for app stores for Android OS* with all Android based app stores constituting the relevant market. When the market is defined from the perspective





of app developers, a possible nomenclature would be the *market for distribution* for apps through app stores for Android OS, again with all Android based app stores constituting the relevant market. Thus, even arguendo, Google's plea is accepted, the competitive constraints would remain same and resultantly, dominance assessment would not be different.

- 156. The Commission further notes that Google in its written as well as oral submissions has claimed that Google Play Store provides a host of services to app developers. Some of the extracts from Google's response are as follows:
 - "...On Google Play, developers have access to all the necessary data to innovate and compete effectively. Google Play provides access tools, programs, and insights that helps developers reach and engage users so they can grow their apps and games.

Developers can easily upload their apps on Google Play (for example, choosing distribution countries and distribution prices), and they have access to extensive analytics tools in real time around their app's performance, ratings, and how sales are developing

Google informs developers on the performance of their apps based on aggregated data. On the Google Play Console, developers can see additional information for each product, such as:

- the devices on which purchases have been made, or the relevant country; and
- a breakdown of various metrics related to their app's performance, such as the number of active devices their apps have been downloaded on, the number of times an update to their app has been installed, or the number of times their app has been uninstalled. Developers can see these metrics at a glance on their "Dashboard" page, and in more depth on their "Statistics" page within the Google Play Console..."
- 157. Going by Google's own submissions, Google offers variety of services to app developers which would not be available if the apps are distributed through side-loading, web apps, file sharing, *etc*. In view of the unique services provided by the app stores, these options are not viable substitutes to Play Store. Accordingly, Google's arguments are rejected.





- 158. In respect of relevant geographic market, the DG has observed that from the standpoint of handset manufacturers, the terms and licence conditions of the OS for smart mobile devices are uniform across the country. Further, the number of applications that Google include in the GMS suite differs by country. Similarly, Google follow different criteria for licencing the Play store according on the legal demands of each location. It is also noted that consumer preferences, availability of mobile apps in local languages, and location-based applications and services, which largely drive the demand and popularity of App store for Android OS, are consistent across the Indian geographical region in terms of the relevant geographic market. As a result, in 'India,' the supply and demand of app stores for Android OS are both homogeneous and different. Accordingly, the Commission determines 'India' as the relevant geographic market for market for app store for Android OS.
- 159. Accordingly, the Commission delineates "market for app stores for Android OS in India" as the second relevant market for the instant matter.

Assessment of Dominance of Google

160. The DG has concluded that the market for app stores for Android OS devices is characterized by a position of strength for Google given the fact the Google Play Store is largest app store in terms of users, availability of apps and developers compared to other app stores. Further, the DG noted that there are significant entry barriers in the market. Moreover, the DG found that the cumbersome process of side-loading of apps and pre-installation not being a viable alternative also works in favour of Google Play Store. Thus, as per the DG, Google Play Store is dominant in the relevant market for App Store for Android OS in India.





- 161. The observations of the Commission in this respect are as follows:
 - a. Market Share Analysis
- 162. As already stated, there are various app stores store which have been developed for Android smart mobile OS which, in addition to Google's Play Store, includes Samsung Galaxy App Store, Xiaomi App Store (Mi-Store), OPPO App Store, Huawei App Store, Aptoid App Store, etc.
- 163. The Commission is of the view that market share is one of the primary though not determinative parameters to assess dominance in a relevant market. There are atleast two methods to disinter, the market share of Google in the relevant market. *Firstly*, calculating the share of smart mobile devices using Google Android on which a given app store is pre-installed. This method allows for an assessment of the economic strength of an Android app store at the level of OEMs, which pre-install app stores on their Android devices. *Secondly*, calculating the market share of a given Android app store on the basis of the number of apps available *via* that store. This method allows for an assessment of the economic strength of an Android App store at the level of app developers or the choice available to users of Android devices. Thus, using both these methods will help in holistic understanding as to dominant position of OPs in the market for App store for Android OS in India.
- 164. Google has stated that it does not make Google Play available to end users outside of its arrangements with device manufacturers under the MADA since allowing users to download Google Play would undermine the value of this licence and the efficiencies they derive from it. It means Play store comes pre-installed on all the devices which have pre-installed GMS under MADA. Subsequently, Google has provided the details of the smart mobile devices (brands) sold in India in which Google Play Store comes preinstalled. Google has stated that the submitted data pertains to the





165. Based on above submissions, the Commission notes that Google Play Store is preinstalled on 100% Android OS devices. Whereas the other app stores such as Samsung Galaxy App Store, OPPO App market, VIVO App Store, *etc.* are preinstalled only on the devices that are sold under their brand name (*e.g.*, Samsung Galaxy Store was pre-installed on Android devices in 2020 as compared to 100% pre-installations secured by Google Play Store). Thus, these competing





app stores failed to offer any significant contest to the monopoly of Google Play Store. Thus, by listing its apps on the Play Store, an app developer can reach virtually the entire market as against the other app stores which have limited reach.

- 166. Based on the total number of Android devices, the Commission further notes that pre-installation of Google Play Store on various smart mobile handset continues to see upward growth trajectory since year 2011. In other words, in year 2011, Google Play Store was pre-installed on number of devices, but this figure in year 2020 zoomed to
- 167. Google Play Store's dominant position is further manifested when a comparison is drawn between volume of smartphone shipments across India from the year 2011 to 2020⁹ with that of number of pre-installation of Google Play Store during 2011 to 2020 as submitted by Google.

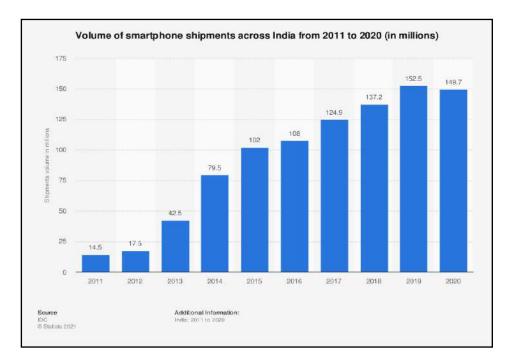
⁹ https://www.statista.com/statistics/792767/india-smartphone-shipments-volume/

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Graph: Volume of smartphone shipments across India from the year 2011 to 2020

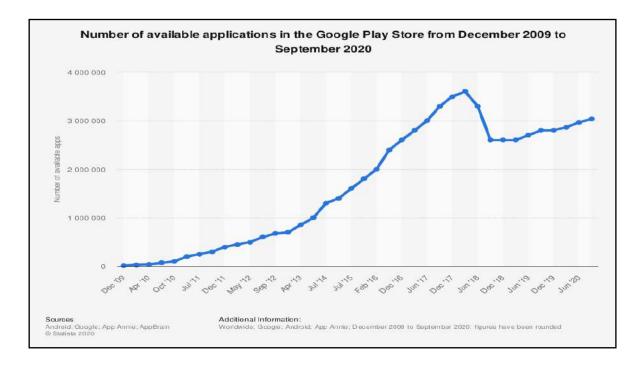


- 168. Based on the above datasets, it becomes axiomatic that Google Play Store was pre-installed on approximately smartphones in the year 2020 out of the total 149 million smartphone shipped in India *i.e.*, around of the smartphone shipped in India. This further add validation to the argument that Google is dominant in the relevant market for app store for android OS in India.
- 169. Google's position in the relevant market is reinforced by the number of Apps available on the Google Play Store. The Play Store is the app store with the largest quantity of apps. ¹⁰ The same is reproduced in the form of graph as under:

As available at: https://www.statista.com/statistics/266210/number-of-available-applications-in-the-google-play-store/







170. This data is corroborated from the data submitted by Google in relation to numbers of Apps available on Google Play Store for Indian users. The same is reproduced herein under along with data pertaining to numbers of Apps downloaded in India:

Year	No. of Apps on Google Play Available to Users in India	Number of Apps Downloaded in India
2013		1,682,586,292
2014		2,412,739,089
2015		3,592,490,412
2016		6,166,857,535
2017		11,640,201,493
2018		16,692,601,078
2019		18,495,168,044
2020		23,677,353,329





171. The comparative analysis of the data regarding number of apps available on Google Play Store *vis-à-vis* other app stores on Android devices in India, is as follows:

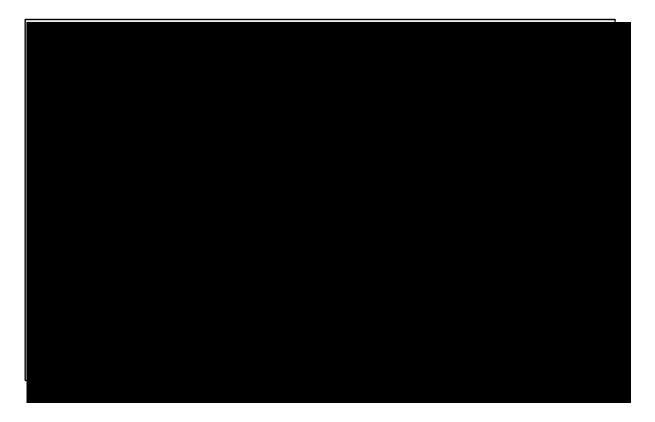
Number of Apps available on different App Stores for Android OS					
Year	Google Play	Vivo	Oppo	Amazon	App Bazaar
2014					
2015					
2016					
2017					
2018					
2019					
2020					

Source: Respective submissions of the parties

172. This data can also be represented graphically, as follows:







- 173. It can be observed from the above Table that as of 2020, highest number of apps were available on Google Play followed by Amazon App Store and App Bazaar. Disparity in the number of Apps available among different App stores reveals the market power of Google Play store in this relevant market for app store for Android OS in India.
- 174. On basis of the above analysis and data, the Commission notes that Google enjoys a very strong position in the relevant market and the same is not upended by competition from third party app stores (which anyways is restricted to OEMs own devices only). Due to the network effects, the quantity and popularly of apps available on any app store becomes very crucial from the stakeholder's perspective. Based on the available data, the Commission notes that the Play Store is the app store with the largest quantity of apps. Based on the data available, the Commission notes that other app stores lagged way behind in terms of number of





apps available therein and seemed to provide to customers no choice or alternate to Google Play Store in the market for app store for Android OS.

175. From the data collected by the DG, the Commission further notes that the total number of active app developers on Google Play Store and Amazon App Store are as follows (as of January 2017)¹¹:

Name of App Store	Number of Developers
Google Play Store	724000
Amazon App Store	69000

- 176. Thus, it is noted that Google Play Store leads other app stores in terms of the number of developers in the market for app stores in Android OS. App developers prefer to support their apps for Google Play rather than other app stores because of its larger user base.
 - b. Barriers to Entry
- 177. Based on the available information on record, the Commission notes that the relevant market for app store for Android OS is characterised by various entry barriers. The requirement of significant investment in developing, marketing, and updating an app store for Android OS is one of them.
- 178. In this context, it is pertinent to note the submission of Amazon:



¹¹ https://www.statista.com/statistics/276437/developers-per-appstore/.





- 179. Google has submitted that it invests heavily in Google Play to keep it competitive with other Android and non-Android app stores. In 2020 alone, for example, Google invested more than USD 1.56 billion in Play.
- 180. Thus, the Commission notes that the relevant market requires significant investment and thus act as a major entry barrier.
- 181. The Investigation has further revealed that the app store is a two-sided market in which Google has been able to attract a large number of Android users on one side (due to presence of large number of apps) and large number of app developers on the other side (due to potential to reach a large audience). Google thus enjoys a strong 'network effect' of large user base and apps developers in the market of app store for Android OS, which makes Google's position unassailable. This is further apparent from the submissions of parties who have developed/ involved in creation of App Stores.

181.1. Amazon stated that,

"... In United States v. Microsoft, the US Court of Appeals upheld the District Court's observation that this "applications barrier to entry" stems from two characteristics of software markets: (1) most consumers prefer an OS for which a large number of applications have already been written; and (2) most developers prefer to create applications for an OS that already has a substantial user base. This "chicken-and-egg" situation arising out of the applications barrier to entry means that applications will continue to be written for existing OS, which in turn ensures that consumers will continue to prefer it over new entrant OSs..."

181.2. Vivo stated that,

"... At present, in terms of market share and number of users, there is a big gap between Vivo and GP (Google Play), which makes it less





attractive to developers with greater circulation needs. The richness of content and the timeliness of version updates are not as attractive to new users as GP..."

181.3. Realme stated that,

"... System ecology is the major entry barrier for a new player in the market of smart mobile Operating system as end users tend to choose system with more function and more third-party applications. There are less users, and third-party developers are unwilling to develop applications, resulting in users not having enough third-party applications to use. Moreover, main obstacle to the late comers of the system is the shortage of the third-party applications and new feature..."

181.4. Microsoft mentioned that,

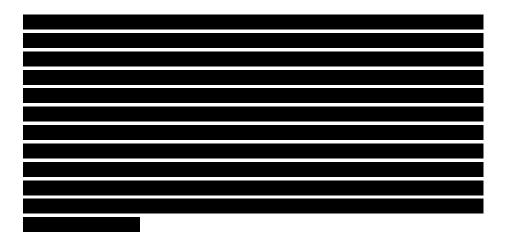
"... During the time it was operational, Windows Phone devices (having the in-built Microsoft App Store), potentially suffered because of the so-called "app gap." App developers did not find it economical to port and support their most popular apps for Windows Phone OS given its low market share compared to iOS and Android. As a result, the Windows Phone OS platform did not have many of the popular mobile apps on which consumers had come to rely. Without these apps, Windows Phone had trouble attracting and retaining users. In later years, Windows Phone OS (having the inbuilt Microsoft App Store) suffered from quality issues, due to Microsoft prioritizing other projects. Even at the height of its popularly, i.e., in the period from 2013 to 2015, Windows Phone OS never exceeded a market share of 2-3% on a worldwide basis..."

182. Based on the above, it is noted that both app developers and app users are immensely important in ensuring that app store goes off the ground *i.e.*, grows larger in terms of size. Network effects results in entry barriers for new entrants and make it much more difficult to achieve a commercially viable scale. Further, a significant investment is also required in development, maintenance, functioning and updating of app store platform. It is further observed that other factors affecting desirability of an app store are its content available on the app store and regular version updates.





183. The above discussion regarding entry barriers also requires a look into the technical issues involved in establishing app store as claimed by Amazon, which arises from exclusion of forked versions of Android by Google from all critical aspects of Android Ecosystem. The relevant extracts from Amazon's submission pertaining to market for mobile operating system are reproduced below:



184. Google Play Service APIs is a software layer working in the background of Android that is used to update Google apps and other apps from Google Play. Most of the Android apps use Google Play Services API for their functioning and without access to same, these Android applications will simply fail to work. Google Play Services are provided along with Google Play and are not available separately. Moreover, any update to the Google Play Service is provided by Google automatically on all supported devices *via* the Google Play Store only. Whilst it is technically feasible to ship a phone without Google Play Services, OEMs who do so, will be at a significant disadvantage to OEMs that ship with Google Play Services. Android devices in which Google Play Store and Google Play Service is not pre-installed, may face difficulty in automatic software updates, new releases, bug fixes and enhancements included in the new versions of Android. Thus, the OEMs has to agree to take license of Google Play from Google, in order to have access to Google Play Services.





- 185. From the aforesaid reply, it is observed that Google does not provide access to its APIs to Fire OS (forked version of Android) devices, thereby making it difficult for app developers to port their apps from Android OS to Fire OS. Based on the above, the Commission notes that a competing app store has to offer not only the store but also develop its own APIs with similar functionalities as those of Google Play Services. Thus, the un-availability of Google Play services APIs also acts as an entry barrier in the relevant market.
- 186. In addition, the DG has also noted that MADA requires OEMs to preinstall 'Google Applications' (including Google Play) to be prominently presented 'at least on the panel immediately adjacent to the Default Home Screen' and others 'no more than one level below the Phone Top.' Some of the newer versions of MADA agreements even specify the sequence, from left to right and top to bottom, in which the Google apps must be presented. This prominence given to Google applications results in a status-quo bias of consumers. Further, many of the pre-installed apps cannot be deleted. These issues suggest that such pre-installation makes solving the 'chicken and egg' problem more difficult since it requires overcoming the *status quo* bias of consumers. This is further corroborated by submissions of App developers.

187. Map my India (an App developer), asserted that

"... Most Android smartphones come pre-installed with Google Mobile Services, including Google Maps, Google Search, Google Play Store, etc. Google Play Store is the biggest mobile application store in the world and accounts for more than 90% of the total mobile applications downloaded on smartphones having an Android OS. It is important to note that till date, no Android app store developer has been able to replace Google Play Store as it requires the developer to not only develop an app store but also its own APIs and functionality similar to Google, i.e. in essence, to replicate the entire Google ecosystem. Since this requires substantial and indefinite investment, Google continues to remain dominant in the "app store" market as well. Due to this dominance, it can impose unilateral terms on competitive apps or suspend/ban them as per its own discretion. This is the biggest challenge for developers like MMI whose app are





available on the Play Store and continue to compete with Google's own product, i.e. Google maps....'

188.	The Investigation has also revealed that Google is sharing significant quantum of
	money with the OEMs (HTC, Huawei, Lenovo, Motorola, OnePlus, Oppo,
	Samsung, Vivo, and Xiaomi etc.) under the RSAs in relation to devices used by
	users in India.
	As per the provisions of RSAs, OEMs are provided with
	the financial incentive for pre-installation of certain Google Applications.
	c. Side-loading, a cumbersome process:
189.	It is noted that Google does not allow distribution of a competing app store
	through Play Store i.e., an app store is not available for download by the user
	through pre-installed Play Store. Thus, any competing Android app store may face
	barriers in terms of discoverability by users as such app store can only be
	downloaded from the website and not through Google Play Store, which is also
	referred to 'side loading'. As already discussed earlier, Google discourages users
	from side-loading apps as well as app stores from other sources. The default
	settings of Android OS device results in blocking of any such attempt, though
	these settings can be circumvented by end users and enabling downloads
	from unknown sources. However, it may be noted that doing so requires some
	•
	basic technical knowledge.
100	
190.	In this regard, it is apposite to refer to submissions





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- 191. In this regard, the DG has also referred to the UK CMA Report which observed that 'the majority of app developers that responded to our request for information did not use side-loading as a distribution channel or identify it as an alternative to the Play Store. Reasons provided for this included the process users have to go through on Android devices to side-load apps ... side-loaded apps may lead to a suboptimal experience as features may break and because it requires users to turn off the security settings on their device.'
- 192. Based on the above, the Commission is of the view that side loading of an app store / app does not offer a competitive constraint on Google's position in the





relevant market for App Store for Android OS based devices. Process of side loading apps involves a serious risk of malware which serves as an entry barriers for third party app stores. Moreover, the process of side loading requires reducing security settings of the mobile device, which users may not be interested in. The cumbersome process of side loading and security threats involved further enhances the dependence of Android users on Google Play Store. Moreover, sideloading of apps does not allow automatic update functionality for the apps, which deters the users as well as app developers, in general from relying on sideloading a viable option.

- 193. The Commission notes that Google' Play Store is significant from the point of view of smart mobile device users as well as app developers. Given the fact that Google's Play Store offers highest number of apps and also offers a greater quality of apps, the Android device user seems to have a preference for Google Play Store and consider it as a 'must have' app. The preference of the user/ app developers also reinforces the dominant position of Google in the relevant market for app stores for Android OS in India.
- 194. As already stated, Google in its submission has contested delineation of the market definition as well as determination of its dominance in the same. Many of the arguments of Google have already been considered and examined above. Google has further averred that the delineation of the relevant market fails to meet the requirements of the Act. To establish a "relevant product market", the substitutability of the products for consumers must be assessed by reference to the prices, characteristics, and intended use of the products. It has been further submitted that the Investigation Report relies on the reports of international competition authorities that have no relevance to app distribution and/or market conditions in India.





- 195. The Commission has perused and examined various submissions of Google as summarised above, however, the same is not convincing because of various reasons discussed in following paragraphs.
- 196. An app store is a specific kind of application, which offers marketplace services to connect apps/app developers with users. These app stores are specific to the OS for which it has been developed (as already discussed *supra*) and cannot be used interchangeably due to difference in source code and APIs. Apple's App Store can be used on iOS whereas, Google's Play Store can be used on Android OS.
- 197. The demand for the app stores on the other hand, come from three different sets of consumers *i.e.*, (a) Smart device OEMs who wish to install an app store to make their smart devices commercially viable and marketable; (b) app developers, who want to offer their services to the end users; and (c) end users to wish to access app stores to access content or avail other services. For reasons already discussed above, an OEM can only choose to pre-install an app store which supports the OS being used by the OEM. Since, presently, there are only two smart device OSs prevailing in the mobile ecosystem *i.e.*, Apple's iOS (which is a non-licensable OS) and Android OS, which is virtually and practically the only OS available to those OEMs who are dependent on third party OSs for their smart devices. Thus, once the OEM has chosen to manufacture smart devices using Android OS, they can only choose app stores which are written for Android OS (*viz.* Google's Play Store and other OEM specific app stores). For these OEMs, Apple's App Store is not an option at all and thus cannot be considered as a substitute.
- 198. Once the OEM has installed particular app store on its devices, the same becomes a door between app developers and the users. An app developer to reach the user base on a particular OS/ ecosystem (*i.e.*, Android or iOS), must rely on the app store on that particular OS only. In other words, an app developer cannot reach an iOS user through Google's Play Store and an Android user through Apple's App





Store. Therefore, these two app stores cannot be considered as substitute by the app developers. The app developers, in order to expand their reach to maximum set of consumers, would not like to confine their offerings exclusively to one of the ecosystems as it would imply losing a sizable portion of the potential consumers' revenue who are available on the other platform. Therefore, they multi-home and offer apps on both the platforms. Further, recognising cross side network effects, app developers have to develop and innovate for each of the ecosystem to be able to maximise their revenue and provide a wider consumer choice.

- 199. Now, examining the substitutability between Google's Play Store and Apple's App Store from an end user perspective, the Commission notes that the natural corollary of the above-mentioned reasoning is that an Android user cannot use Apple App store for downloading apps on her device. Similarly, an Apple user cannot use an app store meant for Android OS to download apps. The end user does not multi-home across app stores on different operating systems/platforms for their requirements. Thus, from an end user perspective also, Google's Play Store and Apple's App Store are not substitutable. The Commission further notes that there might be some degree of competition between the two mobile ecosystems i.e., Android and Apple, however, that too is also limited at the time of deciding as to which device to buy. At that stage also, the Commission is of the considered view that the primary and the most significant factor in the mind of an end user is the hardware specification and the device price. The Commission find it hard to accept that the end user also considers the app store present in the respective OSs as the primary factor, while deciding as to which device to buy. Google has not presented any evidence let alone a convincing one to establish the same.
- 200. The Commission of the view that the limited competition between Android and Apple ecosystems (and not between the respective app stores *per se*) from the





perspective of end user, is not sufficient to constrain the behaviour of Google while laying down policies for its app store.

- 201. Even from the two other constituents of the demand side of app stores *i.e.*, app developers and the end users, the Commission find that there is no substitutability between Google's Play Store and Apple's App Store. Accordingly, the Commission is not convinced by the arguments of Google and notes that Apple's App Store cannot be considered to be the same relevant market as that of Google Play Store. Once Apple App Store is excluded from the relevant market for Google Play Store, there is no question of exercising any competitive constraints from Apple App Store.
- 202. Further, Google has attempted to use a literal interpretation of Section 2(t) of the Act, to claim similarity between Play Store and Apple's App Store based on characteristics, prices and intended use. After examining the averments of Google, the Commission is of the view that *firstly*, the interpretation of any statutory provision and specifically for economic legislations, cannot be divorced from the commercial reality and technical feasibility. For various reasons already discussed above which reflect the actual market outcomes, Google's Play Store and Apple's App Store cannot be considered as substitutes. *Secondly*, even the literal interpretation adopted by Google is also devoid of any merit and thus needs to be rejected. Section 2(t) provides that relevant product market comprises of all those products or services which are regarded as *interchangeable or substitutable by the consumer*, by reason of characteristics of the products or services, their prices and intended use. In the present matter, none of the constituents of the demand side of app stores considers Google's Play Store and Apple's App Store as interchangeable or substitutable, as discussed *supra*.
- 203. The claim of Google that it competes with Apple's App Store is also demolished from a bare perusal of the fact that Google, as an app developer, offers its





proprietary apps *viz*. Google Search, Google Chrome, Google YouTube, Google Maps, *etc*. on Apple's App Store (or erstwhile Windows Store) but not on the other app stores for Android OS. Google realises that app stores are an important gateway to reach the users in each of such ecosystems. Google has secured access to 100% of the users on the Android platform by way of imposing pre-installation through MADA on all Android devices. However, in order to reach users on iOS platform, Google need to provide its apps available for download on Apple App Store. In pursuit of this objective, Google has also entered into an agreement with Apple for being the default search engine on Safari Browser. The Commission is of the view that like any other app developer, Google in order to maximise its consumer base, cannot afford to lose a sizable portion of the potential consumers available on iOS platform. This in itself, indicates that Google's Play Store and Apple's App Store are two different distribution channels for reaching out to two distinct set of customers.

204. Google has also argued that the Investigation Report relies on the reports of international competition authorities that have no relevance to app distribution and/or market conditions in India. The Commission is of the view that same is of no relevance as, *firstly*, the DG is a fact-finding body and has to gather evidence and forward the same to the Commission. The process of adjudication starts post-submission of Investigation Report. The propositions advanced by Google have no relevance in the present context and it needs no reiteration that an adjudicatory body has to return its findings independently in light of evidence and material available on record. As such, it is not necessary to delve into the aspect any further as the Commission has examined the evidence independently and findings have been arrived at on the basis of material on record. Having said that, it is clarified that nothing prevents the authorities from looking at the decisions given by counterpart agencies if the issues involved in the domestic proceedings are similar to those involved in other jurisdictions *Secondly*, Google itself admits that the development of its products as well as various agreements as well practices are





global in nature and therefore, it is futile to claim that the same are irrelevant. The reports of other agencies are not determinative but have persuasive value. The conclusions of the Commission are based on evidence available on record and after considering the specificities of the prevailing market conditions in India. *Thirdly*, acknowledging the similarity in issues, Google itself referred to decisions of foreign authorities in its submission. *E.g.*, while contesting the market delineation, Google relied on *Epic Games v. Apple (Epic Games v. Apple)*, *United States District Court, Northern District of California, Case No. 4:20-cv-05640-YGR, September 10, 2021*.

205. The Commission notes that Play Store is by far the most important app marketplace on the Android ecosystem. Play Store is significant from the point of view of smart mobile device users who consider this as a 'must have' app. The app developers perceive Play Store to be indispensable for reaching out to the entire spectrum of Android device users and the OEMs too perceive Play Store to be indispensable for the commercial success of their handsets. The dominance of Play Store inter alia stems from the strong indirect network effects that work in its favour, with its large user base on one side and a large number of app developers on the other side, who depend on Play Store to access these users and maximise their reach and revenue potential. These factors, in conjunction with Play Store's automatic update functionalities, its close integration with Google Play Services, lack of substitutability between android app store and other OS app stores, and high entry barriers lead to a reasonable conclusion that Google Play Store occupies a dominant position in the relevant market of app stores for Android OS in India. Even if the market definition nomenclature is considered from the app developer as well as user perspective i.e., as a distribution channel for apps, the Commission notes that listing apps on Google Play Store is indispensable for the app developers and they cannot afford to rely on any other mode of distribution to reach the entire spectrum of Android device users.





C. Market for apps facilitating payments through UPI in India

- 206. Before adverting to the market concerning UPI, it would be apt to understand Unified Payments Interface ('UPI') in India. It is instructive to note here that the Payments and Settlement Systems Act, 2007 ('PSS Act') has been enacted for the regulation and supervision of payment systems in India. Under the PSS Act, the RBI is the designated authority for authorizing various payment systems. The RBI has authorized various Payment System Operators to operate payment systems in the country, including the National Payments Corporation of India ('NPCI'), which is the umbrella organization that operates retail payment and settlement systems in India.
- 207. UPI was launched by the NPCI in 2016 and was promoted as an instant real-time payment system to facilitate inter-bank transactions on a mobile platform. UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Furthermore, UPI offers a uniform architecture for enabling users with bank accounts to send and receive money instantaneously (through their mobile devices) by use of a single identifier (a UPI ID) and without having to share bank account details, while transferring money. The UPI ecosystem is designed for banks and only a banking entity can directly interact with the UPI switch. However, non-banking entities can also participate by partnering with a banking entity which is already on UPI platform, and developing their own APIs referred to as third party applications (apps) e.g., Paytm, PhonePe etc. Such entities who provide UPI services by partnering with banks, such as G-Pay, PhonePe, Amazon Pay, Paytm etc. are generally referred to as Third Party Application Providers ('TPAPs').





208. In this relation, it is apt to mention here about the participant(s) in UPI ecosystem:

- <u>NPCI</u>: NPCI is the network operator, service provider and coordinator of the UPI network/ ecosystem. It is the central agency that owns and operates the UPI ecosystem.
- <u>UPI Service Provider</u>: UPI ecosystem is run through Payment Service Provider¹² ('PSP') banks. This ecosystem also includes non-banking entities *i.e.*, TPAPs, who may partner with up to Five (5) PSP banks to provide UPI services. The end user can avail UPI Service, either through any PSP bank's app or the TPAP's app, by linking their bank accounts to their respective UPI IDs.
- <u>TPAP</u> A Third Party App Provider is a service provider and participates in the UPI ecosystem through PSP banks. It offers a user friendly interface to make UPI payments. Examples include Google Pay, PhonePe, Amazon Pay UPI etc.
- <u>Technology Service Provider (TSP)</u>: PSP banks have been permitted to engage with outsourced technology service providers ("TSPs") for the backend technology integration with UPI.
- <u>PSP</u> Payment Service Provider means entities (banks) which are allowed to
 issue virtual addresses to the users and provide payment (credit/debit) services
 to individuals or entities and regulated by the RBI. A PSP is a bank that has
 various TPAPs integrated into its system.
- Remitter Bank the account holding bank of the Payer.
- Beneficiary Bank the account holding Bank of the receiver.

PSP Bank is a member of UPI and connects to the UPI platform for availing UPI payment facility and providing the same to the TPAP which in turn enables the end-user customers / merchants to make and accept UPI payments. PSP Bank, either through its own app or TPAP's app, on-boards and registers the end-user customers on UPI and links their bank accounts to their respective UPI ID.PSP Bank is also responsible for authentication of the end-user customer at the time of registration of such customer, either through its own app or TPAP's app. Lastly, PSP Bank engages and on-boards the TPAPs to make the TPAP's UPI app available to the end-user customers: https://www.npci.org.in/what-we-do/upi/roles-responsibilities.





209. In relation to UPI, it is also noted that UPI transactions can be primarily done either in the push or pull form. In the push form, money is sent by the app user to a recipient and the process is initiated by the sender. Separately, under the pull form, money is requested by the recipient, who initiates the payment process.

Relevant Market

- 210. The DG has examined substitutability between cash payment and digital payment as well as substitutability between UPI and other methods of digital payment (credit card, debit card, net banking, mobile wallet) for the delineation of relevant product market. Based on its examination, the DG has concluded that the relevant market in the instant case may be defined as 'market for apps facilitating payment through UPI in India'.
- 211. Google on the other hand has contested this market definition by the DG and claimed that this market is narrow and restrictive. It has been further averred that the market for digital payments ought to be broader which includes other forms of payments like credit & debit cards, mobile wallets, internet banking, *etc*. Google claims that its UPI app *i.e.*, GPay competes with various other digital payment methods. As per Google, these services are substitutable when it comes to purchase of digital content on the Play Store.
- 212. The observations of the Commission in this respect are as follows:
 - a) Substitutability between cash payment and digital payment
- 213. As noted by the DG, cash-based payments are manual and prone to inefficiencies and fraud. Whereas digital payments with the development of information technology and the wide adoption of smart devices offer possibilities to simplify





the transactions. Digital payments are more secure as well as easier to handle as compared to cash payments.

- 214. Thus, the Commission concurs with the finding of the DG that digital payments and cash payments are not interchangeable.
 - b) Substitutability between UPI and other methods of digital payment
- 215. The DG has succinctly brought on record the distinctive features of various digital payment methods *vis-à-vis* that of UPI apps. These are discussed below:

UPI versus debit/ Card

- 216. The differences between UPI and cards, as highlighted by the Investigation are summarised as:
 - 216.1. UPI provides an enhanced, secure and seamless experience, as it does not require sharing of any payment details by the user. This is unlike card payments wherein the user is required to divulge details, such as card numbers/ Card Verification Value (*CVV*), and card expiry date which increases the potential security concerns.
 - 216.2. Unlike card payments, UPI does not charge the merchant convenience fees that is charged to the merchant outlets for card payments made at a POS terminal
 - 216.3. UPI is more widely accepted as it facilitates payments through mobile numbers (linked to a user's bank account) and QR codes. A merchant does not need to install a POS machine (which typically costs between INR 5,000 INR 12,000) at the store to process UPI payments, rather, a printout of the QR code is sufficient. This has resulted in the rapid adoption of UPI as a favoured mode of payments by even smaller merchants.





- 216.4. UPI permits the linking of multiple bank accounts into a single mobile app (of any participating bank or third party). In contrast, one credit and/or debit card is only linked to one bank account
- 216.5. UPI payments are limited to India only, whereas card based payments can be used for payments globally.
- 217. In addition, the Commission notes that its relatively easier and almost instantaneous to register on UPI apps as compared to securing a credit card from bank. Further, it is very convenient for the users, to use UPI facility as compared to cards. Based on the foregoing reasoning, the Commission concurs with the DG that UPI enabled digital payments apps and debit/ credit card-based payments do not fall in the same market.

UPI versus Net Banking

- 218. Net banking gives users electronic access to a variety of banking services. Money transfer services, access to fixed deposits/recurring deposits, online investment services, and administrative services including issuing of cheque books, lending facilities, debit and credit cards, and so on are among them. UPI-enabled digital payments, on the other hand, are distinct from net banking in that they do not offer a broad variety of banking services and are largely limited to conducting financial transfers.
- 219. There are various money transfer services through net banking *e.g.*, National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Immediate Payment Service (IMPS), *etc*.
- 220. A major difference revealed by the Investigation, between UPI and the money transfer services discussed above is the convenience and ease that UPI gives a





customer compared to the above. A short comparison between UPI and these money transfer services has been done below:

- 220.1. Payments made through UPI are real time payments that can be instantly made 24x7 whereas RTGS is not a 24x7 system. The RTGS service window for customer transactions is available 7 am to 6 pm on a working day, for settlement through the RBI. However, the timings that the banks may accept RTGS may vary from bank to bank;
- 220.2. NEFT is a fund transfer system in which the transactions received up to a particular time are processed in batches every half hour. Whereas through UPI, a user can make a request for payment from another UPI user, which is then settled instantly. IMPS does not provide for payment collection services. This is because UPI provides for a Peer to Peer (*P2P*) "pull" functionality.
- 220.3. UPI provides for payments through virtual payment addresses and QR codes, whereas IMPS provides for payments only through bank details of the recipient.
- 220.4. UPI is a single mobile app for accessing different bank accounts whereas IMPS is restricted to a single bank account only.
- 220.5. Some banks, also have a mandatory waiting period for adding a new beneficiary, after which, users are allowed to make a fund transfer (for example HDFC Bank allows transfers to new beneficiaries only 30 minutes after addition), and there may be a cap to the amount that can be transferred to new beneficiaries within the first 24/48 hours. These restrictions do not apply to UPI.
- 220.6. There are no transaction fees levied on users for UPI payments whilst IMPS services through net banking are chargeable.
- 221. Based on the above, the Commission concurs with the DG that UPI enabled digital payments apps provide several convenient and value-added features which make





it a distinct payment system. Thus, there is no substitutability between payments through UPI enabled digital payments apps and transfers through net banking (NEFT, RTGS and IMPS).

UPI versus Mobile wallets:

- 222. A mobile wallet is a prepaid payment instrument (PPI) to facilitate purchase of goods and services, remittance facilities, etc., against the value stored in / on such instruments. Users can link their credit card or debit card information in mobile device to mobile wallet application or they can transfer money online to mobile wallet. Instead of using their physical plastic card to make purchases, they can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it.
- 223. UPI and mobile wallets differ in a number of ways as discussed below:
 - 223.1. A UPI enabled digital payment app allows a user to transfer money directly from one bank account to another bank account instantaneously. On the other hand, while a mobile wallet allows a user to make payments, it is restricted to the value stored/ pre-loaded on the instrument.
 - 223.2. a wallet transaction involves multiple steps, which includes the transfer/loading of money from bank account/ card to the wallet and then a transfer to the intended beneficiary, while a UPI transfer involves direct money transfer to the beneficiary's account.
 - 223.3. mobile wallets lack interoperability as it is currently not possible to transfer money from one wallet to another. On the other hand, UPI payments can be made across different service providers based on a unique identification.
 - 223.4. UPI is more secure than a mobile wallet as wallets mostly rely on a phone's locking system for security. Wallet based transactions typically do not require any tiered security measures. This essentially means that a third party could potentially illegally transfer funds merely through accessing a





smart mobile device. On the other hand, UPI provides a two-factor authentication, which provides a secure and convenient payment experience to the user.

- 224. On the basis of the above analysis, it can be concluded that there is no substitutability between UPI enabled digital payments apps and mobile wallets.
- 225. In relation to substitutability between UPI vis-à-vis cash payments and digital payments, it is apposite to refer to submissions of few app developers in fintech space, as follows:
 - 225.1. Amazon Pay Private Limited stated that though there are multiple modes digital payment, but UPI has additional advantages over others in terms of better security architecture and interoperability across different mobile applications. Secondly, UPI allows access to multiple bank accounts into a single mobile application of any entity providing UPI services. The relevant extracts from the submission are reproduced below:

"The Indian payments market is pre-dominantly cash driven. Digital payment is a developing segment. Digital payments can be made using various payment systems, such as debit cards, credit cards, mobile wallets, mobile apps, net banking, electronic clearing services, National Electronics Funds Transfer System ("NEFT") Real Time Gross Settlement ("RTGS"), Immediate Payment Service ("IMPS") and UPI. All digital modes of payment (such as wallets, UPIs, credit and debit cards, etc.) are substitutable, inter from the consumers' perspective. However, the following features of UPI may be considered as an additional advantage as compared to other modes of digital payments in India:

(i) The unique feature of VPA based transaction is the secure aspect of UPI architecture as it obviates the need for sharing account or bank details to the remitter. It powers





- multiple bank accounts into a single mobile application of any entity providing UPI services.
- (ii) UPI can integrate and bring under its umbrella the multiple PSPs by adding a layer of interoperability within their platforms.
- iii) The UPI ID acts as a uniform digital identity for the customer, and the customer can authenticate payment transactions on this UPI ID through the UPI App, which is downloaded on the customer's mobile device.
- (iv) UPI enables push (pay) and pull (collect) transactions by the payer and payee using their UPI ID and without the need for sharing bank account details.
- (v) UPI permits payments to other UPI users and merchants via a mobile application.
- (vi) UPI offers creation of a static four-digit PIN which can be used by customers to authenticate transactions across all bank accounts linked to the virtual address (UPI ID) registered with the PSP bank. In other words, if a customer has 4 bank accounts (with 4 different banks), customer can register for UPI with any PSP bank and link all his 4 bank accounts into one single UPI ID."

225.2. Paytm also summarized the various benefits of UPI over other forms of digital payment in following words:

"... To summarize the benefits include: (i) for banks - single click two factor authentication, a universal application for transactions, it leverages existing infrastructure, it is safe and secure, the payment basis is a single/ unique identifier, and it enables seamless merchant transactions; (ii) for customers: - round the clock availability, single app for accessing different bank accounts, no requirement for credential sharing, single click authentication, and ability to raise complaint directly through the UPI app; and (iii) for merchants: seamless fund collection from customers through single identifiers, no risk of storing customer's virtual address like in cards, access to customers that do not have credit/debit cards, suitability for e-commerce and m-commerce transactions, resolves the cash on





delivery collection problem, and enables in-app payments with ease."

225.3. PhonePe described how the UPI is distinct from other modes of digital payment and listed its benefits. In its submission, detailed workflow adopted by users to make digital payment was elucidated along with limitations associated with each mode of digital payment in terms of funds transfer limits, frequency of transactions, disclosure of user data. The relevant extracts from the submission are reproduced below:

"UPI is different from other modes of digital payments. The key advantages of UPI compared to other modes of digital payments are set out below:

(25) UPI v. Card Payments (Debit & Credit Cards)

- UPI does not involve sharing of sensitive data such as card number, card verification value ("CVV"), etc. which increases security issues;
- Unlike debit / credit cards, UPI payments do not require a physical card for making a payment at the merchant store. Further, no special equipment is needed at the merchant store for accepting UPI payments either. Payments through UPI can be made simply through mobile numbers or scanning a Quick Response ("QR") code at the merchant store, and there is no need to install any point of sale ("POS") terminal machinery, which can be fairly costly;
- UPI Payments are cheaper and more widely accessible by a larger demographic; and
- UPI can be linked to multiple bank accounts whereas credit / debit cards can only be linked to one bank account each.

(26) UPI v. mobile wallets





- A 'mobile wallet' is a prepaid payment instrument which facilitates the purchase of goods and services from entities that accept that wallet. Mobile wallets require users to transfer money from their bank account into the wallet to be able to use it. UPI transfers happen directly between the banks;
- UPI uses a VPA as an identifier and is a comparatively open and interoperable payment platform compared to mobile wallets;
- The UPI transaction limit is INR 1 lakh per transaction whereas wallet transactions are capped to (i) INR 10,000 per month for non-KYC customers and (ii) INR 1 lakh per month for full KYC customers.

(27) UPI v. Net Banking

- Net Banking can be utilised through the Bank's own portals / websites /mobile banking apps, whereas the UPI framework can also be accessed through third-party apps (i.e.,, TPAPs, as elaborated on below);
- Net Banking facilitates a number of different payment methods such as Real Time Gross Settlement ("RTGS"), National Electronic Funds Transfer ("NEFT"), IMPS, etc. Whilst Net Banking provides a broader set of services / facilities, it takes more time to set up a new transaction than UPI: and
- NEFT and RTGS transfers require the input of details of the payee's bank account number and other details, in comparison to UPI which works on the basis of a simple VPA. Additionally, transactions have a wait time of 30 minutes for payments to new payees, which is not the case with UPI transfers.

RTGS

• RTGS is meant for large transfers and has a minimum transaction requirement of INR 2 lakhs. This makes it very different and distinct as compared to UPI transactions; and





 UPI payments are much faster and can be utilised around the clock by users sending and receiving money, unlike RTGS which is routed through the RBI;

NEFT

• NEFT is an electronic system of fund transfers which operate on a Deferred Net Settlement basis – i.e.,, transactions made through NEFT are settled in batches. Accordingly, in NEFT, any transaction initiated after a designated settlement/cut-off time would have to wait till the next designated settlement time. UPI, on the other hand, happens on a real time and continuous basis. Therefore, the two modes are not comparable.

Net Banking IMPS:

- To make a net banking IMPS transfer, one needs to have the particular app / website of the debiting bank account. In comparison, UPI is interoperable and multiple bank accounts can be linked to the same app;
- Net Banking IMPS transactions work only if data on the Name, Bank Account, IFSC code, etc. of the payee are available, whereas UPI transactions can work only with VPAs;
- Net Banking IMPS transactions have a wait time of 30 minutes for payments to new payees, unlike UPI transfers which are instantaneous; and
- Transaction fees / transfer charges for Net Banking IMPS transactions are higher than for UPI payments.
- (29) Therefore, as can be noted from above, UPI is distinct from other modes of digital payments from the perspective of users as well as other key stakeholders..."
- 225.4. Xiaomi differentiated UPI with other forms of digital payment in following table:





Comparison of Features of UPI Across Other Payment Modes						
Features	UPI	Credit/debit cards	Net Banking	Digital Wallets		
Virtual Payment Address ("VPA")	✓	×	×	×		
Requirement to store / access sensitive information	×	~	√	×		
Interlink multiple bank accounts to one digital identity	V	×	×	×		
Instrument-less mode of transaction	V	×	✓	√		
Real-time fund settlement	√	√	×	√		
Daily transaction limit	√	√	×	√		
Bank account requirement	√	√	√	X		
Convenience of money transfer	√	×	✓	√		
Single click authentication	√	×	×	×		
Option to raise complaints directly	√	V	✓	√		
P2P transactions	√	×	√	√		
Requirement of banking detail of beneficiary	×	×	✓	×		
Transfer costs	×	✓	×	X		

- 226. The Commission notes that UPI offers unique features *viz*. using virtual payment address compared to card payments, mobile wallets and net banking; functionality to interlink multiple bank accounts to single digital identity; UPI does not requires bank details of beneficiary but needs beneficiary's mobile number, QR code or VPA, *etc*.
- 227. In addition to the above, National Payments Corporation of India also enlisted benefits provided by UPI to different stakeholders *i.e.*, banks, end-consumers and merchants. It was stated that UPI ecosystem enables more secure and quick





transactions through single click two factor authentication, no requirement to store consumer details, round the clock availability, quick grievance redressal mechanism, interoperability across platforms and feature to link multiple bank accounts to single digital identity. The relevant extracts from the submission are reproduced here under:

Benefits for banks:

- i. Single click two factor authentication.
- ii. Universal Application for transactions.
- iii. Ability to leverage existing infrastructure.
- iv. Safe and secure transactions.
- v. Payments on the basis of unique Identifications.
- vi. Enable seamless merchant transactions.

Benefits for end consumers:

- i. Round the clock availability.
- ii. Single Application for accessing different bank accounts.
- iii. Use of Virtual ID without credential sharing, such as card number, account number; IFSC etc.
- iv. Single click authentication.
- v. Raise complaint from mobile app directly.

Benefits for merchants:

- *i.* Seamless fund collection from customers through single identifiers.
- ii. No risk of storing customer's virtual address like in Cards.
- iii. Ability to tap customers who do not have credit / debit cards.
- iv. Suitable for e-commerce & m-commerce transactions.
- v. Resolves the "cash-on-delivery: collection problem.
- vi. In-app payments.

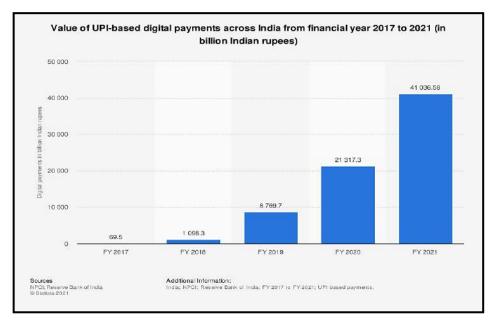




- 228. The Commission notes that Section 19(7) of the Act provides an indicative list of factors to determine the relevant product market, which include physical characteristics of the goods and services under consideration, amongst others. It is evident from the submissions of various parties as discussed in preceding paragraphs that though the intended use of different digital payment methods might be same, but the characteristics of UPI are different from that of other modes of digital payment. More specifically, it can be stated that payment through UPI Apps is not substitutable with other modes of digital payment because of following characteristics:
 - 228.1. UPI users can initiate push transactions by using UPI ID, this feature is not available in any other modes of digital payment.
 - 228.2. UPI permits the linking of multiple bank accounts into a single mobile App. In other words, if a customer has 2 bank accounts with 2 different banks, customer can register for UPI with any PSP bank and link all his bank accounts into one single UPI ID. In contrast, one credit/ debit card is only linked with one bank account.
 - 228.3. Another important characteristic of UPI is presence of network effects. UPI is a multisided platform consisting of multiple stakeholders including end users, banks, merchants, UPI App developers etc. The user base of a UPI app determines the number of merchants which adopt it and offer payments through such an app, which conversely increases the number of users of the UPI app. This means that the activity and scale of one user group on the platform can influence the activity and scale of other user groups on the platform.
- 229. In relation to delineation of the relevant market and to understand the advantages offered by UPI over other digital payment methods, it is apt to refer to the exponential growth witnessed by UPI platform. To appreciate the same, it would be relevant to re-produce the related statistics:







230. The aforementioned graph¹³ shows that the value of UPI based digital payment from financial year 2017 to 2021 has seen a steep rise *i.e.*, from INR 69.5 billion in FY 2017 to INR 41039.58 billion in FY 2021. Since April 2016, UPI has become synonymous to a rapid digital payment which has seen an exponential growth trajectory to cross over 200 cr transactions a month. This is further expected to grow 10x over the next 3 years¹⁴. In FY 2018-19, UPI accounted for 17% of the total 31 billion digital transactions in the country. The next fiscal year saw UPI's share rising to more than 27% as it processed 12.5 billion transactions of the total 46 billion digital transactions. In FY 2020-21, UPI accounted for 40% of the total 55 billion digital transactions¹⁵. As of August 2021, UPI has 22+ crore users who did 3.5 billion financial transactions in August, aggregating to a settlement value of 6.39 lakh crore¹⁶. The same is represented graphically as under:

¹³ https://www.statista.com/statistics/1171872/india-value-of-digital-payments/

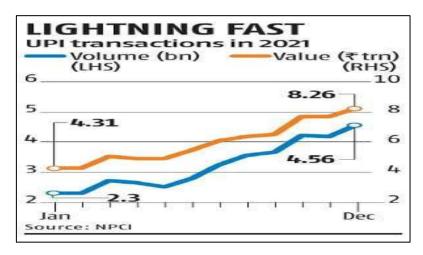
¹⁴ https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/oct/doc2021101211.pdf

¹⁵ Ibid

¹⁶ Ibid







- 231. Based on the foregoing analysis, the Commission is of the view that relevant product market in the instant matter can be defined as 'market for apps facilitating payments through UPI', which is a unique relevant product market.
- 232. In relation to relevant geographic market, it is noted that conditions of competition for supply of UPI apps in homogenous across India including the regulatory framework. As a result, the Commission deems it appropriate to consider 'India' as the relevant geographic market for apps facilitating payments through UPI.
- 233. Therefore, in view of the above analysis it can be stated that the relevant market in the instant case may be defined as 'market for apps facilitating payment through UPI in India'.
- 234. To summarize, the Commission determines following five relevant markets in the present matter:
 - a. Market for licensable OS for smart mobile devices in India
 - b. Market for app store for Android smart mobile OS in India
 - c. Market for apps facilitating payment through UPI in India





- 235. Further, the Commission also holds Google to be dominant in the first two relevant markets *i.e.*, market for licensable OS for smart mobile devices in India and market for app store for Android smart mobile OS in India.
- 236. After delineation of the relevant market as well as determination of dominance of Google in these markets, the Commission now proceeds to examine the alleged conduct as to whether the same amounts to abuse of its dominant position by Google, in violation of Section 4 of the Act.

Assessment of alleged abuse of dominant position by Google

- 237. The Commission notes that the instant case relates to the alleged abuse of dominant position by Google in its Play Store policies as well as its UPI app, in contravention of the provisions of Section 4 of the Act. In terms of Section 4 of the Act, an enterprise or a group, enjoying a dominant position in a market, is prohibited from abusing its dominant position in the relevant market. Section 4(2) of the Act lists out various conducts which are stated to tantamount to abuse of dominant position. At this stage, it would be prudent to reiterate the provisions of Section 4(2), which reads as follows:
 - (2) There shall be an abuse of dominant position under sub-section (1), if an enterprise or a group, —-
 - (a) directly or indirectly, imposes unfair or discriminatory—
 - (i) condition in purchase or sale of goods or service; or
 - (ii) price in purchase or sale (including predatory price) of goods or service.

Explanation.— For the purposes of this clause, the unfair or discriminatory condition in purchase or sale of goods or service referred to in sub-clause (i) and unfair or discriminatory price in purchase or sale of goods (including predatory price) or service referred to in sub-clause (ii) shall not include such discriminatory condition or price which may be adopted to meet the competition; or





- (b) limits or restricts—
 - (i) production of goods or provision of services or market therefor; or
 - (ii) technical or scientific development relating to goods or services to the prejudice of consumers; or
- (c) indulges in practice or practices resulting in denial of market access in any manner; or
- (d) makes conclusion of contracts subject to acceptance by other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts; or
- (e) uses its dominant position in one relevant market to enter into, or protect, other relevant market.
- 238. Based on the allegations against Google, the DG has identified 3 different issues for determination *i.e.*, whether Google has abused its dominant position or not in respect of each of such alleged conduct.
 - Issue 1: Whether making the use of Google Play's billing system (GPBS), exclusive and mandatory by Google for App developers/owners for processing of payments for App and in-app purchases and charging 15-30% commission is violative of Section 4(2) of the Act?
- 239. The Informant in Case No. 07 of 2020 averred that Google's Payment Policy specifically provides that developers charging for apps and downloads from Google Play must use Google Play's payment system. The Payment Policy further provides that developers offering products within another category of app downloaded on Google Play must use Google Play In-app Billing as the method of payment. By making listing of an app on Play Store conditional on the app using Play Store's payment system and Google Play In-App Billing for charging their users, the Informant alleges that Google is imposing a "take it or leave it" condition on all app providers. If apps do not comply with Google's demand of





using Play Store's payment system and Google Play's In-App billing, they will not be able to access more than 90% of the target users in India, which is not a feasible option for any app provider.

- 240. The Informant further averred that this condition has been "imposed" can be further demonstrated by the fact that the Play Store charges a 30% commission from app providers for allowing them to use the Play Store's payment system and Google Play In-App Billing. If the app providers had an option, they could have preferred using alternative payment aggregators which charge a much lower commission and are established and trusted names in the online payment universe. The Informant alleges that by making listing on Play Store conditional on the apps using Play Store's payment system and Google Play In-App Billing, Google has imposed an unfair condition on both sides of the platform, *i.e.*, app providers as well as users. The condition imposed by Google is unfair to the app providers as it restricts their choice in terms of preferred payment partners and preferred modes of payment. The condition being imposed by Google is unfair to users as their choice regarding mode of payment is being restricted.
- 241. The Informants in Case Nos. 14 of 2021 and 35 of 2021 also made similar allegations *i.e.*, (i) mandatory use of Google Play Billing System (GPBS); and (ii) charging high service fee of 15-30% from App developers.
- 242. The DG based on its investigation has concluded that conduct of Google amounts to violation of the provisions of Section 4(2)(a)(i), Section 4(2)(a)(ii), Section 4(2)(b), Section 4(2)(c) and Section 4(2)(e) of the Act. Google on the other hand has contested the findings of the DG.
- 243. The Commission has perused the Investigation Report, response of the Parties thereon and material available on record. The observations of the Commission on this issue are detailed in succeeding paragraphs.





- 244. At the outset, the Commission notes that for distributing an app through the Google Pay Store, an app developer is required to agree to the terms set out in the Developer Distribution Agreement (the DDA) and, under the DDA, the Developer Program Policies (the DPP). Further, if the app developers want to distribute paid apps or enable in-app purchases, they also need to agree with the Google Payments Terms of Service-Seller (IN). Therefore, following three main documents contain the terms and conditions which govern relationship between Google and App developers who want to distribute their paid Apps through Google Play Store or enable in-App purchases are:
 - 1. Developer Distribution Agreement (DDA)
 - 2. Developer Program Policies (Payments within the heading Monetization and Ads)
 - 3. Google Payments Terms of Service-Seller (IN) (GPTS)
- 245. The DDA is the principal agreement between the App developer and Google regarding distribution of Apps. Section 2.1 of the DDA reads as under:
 - "2.1 This agreement ("Agreement") forms a legally binding contract between You and Google in relation to Your use of Google Play to distribute Products. You are contracting with the applicable Google entity based on where You have selected to distribute Your Product (as set forth here). You acknowledge that Google will, solely at Your direction, and acting pursuant to the relationship identified in Section 3.1, display and make Your Products available for viewing, download, and purchase by users. In order to use Google Play to distribute Products, You accept this Agreement and will provide and maintain complete and accurate information in the Play Console." 17

https://play.google.com/about/developer-distribution-agreement.html. The App developer is referred as "You" and Products is defined as: Software, content, digital materials, and other items and services as made available by Developers via the Play Console.





246. One of the primary allegations, in the present matter, is mandatory use of Google Play Billing System (**GPBS**) for distributing paid apps as well as in-app paid content by the app developers to the users. Google defines and describes the Google Play Billing System as:

"Google Play's billing system is a service that enables you to sell digital products and content in your Android app."

- 247. GPBS is the proprietary billing system of Google. It is an App developer facing system whereby the App developers create account with Google. Further, Google remits App <u>developers</u> the payments collected from users of these Apps who (i) purchase the App from the Google Play Store; or (ii) make purchases of digital goods/services and/or subscriptions within the App. In the process, Google deducts its "service fee" or commission for facilitating this process of collecting payments from users and remitting to App developers.
- 248. The relevant extract of Google payment policy (DPP)¹⁸ for Google Play is as under:

"Payments

- 1. Developers charging for app downloads from Google Play must use Google Play's billing system as the method of payment for those transactions.
- 2. Play-distributed apps requiring or accepting payment for access to in-app features or services, including any app functionality, digital content or goods (collectively "in-app purchases"), must use Google Play's billing system for those transactions.....

Examples of app features or services requiring use of Google Play's billing system include, but are not limited to, in-app

¹⁸ https://support.google.com/googleplay/android-developer/answer/9858738





purchases of:

- Items (such as virtual currencies, extra lives, additional playtime, add-on items, characters and avatars);
- subscription services (such as fitness, game, dating, education, music, video, service upgrades and other content subscription services);
- app functionality or content (such as an ad-free version of an app or new features not available in the free version); and
- cloud software and services (such as data storage services, business productivity software, and financial management software).

(Emphasis Supplied)

- 249. Google Play's Payments Policy is a part of Google's mandatory Developer Program Policies and Developer Distribution Agreement which have to be agreed to by all app developers who want to list their app on the Play Store, without any scope for changes / negotiations. The DDA states that the agreement forms a legally binding contract between App developer and Google in relation to App developers to use of Google Play Store to distribute their Apps. The Google Play's Payment Policy sets out specific rules in relation to apps that are proposed to be distributed through the Play Store. As reproduced above, Google's Payment Policy specifically provides that, "developers charging for apps and downloads from Google Play must use Google Play's billing system...", (emphasis supplied). Thus, payments for all paid downloads and IAPs must be routed through GPBS, and alternative payment systems / processors cannot be used even if the app developer and the user would like to use an alternative payment system / processor.
- 250. Google's Payment Policy further states that IAPs include any payment for: (i) virtual game products, including coins, gems, extra lives or turns, special items or equipment, characters or avatars, additional levels or playtime; (ii) app functionality or content, such as the ad-free version of an app or new features not





available in the free version; (iii) subscription services, such as subscription for streaming music, videos, books, or other media services; digital publications, including when bundled with a physical edition; and social networking services; and (iv) cloud software products, including data storage services, business productivity software and financial management software.¹⁹

- 251. The Investigation has also revealed that Google strictly monitors compliance with the Developer Program Policies through a review process. At the time of submitting an app for review itself, app developers have to specify to Google whether they offer IAPs.
- 252. Thus, Google requires the App developers to exclusively and mandatorily use the Google Play's Billing System (GPBS) not only for receiving payments for Apps (and other digital products like audio, video, games) distributed/sold through the Google Play Store but also for certain in-app purchases *i.e.* purchases made by users of Apps after they have downloaded/purchased the App from the Play Store. Further, the mandatory and exclusive use of Google Play's Billing system has been clearly stated by Google in the page titled "*Understanding Google Play's Payments Policy*"²⁰. The relevant part reads as under:

"...all developers selling digital goods and services in their apps are required to use Google Play's billing system. Any existing apps currently using an alternative in-app billing system will need to remove it to comply with this update."²¹

(Emphasis Supplied)

The only occasions when the policy is not applicable are: (i) for the purchase or rental of physical goods (such as groceries, clothing, housewares, electronics); (ii) for the purchase of physical services (such as transportation services, cleaning services, airfare, gym memberships, food delivery, tickets for live events); (iii) for a remittance in respect of a credit card bill or utility bill (such as cable and telecommunications services); (iv) for when payments include peer-to-peer payments, online auctions, and tax exempt donations; etc.

 $[\]underline{\text{https://support.google.com/googleplay/android-developer/answer/10281818?hl} = \underline{\text{en}}$

https://support.google.com/googleplay/android-developer/answer/10281818#zippy





- 253. Therefore, if app developers do not comply with Google's demand of using Play Store's payment system (*i.e.*, Google's Play Store Billing and In-App Billing System), they are not permitted to list their apps on the Play Store, and therefore, will not be able to access potential customers using Android based smart devices, which is not a feasible option for any app developer.
- 254. Further, the app developers cannot not lead users to an alternative payment method other than GPBS within an app distributed on Google Play.²² In particular, (W)ithin an app, developers may not lead users to a payment method other than Google Play's billing system unless permitted by the Payments policy. This includes directly linking to a webpage that could lead to an alternate payment method or using language that encourages a user to purchase the digital item outside of the app.²³ Relevant extracts of the Section 4 of Google Play's Payment Policy is reproduced hereunder:

"... apps may not lead users to a payment method other than Google Play's billing system. **This prohibition includes, but is not limited to, leading users to other payment methods via:**

- *An app's listing in Google Play;*
- *In-app promotions related to purchasable content;*
- In-app webviews, buttons, links, messaging, advertisements or other calls to action; and
- In-app user interface flows, including account creation or signup flows, that lead users from an app to a payment method other than Google Play's billing system as part of those flows."

(Emphasis Supplied)

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²² Section 4 of Google Play's Payments policy, available at

https://support.google.com/googleplay/android-developer/answer/9858738

²³ https://support.google.com/googleplay/android-developer/answer/10281818?hl=en. See Frequently asked questions and in particular 'Can I communicate with my users about alternative ways to pay?'





- 255. Thus, the Investigation has revealed that in addition to imposing a mandatory obligation to use GPBS, Google also restricts the ability of app developers to inform consumers within an app of the ability to purchase in-app content elsewhere, such as on a website ('Anti-steering Provisions'). The Commission is of the view that app is the primary and, in most cases, only medium for the app developers to communicate with their users and as such, critical for app developers. The app developer should have freedom to choose their communication channel to interact with their users to promote and offer their services. Any restriction on app developers in this regard is an unfair imposition as it impede the ability of app developers to increase their usage/ membership.
- 256. After examining the various relevant clauses of the contractual arrangements between Google and app developers, the Investigation has thereafter examined the service fee charged by Google. The DG has noted that Google Play Store is working as an online marketplace platform for sale/distribution of Apps for end users of Android smartphones in India. In doing so, Google levies charges a onetime fee of \$25 for onboarding/hosting Apps on its platform. It also charges the App developers fee on purchase of apps and in-app purchases ("Service Fee"). Thus, hosting fee and Service Fee can essentially be seen as the price charged by Google Play Store for facilitating the sale/distribution on the platform. This Service Fee has been alleged to be unfair and discriminatory in the present case.
- 257. Service Fee is charged by Google from App developers who distribute either (a) paid Apps on the Google Play Store; and/or (b) charge for in-app purchases of digital goods or subscriptions. The Investigation has revealed that as on 06.01.2022²⁴, this service fee is as under:

²⁴ https://support.google.com/googleplay/android-developer/answer/112622?hl=en

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- 257.1. From 01.07.2021, service fee is 15% for the first USD 1 million of earnings for all App developers enrolled in the 15% service fee tier.
- 257.2. Service fee is charged @ 30% for earnings in excess of USD 1 million each year.
- 257.3. For developers not enrolled in the 15% service fee tier by 01.07.2021, the service fee of 30% applies until enrolment has occurred.
- 257.4. From 01.01.2018, Google lowered its fee for subscriptions to 15% for subscribers who maintained a subscription service for more than 12 months. However, w.e.f. 01.01.2022 Google announced that from this date the service fee for *all* subscription products will be 15%.
- 258. Further, the policy update (announced on 16.03.2021 and applicable from 01.07.2021), require App owners/developers to enroll in the *15% service fee tier* in order to avail this discount of 15% on the 1st million dollars (USD) that they earn in a year.²⁵ Also, the App developers are required to have an "Account Group" whereby all the Associated Developer Accounts will be notified to Google.²⁶ Thus, if an App developer has more than one paid App or Apps containing in-app purchases, they will be considered to be part of one Account Group and accordingly the 1 million dollars (USD) will be calculated on the basis of the cumulative income of all the apps.
- 259. Google further reduced the service fee for apps with e-books and on demand music streaming services from 15% to 10%. However, in order to avail this discounted fee, the app owner has to fulfil the eligibility requirements as per "Play Media Experience Program".²⁷

²⁵ https://support.google.com/googleplay/android-developer/answer/112622?hl=en

Case Nos. 07 of 2020, 14 of 2021 and 35 of 2021

²⁶ https://support.google.com/googleplay/android-developer/answer/10632485

²⁷ Sameer Samat (VP of Product Management, Android & Google Play), "Evolving our business model to address developer needs": https://blog.google/intl/en-in/products/evolving-our-business-model-address-developer-needs/





- 260. Therefore, the following points emerge with regards to service fee:
 - 260.1. The general service fee applicable on purchase of Apps and in-app purchases is 30%.
 - 260.2. For those developers who enrol for the 15% service fee tier, the service fee will be reduced to 15% for earnings up to USD 1 million in a year, from 01.07.2021.
 - 260.3. For subscription services, 15% service fee will be applicable starting from 01.01.2022.
 - 260.4. For apps with e-books and on demand music streaming services the service fee can be 10% if they enrol in the "Play Media Experience Program". The Play Media Experience program contains specific eligibility requirements pertaining to integration of the Apps with specific Google platforms and APIs, for example the music apps are required to integrate with WearOS, Android Auto, Android TV, and Google Cast platforms.
- 261. It is also noted that through various blog posts and otherwise, Google has been announcing/clarifying the scope, applicable fee and date of implementation of its payment policy. These enforcements of Google's policy of mandatory use of GPBS announced *via* different blog posts starting 28.09.2020 have been summarily tabulated hereunder:

Changes (post-September 2020) to Google Play Store payments policy and its enforcement

S. No	Date of Announceme	Relevant Issue and Remarks
•	nt	
1.	28.09.2020 ²⁸	Enforcement of (i) mandatory use of GPBS after

Sameer Samat (VP Product Management), "Listening to developer feedback to improve Google Play": https://android-developers.googleblog.com/2020/09/listening-to-developer-feedback-





S.	Date of	Relevant Issue and Remarks
No	Announceme	
•	nt	
		30.09.2021 and (ii) 30% service fee
2.	$05.10.2020^{29}$	Enforcement of mandatory use of GPBS extended
		till 31.03.2022 for developers based in India
3.	$16.03.2021^{30}$	Starting 01.07.2021, service fee reduced from
		30% to 15% for the first \$1M (USD) revenue
		each developer earns every year.
4.	16.07.2021 ³¹	(Overseas) Developers given an option to request

 $\underline{to.html.} \ \ Also, \ \underline{https://blog.google/intl/en-in/products/platforms/listening-to-developer-feedback-to/.}$

Few extracts are as follows:

- "...We've always required developers who distribute their apps on Play to use Google Play's billing system if they offer in-app purchases of digital goods, and pay a service fee from a percentage of the purchase......we have clarified the language in our Payments Policy to be more explicit that all developers selling digital goods in their apps are required to use Google Play's billing system......But for those who already have an app on Google Play that requires technical work to integrate our billing system, we do not want to unduly disrupt their roadmaps and are giving a year (until September 30, 2021) to complete any needed updates..."
- Purnima Kochikar (Director of Business Development, Games & Applications, Google Play), "Google Play's billing system: Update": https://blog.google/intl/en-in/products/platforms/google-plays-billing-system-update/. Few relevant extracts are as follows:
 - "...And we're also extending the time for developers in India to integrate with the Play billing system, to ensure they have enough time to implement the UPI for subscription payment option that will be made available on Google Play -- for all apps that are yet to launch, or that currently use an alternative payment system, we set a timeline of 31st March 2022..."
- Sameer Samat (Vice President, Android and Google Play), "Boosting developer success on Google Play": https://blog.google/intl/en-in/products/platforms/boosting-developer-success-on-google/. Few relevant extracts are as follows:
 - "...Starting on 1st July, 2021 we are reducing the service fee Google Play receives to 15% for the first \$1M (USD) of revenue every developer earns each year..."
- ³¹ Purnima Kochikar (VP, Play Partnerships), "Allowing developers to apply for more time to comply with Play Payments Policy": https://android-





S.	Date of	Relevant Issue and Remarks
No	Announceme	
•	nt	
		a 6-month extension, which will give them until
		31.03.2022 to comply with the Payments policy.
5.	21.10.2021 ³²	Service Fee on subscriptions reduced from 30% to
		15%, further reduction of service fee on audio,
		video streaming services from 15% to 10%
6.	10.12.2021 ³³	Enforcement of mandatory use of GPBS extended
		till 31.10.2022 for Indian developers

262. Relevant excerpts from the announcement made on 10.12.2021 are as follows:

"...In 2020, we clarified the language in our Payments policy to be more explicit that all developers selling digital goods and services in their apps are required to use Google Play's billing system. Apps using an alternative in-app billing system will need to remove it in order to comply with the Payments policy.

We always strive to work with our developer community to help keep their apps on Play while they make any needed changes. While most developers have already complied with this long-standing policy, we gave a one year

<u>developers.googleblog.com/2021/07/apply-more-time-play-payments-policy.html.</u> Few relevant extracts are as follows:

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[&]quot;...After carefully considering feedback from both large and small developers, we are giving developers an option to request a 6-month extension, which will give them until March 31, 2022 to comply with our Payments policy..."

Sameer Samat (VP of Product Management, Android & Google Play), "Evolving our business model to address developer needs": https://blog.google/intl/en-in/products/evolving-our-business-model-address-developer-needs/. Few relevant extracts are as follows:

[&]quot;....we're decreasing the service fee for all subscriptions on Google Play from 30% to 15%, starting from day one....... Ebooks and on-demand music streaming services, where content costs account for the majority of sales, will now be eligible for a service fee as low as 10%...."

FAQs on payments policy page of Google,: https://support.google.com/googleplay/android-developer/answer/10281818#zippy=%2Cwhy-is-the-payments-policy-compliance-deadline-different-for-developers-in-india





grace period for any that needed to make changes to their apps. Based on developer feedback, we gave eligible developers the option to request an additional six months, giving them more than 18 months to bring their apps into compliance. We continue to work with developer partners to meet the evolving needs of our ecosystem.

Starting June 1, 2022, any app that is still not compliant will be removed from Google Play.

Developers in India have until October 31, 2022 to comply due to unique circumstances with the payments landscape in the country..."

- 263. Based on the above, the Commission notes that the payment policy of Google required app developers offering paid apps or in-app purchases (IAPs) to use GPBS mandatorily. However, the app developers who were using third party payment processors were given time till 31.10.2022 to shift to GPBS for these services. In other words, the app developers would not be allowed to use third party payment processors for paid apps or IAPs and they have to shift to GPBS compulsorily.
- 264. In this regard, it is pertinent to note that ADIF in its submissions stated that gaming apps are presently mandatorily required to use GPBS. ADIF also submitted a letter from an app developer in the gaming industry wherein the said app developer had stated that "... We use GPB as we have no other option but to use the same as we have been explicitly told by Google that we would be de-listed from the Play Store if we do not use their payment system as our apps are in the gaming category, and it is mandatory to use their billing system. Therefore, we have no option but to only have GPB as a payment method and thus, it is impossible for us to avoid the commission charged by Google on the GPB..." Google has also mentioned in its submissions that "...it had always been clear that gaming developers are required to use GPB for transactions on their Google Play-distributed games..." Google has also stated that "...

...". Based on these





statements, the Commission notes that though Google has extended the date for app developers to comply with its policy related to GPBS but gaming apps which represent significant portion of transactions on Play Store, were already required to mandatorily use GPBS.

- 265. The DG during its investigation has also examined changes introduced in the scope of its payment policy by Google over the years. For this purpose, the Investigation has examined all DDAs submitted by Google along with the Developer Program Policies (DPP) and transaction/Service Fee charged by Google prevalent at different points of time when Google revised the DDA. The Investigation has concluded that Google has gradually increased the scope of the mandatory requirement of use of its own payment/billing system (currently GPBS) by explicit additions in the policy.
- 266. The Commission notes that Google Play's Payments Policy which is a part of Google's mandatory Developer Program Policies, have to be agreed to by all App developers who want to list their app on the Play Store, without any scope for changes / negotiations. Google's Payment Policy specifically provides that developers charging for apps and downloads from Google Play must use Google Play's payment system, *i.e.*, GPBS for both paid app downloads as well as IAPs. If App developers do not comply with Google's demand of using GPBS, they are not permitted to list their apps on the Play Store.
- 267. On account of the mandatory applicability of the GPBS, the App developers would not be able to use the payment processing system of their choice for facilitating app purchases and in-apps purchases of digital products.
- 268. As already noted, Google's Android is the most widely used smart device ecosystem in the country (with more than 90% coverage in terms of smart devices sold in a year) and Google's Play Store acts as the gatekeeper between app store





and the smart device user. As a result of its financial might and its control over the entire ecosystem, Google undoubtedly has a much stronger bargaining position *vis-à-vis* App developers. App developers and users have no bargaining power *vis-à-vis* Google and are forced to accept terms that deter legitimate competition and increase their costs of operation. The app developer has no choice but to agree to the terms and conditions unilaterally decided by Google, otherwise they will not be able to access a vast pool of potential Android users in India. The Commission is of the view that gatekeepers like Google should not use their unassailable position to require the app developers, which are dependent on them, to use any of their additional or other service together with its core services *viz.* app store services. It detriments the app developers by reducing its ability to choose its business partners in respect of these additional or other services and also affects their ability to offer innovative solutions as they have to contend with what is being offered by the gatekeeper.

269. Further, the anti-steering provisions exacerbate the situation by prohibiting the app developers from directing the users towards third party payment processors or even to their own websites. The app developer by using third party payment processors may offer greater benefits and innovative features to the app users. Further, the app developers are also restrained from *using language that encourages a user to purchase the digital item outside of the app* by virtue of Anti-steering Provisions. The DG has also noted that the practices followed by Google, also results in restricting app users from benefiting from the discounts and cashbacks offered by banks and other financial institutions that could have been availed by users by using alternative payment processing systems. Thus, app developers which otherwise had option to use payment processor of their choice would have to use GPBS.





Discriminatory Practices

270. The DG has also examined whether Google is also following discriminatory practices by not using GPBS and thus, the resultant service fee for its own applications. In this regard, relevant extracts form the submissions of Google are as follows:

	Google apps, are subject to the same set of rules per 2020, Google announced a clarification of its
•	lear that apps that sell access to digital content
o	Google Play's billing system. Developers not
	were given a grace period until March 31, 2022
to comply.	
''	
66	
11. As explained ab	ove, Google's own apps generally already use
Google Play's billing sy.	stem. Google will require those Google apps that
do not already use Goo	gle Play's billing system to make the necessary
updates.	
	,,

271. In this regard, it is also relevant to note the submissions of ShareChat, the relevant extract of which is reproduced below:





"An even more egregious distortion of the market is in the context of our Moj App, which is a short-video platform where users are able to create, share and view videos. One of the major competitors of Moj is YouTube, the video sharing platform owned by Google. It is industry practice for video sharing platforms to institute some form of monetization programmes by which users/creators who create a high number of popular videos get remunerated by the platforms for the quality content they create. Such users form an extremely important part of the content supply side and as a result Moj and YouTube compete for the same creators in the supply side market. In a manner similar to ShareChat (outlined above), the rollout by the Company of in-app payments and gifting by users to creators within the Moj app is imminent. Given that these payments and gifting come within the purview of the mandatory applicability of Google IAP and the consequent 30% commission, it will significantly and adversely affect Moj's ability to attract and retain creators as it represents an exorbitant cost to Moj and a distortion in the economics in the content supply side of the market. Given such cost does not apply to YouTube, this materially and adversely affects the ability of video sharing platforms to compete with YouTube. Consequently, the result is the exploitation by Google of its dominance in the app-store market in India to impose an unreasonable and illegal tie-in arrangement, which not only is an abuse of dominant position in the primary app-store market, but also has significant material adverse effect in downstream markets where Google itself may be a direct competitor."

272. Thus, ShareChat disclosed that Google discriminates by not implementing its policies for YouTube. In this regard, the Investigation has also examined agreements for availing their services for in-app purchases on These agreements have been entered into between Google and the respective hus, instead of using GPBS, YouTube has directly engaged with third-party payment processors for processing the payments. It is further noted that YouTube is paying a fee of for processing payments as well as IAPs in respect of its own Apps, whereas by imposing a service fee of onto other apps, Google is putting its rivals at a disadvantage. Google in its submission has





also admi	itted that "			
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				,

Based on the same, it is noted that while YouTube has been given the liberty to use third party billing system and thereby, bypassing GPBS and the resulting applicable service fee of Google, the rivals are being continuously forced to use GPBS and pay a service fee of 15-30%. Thus, it is noted that Google has not subjected its own app to the conditions and service fee, as being forced upon the other apps. These discriminatory practices result in competitive disadvantage to the competitors of Google in the downstream market, by increasing their cost.

273. The discriminatory practices directly harms the app developers as it increases their costs and is exploitative for the App developers and App users in India. The App developers have two choices, either to absorb this increased cost or to pass on the increased cost on to the end users of their apps. If app developer absorbs the increased cost, it affects their margins and leaves lesser amount to be spent on research and development activity for improvement of the quality of their apps. Decrease in the quality of apps directly harms the consumers as they will get lower quality at same price. Moreover, lesser investment in innovation also affects the ability of App developers to effectively compete in the downstream markets. If the app developer chooses to pass-on the increased cost of apps to the app users that will directly harm the consumers as they have to pay higher price for the same services, consequently consumers will either reduce or stop using the apps. This may lead to exit of the apps from the market and thereby reduce competition in the Indian app economy.

Access to Data

274. The Commission while directing the Investigation in the matter observed that "...it also needs to be seen whether Google would have access to data collected from the users of its downstream competitors which would enable it to improve its





own services. However, such competitors may not have access to this data for improvisation/innovation of their own app. This would result in a competitive advantage to Google over its competitors...". Accordingly, the DG has also examined as to whether access to data of downstream competitors by Google would give any competitive advantage to Google.

275.	The DG during its Investigation has examined policies/ agreements which govern
	data collection and usage practices by Google. In this context, the Investigation
	has examined the payment processing services agreement executed between
	. It is noted that Google
	has access to different types of personal data of the users including the data related
	to
	".

- 276. In this relation, it is also pertinent to refer to the relevant extract of the reply filed by Google, which is reproduced below:
 - "...2(xiv) It is observed in clause 9.2 of the DDA that Google collects certain usage statistics from Google Play and Devices. Please provide examples of such statistics collected by Google from apps pertaining to the following categories: (i) music streaming; (ii) e books/ audiobooks; (iii) video streaming; (iv) online games; (v) dating apps; (vi) maps; (vii) email services; (viii) cloud services.
 - 17. Developers that distribute their apps on Play have access to the Play Console. This allows developers to easily upload their apps on Google Play (e.g., choosing distribution countries and distribution prices), and provides extensive analytics tools in real time around their app's performance, ratings, and how sales are developing. There is no restriction on the app analytics providers that developers can use to assess the performance of their apps. The majority of the data available to developers through the Play Console can be downloaded by the developer, and analysed using any





third party analytics provider of their choice, such as App Annie, or by the developer themselves. In addition, app developers can collect within their app user data for their own purposes and analyse that data on their own and/or outsource the analysis to third party providers.

- 18. Google collects certain statistics and data that are also shared <u>in part</u> with developers through the Play Console:
 - a. Device information and when the device has accessed Google's systems:
 - b. In-store user activities (such as searches, listing impressions, and preregistration requests);
 - c. User information (such as registered country and language preference) and user-triggered events (such as installs, updates, uninstalls, and purchases);
 - d. Subscription initiation and state (such as total, new and cancelled subscriptions, along with revenue details);
 - e. User-generated ratings and reviews;
 - f. App usage information (such as app opens, game achievements, scores, and other developer-nominated events);
 - g. App technical performance data (such as crashes, ANRs, stack-traces, Apps size, and security vulnerabilities);
 - h. Depending on a user's privacy settings, Google also may collect Android usage and diagnostic data (for example, battery level, how often a user uses their Apps and which Apps may cause their device to crash or freeze).
- 19. On the Play Console Policy Centre, Google publishes guidance for developers on the type of data they can access. As explained in this guidance, to protect users' privacy, the data made available to third party developers is typically made available on an aggregated or anonymized basis.

277. Google has further submitted that,

- 14. As explained on Google Play's support page "Share usage & diagnostics information with Google", if a user turns on usage and diagnostics, the device sends information to Google about what is working and what is not. For example, a device can send information like:
 - a. Battery level
 - b. How often the user uses its apps
 - c. Quality and length of the user's network connections (like mobile, Wi-Fi, and Bluetooth) Usage and diagnostics information is used to





improve products and services, like Google apps and Android devices. For example, this information is used to improve:

- a. Battery life: Google can use information about what is using the most battery on the user's device to help make common features use less battery.
- b. Crashing or freezing on devices: Google can use information about when apps crash and freeze on the device to help make the Android operating system more reliable.

16. Google has visibility of certain public reports concerning the usage of third party app stores and sideloading. 10 For example, Epic launched Fortnite on Android in 2018 without distributing its app via Play. Instead, it launched its app in Samsung's Galaxy App Store, achieving 15 million downloads in just 21 days.

17. Moreover, in some	instances,	

- 278. Based on the above, it is noted that Google has access to a significant volume and category of granular data of the app users including complete personal as well as financial transaction information. The mandatory requirement to use GPBS by Google impact the developers' ability to improve their services and compete effectively in their respective domain as the financial transaction data pertaining to their own users is in the complete control of Google and not shared with them in full. Further, by having access to the financial transaction data along with other data, Google is in a position to distort competition in the downstream markets by setting rules for controlling the whole process of development and distributions of apps.
- 279. The Investigation has also approached certain app developers in the music streaming which compete with Google's YouTube music streaming services. The relevant replies are reproduced below:





279.1. Hungama has stated that,

"A competitor having access to our customer data is not desirable as these users could be directly targeted by Google with their own product & services aimed at making such users download similar Google apps For e.g. Since Google owns the Play store & also makes Google Play Billing as the default option to collect payments for subscription, now it has information of all Freemium & Premium users, Google could use this data to target the premium users with their own product with a pricing aimed at attracting these users."

279.2.	Jio Saavn has stated that,
279.3.	Gamma Gaana has stated that,
279.4.	Airtel Digital Limited has stated that,
	,

280. Some other relevant extracts of submissions made by third parties are as follows:





- 280.1. MapMyIndia in its submission has referred to Clause 9 of the *Google Play Developer Distribution Agreement*. The relevant extract from the submission of MapMyIndia is as follows:
 - "....9.2 In order to continually innovate and improve Google Play, related products and services, and the user and Developer experience across Google products and services, Google may collect certain usage statistics from Google Play and Devices including, but not limited to, information on how the Product, Google Play, and Devices are being used.
 - 9.3 The data collected is used in the aggregate to improve Google Play, related products and services, and the user and Developer experience across Google products and services. Developers have access to certain data collected by Google via the Play Console and certain Google Play APls.

MMI Comment: Google does not clarify what it means when it says that it collects information about how the Product and Devices are being "used". It uses this clause 9.2 to collect data of how users use the MMI apps and then clause 9.3 allows it to share this data "across Google products and services" which includes Google Maps. If Google Maps can access any direct or indirect data created through the usage of MMI's navigation and tracking app, it can cause grave prejudice to the latter and cause appreciable adverse effect to competition in India..."

- 280.2. Relevant extract from the submission of Disney+hotstar, is as follows:
 - "7. ...if access to a Disney+ Hotstar subscription service is primarily through its in-app payments through the Google Play Store's inapp payments system as is envisioned from 31 March 2022, Google may have access to the following data:
 - a. The payment instrument used by the user:
 - b. Amount paid;
 - c. Whether the payment is recurring or non-recurring;
 - d. Whether the payment is tied to an advertising id; and
 - e. The phone number of the user.
 - 8. It may be noted that the Google in its privacy policy states that Google collects data about user's purchase activity and activity on third-party sites and Apps that use Google's services. Further,





Google uses this data to provide personalised services, including content and advertisements.

- 9. It is unclear whether such data would be shared with Disney+ Hotstar. However, access to such data will likely allow Google to improve the offerings of YouTube, which is a competitor of Disney+ Hotstar, to provide customized products and services, and targeted advertisements..."
- 281. The Commission is of the view that by having control on the data, Google is in a position to put its competitors in a disadvantageous position in the downstream markets. An app developer who is selling its app through Google Play Store is not in a position to have access to the data generated by its own app. However, Google being in control of Android OS and Play Store is not only able to have control to the data which is primarily generated by a third-party app provider but also in a position to decide whether to share selectively or not to share the same with the App developers. The Commission is of the view that access to this user level transaction data would be useful for the app developers as they would be able to provide targeted offers and promotions based on this data. The Investigation has revealed that this data is not shared with the app developers in a transparent and equitable manner. The app developers can use this data to improve their offerings for the users. Whereas collection of transaction related data of another and competing apps, through GPBS, would enable Google to target users specifically for its own 'paid' apps. However, this would put other app developers (competing with Google's apps) at a significant disadvantage. Google would not have access to such payment data if IAPs and paid app downloads are processed through alternative payment solutions. The Commission also takes note of the submission made by ADIF that concerns get further exacerbated by Google's admission in the writ petition filed by it before the Hon'ble Karnataka High Court bearing WP No. 9399/2022 wherein it states that some of the members of ADIF are its competitors.





- 282. The Commission is of the view that Google would not only have the ability to collect data but also incentive to use this data for its other verticals *viz*. creating consumer profiles and monetizing the same through search advertising services, other paid services offered by Google, identify and enter into new markets, *etc*. As pointed out by ADIF, Google uses this data to support its vast advertisement business by, among other things, selling access to the data back to the developers. The advertising revenue earned by Google through advertisements in Google Play is a testimony to the same.
- 283. Based on the foregoing analysis, the Commission notes that Google would have access to competitively significant data of various apps listed on Play Store. Usage of GPBS by these apps, further adds to collection of additional data points from the users. Access to this data set of the downstream competitors, will result in competitive advantage for Google's owned services. Google would be in a position to use this data to improve its services and better target the potential customers. On the other hand, the downstream competitors would not have access to the complete data set and thus, would suffer competitive harm.

Settlement Period followed by Google

- 284. Another related issue examined by the DG is that of time taken by Google for settlement of payments to the App developers in India. *The relevant extracts from the reply of Google, in this regard, are as follows:*
 - Q. 2(vi) What is the payment settlement time-period with app developers in India after Google receives a payment?

Reply:

"The payouts for Google Play developers are initiated on the 15th day of each month for the previous month's sales. However, payout schedules may vary depending on the developer's product and the payment threshold set by a developer in its payment profile."





"...Q.2(xvi) In response to query 2(vi) sought vide notice dated 24.06.2021 you have stated that the payout for Google Play developers are initiated on the 15th day of each month for previous month's sales. Please explain the rationale for the same. Also, provide copies of internal communication including emails, presentations, minutes of meetings related to the decision to use this timing for payment to app developers.

Reply:

"8. Invoices are paid on the 15th of each month as Google uses a monthly payment system for the payment of invoices and accounting. A number of businesses and employers globally choose the 15th of each month as the date for payment as it is around the middle of each calendar month.

9. By	paying inv	oices a	t the middle o	f ea	ch month,			
	This also	allows	any payments	s to	account f	or refunds,	returns	or
other	charges.							

- 10. Google is not aware of any internal documents explaining the rationale behind the timing for payment to app developers. Google does however inform developers of the timing of the payments to developers on its Payments Center website..."
- 285. During investigation, various app developers have submitted in one form or the other that not only the commission rates charged by the other payment processor(s) in the range of 1-3% per transaction, but even the settlement period is shorter *i.e.*, T+2 (and in some cases T+1). But when the same is compared with Google's terms and conditions, it becomes clear that settlement period is longer.
- 286. In this regard, the Investigation also examined the agreements of Google with payment aggregators in India, for processing of payments on Google Play. The Investigation has revealed that the payment aggregators are liable to settle payments to Google within





	of transaction. Further,
287.	Thus, it is noted that the
	. However, Google
	makes the payments to the app developers only on 15th day of every month. It
	means, if a transaction for in-app purchase has taken place on an app on
	01.01.2022, then Google will make the payment to the app developer on
	15.02.2022 whereas the payment aggregator will process the payment and transfer
	the same to Google

- 288. Google contends that the developer facing billing system and the user facing infrastructure are two different products. However, the Commission notes that the GPBS as well as the payment infrastructure is being offered in an integrated manner through which money paid by the user reaches to the App developer after deductions by Google. By virtue of its conduct, Google retains control over the complete transaction as well as money involved in it and pays the App developers as per its own terms. The exercise of such control is noted to be detrimental to the App developers.
- 289. It is also noted from the submissions of various payment aggregators that as per the RBI guidelines, the payment settlement time period is generally T+1 to T+3 days only. Thus, payment processing service providers take only 1 to 3 days for settlement of payments to App developers from the date of transaction the payment. The Investigation perused the RBI Guidelines dated 24.11.2009 for settlement of payments electronic payment transactions involving intermediaries. As per these guidelines, the payments to merchants which do not involve transfer of funds to nodal banks shall be effected within a maximum of T+2 settlement cycle (where T is defined as the day of intimation regarding the completion of

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transaction). Further, all payments to merchants involving nodal banks shall be effected within a maximum of T+3 settlement cycle.

290. On the basis of foregoing analysis, it is noted that Google receives the payments within a shorter and strict deadline from the payment aggregators. However, Google fails to observe such strict timeline when it comes to making payment to app developers wherein the payments are released after a gap of 15 to 46 days from the day of the transaction. If the app developers would have freedom to choose a payment processor of their choice, they would be able to receive payments (after deducting payment processing charges) in much shorter time limit as prescribed by RBI. Notwithstanding, the Commission observes that Google has not offered any objective justification for its present practise of making payments to app developers on 15th of each month when Google itself get paid within 2-3 days of the transaction. This unjust enrichment on the part of Google is found to be unfair for the app developers especially small app developers for whom regular and prompt cash flows from their users is critical. Google through its conduct is found to have unfairly benefitted at the expense of app developers.

Denial of Market Access

- 291. The DG has also found that mandatory imposition of GPBS by Google for paid apps as well as IAPs amounts to denial of market access for other payment processors operating in the market and thus, violates Section 4(2)(c) of the Act. In this regard, the Commission notes that by virtue of imposition of GPBS, the app developers would be mandated to use Google's services for the processing of payment for paid apps and IAPs. Further, as already stated above, the anti-steering provisions of Google, forbid app developers from re-directing users to websites for payment outside the app environment.
- 292. In the absence of such policy of Google, the app developers can use other payment solutions or develop their own in-app payment processor to process such





transactions. There are various service providers (*e.g.*, PayPal, JusPay and Razorpay, *etc.*) globally and in India, offering payment processing services to app developers. In absence of this mandatory requirement by Google, the App developers could have negotiated the terms and conditions with the payment service providers and benefitted through competition in the market for payment processing services for in-app payment transactions.

- 293. The Commission is of the view that the mandatory imposition of GPBS forecloses the opportunity for other payment processing service providers to serve the app developers in relation to the processing of payments for paid apps and IAPs. This would also discourage app developers from developing its own in-app payment processor. In this regard, it is apt to note the submission made by Disney Hotstar, which is extracted below:
 - "... This arrangement also may disincentivize developers from developing their own in-app payment processing functionalities..."
- 294. In this context, it is important to note the submissions made by few payment aggregators, which are mentioned below:
 - 294.1. Paytm has submitted that,

"Yes, Paytm does consider Google as its competitor in the collection of payments from users of apps on smart mobile devices in India. Google is building a closed wall payment ecosystem for apps which accept payments in the form of paid app downloads and inapp purchases (IAP/s) on the Play Store. This closed wall ecosystem, is particularly detrimental to competition in the PG space, since apps involve a direct engagement between the app developer/merchant and users (particularly with respect to IAPs where there is no involvement of app stores such as the Play Store). Therefore, if through this closed wall ecosystem wherein app developers are only allowed to process IAPs through the app store's own payments system and no other PGs, then PGs would lose all their app related business, as in any event in the case of paid app downloads, the engagement is between the app store and the user





wherein the app developer is not involved. While doing so, Google is benefitting from the hefty commissions that it earns from paid app downloads and IAPs (discussed in greater detail below)."

(Emphasis Supplied)

294.2. Razorpay has submitted that,

"Google's policy change for Play Store, mandating that **certain app categories would need to migrate to the Google Play billing system,** would impact payment aggregators as online payment gateway aggregators would not be able to support such app developers, and transactions undertaken by them, affecting our revenue...".

(Emphasis Supplied)

294.3. Mobikwik has stated that,

"Payments are collected from users of software applications (apps) via two modes namely; (a) payment collection system of the respective software application; and (b) Google Play's in-app billing system. We consider Google as a competitor for the payment mode described under sub point (a) as software applications have multiple payment partners...".

(Emphasis Supplied)

294.4. Infibeam Avenues has submitted that,

"Yes, we consider Google (who collects payment from users of certain Apps) as our competitor.... Additionally we are processing UPI and Debit Cards on zero merchant discount rates (MDR) and Google in its billing policies has mentioned that it is charging 30% fees on transactions processed under play store; Google (who collects payment from users of certain Apps) has dominant position over Android OS and Google Play store; if fair competition isn't monitored in any industry it would lead to monopoly by one player and intern resulting to higher cost of digital products in India and all of the cost would be offloaded to the consumers."

(Emphasis Supplied)

295. Based on the data provided by Google, the Investigation has analyzed the impact of change in Google's policy on Indian app economy. It is noted that in the year 2020, the number of apps which were using GPBS was only of the total apps which are either paid or contain in-app purchases. Therefore, around





the apps which are either paid apps or contain in-app contents were either using an alternative third-party payment processing system or using their own proprietary systems. Google's decision of making GPBS mandatory, through enforcement of its policies, for app purchases and in-app purchases amounts to denial of market access to the third-party payment processing service providers as well as affect those apps which are using their own payment processing system. Further, these apps would also be deprived of commercial freedom to select payment processing partner of their choice.

- 296. Further, as already elaborated, Google's Play Store provides an un-parallel reach to the Android users, amongst all Android app store in India. The Play Store is thus a critical app distribution channel for app developers to reach to vast pool of Android users through a single window. It is the only viable distribution channel available to Android app developers in India. If a developer wants users to discover and download its app, that app must be on the Play Store. The Play Store's market share in combination with the network effects insulates it from competing Android app stores. In order to access this 'must have' distribution channel, the app developers would have to agree to the onerous conditions being imposed by Google *viz*. mandatory use of GPBS. Android app developers have no choice but to use this essential distribution channel to reach app users in India, giving Google the ability to impose restrictions and indulge in anti-competitive conduct such as requiring the exclusive use of GPBS. If the app developers do not agree to the policies of Google, they cannot list their apps on the Play Store and thus, denied access to the market.
- 297. The Investigation has further revealed that by virtue of various policy announcements by Google, various additional categories of apps will be required to only use the GPBS for IAPs (such as fitness, dating and education apps). This will further compound the harms caused to payment processing service providers because it further narrows the scope of the business that is available to them. In





this regard, the DG based on publicly available data has noted that fitness, dating, and education app markets in India are collectively valued at over USD 3 billion. Thus, with the mandatory imposition of GPBS, other payment processing service providers will lose out on this market opportunity, impacting their ability to carry out any innovations and product improvements, which can be catastrophic in such network-effect driven markets. Section 4(2)(c) must be interpreted broadly while keeping the Act's objectives and scheme in mind. Any action taken by a platform with a large network effect would have an impact on business users, preventing them from using other payment processors that offer better terms and conditions, thus constitutes an abuse. Market access is denied in any circumstance that denies a player the ability to participate effectively in the market so that competition is no longer decided on the basis of merit.

298. Google has persistently claimed that mandatory applicability of GPBS will affect only small number of apps in India. The relevant extract from the submission made by Google is as follows:

"Apps using Google Play's billing system where Indian users have made transactions represent a small minority of all apps available on Google Play. For instance, in 2020, paid apps or apps containing inapp purchases distributed by Indian developers, which used Google Play's billing system and for which Indian users transacted, only amounted to less than of the total number of apps available to Indian users."

(Emphasis supplied)

299. In this regard, it is noted that *firstly*, Google's above-mentioned statistic only includes impact on the apps distributed by Indian developers on Google Play Store. It does not include apps distributed by developers based outside India but offering their apps to Android users based in India. *Secondly*, on the basis of data provided by Google, the Investigation has revealed that in the year 2020, there were more than apps for which users transacted with Google play billing system in India. By no stretch of imagination, these many apps can be considered





to be insignificant. Millions of Indian users will be using these apps and transacting with them through GPBS. With the upcoming mandatory imposition of GPBS w.e.f. 01.11.2022, the said numbers are going to increase multi-fold. Thirdly, as already stated above, in the year 2020, the number of apps which were using GPBS was only of the total apps which are either paid or contain in-app purchases and thus, the remaining 80% of such apps, would be required to mandatorily use GPBS going forward.

Averments of Google

- 300. Google has submitted that the requirement to use GPBS does not result in a denial of market access, limit technical development or amount to leveraging. The averments made by Google, while contesting the findings of the DG are summarized below:
 - 300.1. Users and developers benefit from a safe and uniform billing system. As a safe billing system, GPBS helps Google to protect users. A secure billing system increases user trust and willingness to buy online, which helps increase revenues for app developers. Further, GPBS allows Google to efficiently collect its service fee without incurring additional costs to monitor and enforce recovery of service fees or impose an additional administrative burden on developers.
 - 300.2. There is no violation of Section 4(2)(a)(i) of the Act because Google's Payments Policy is fair, and the use of standard terms reduces the potential for discrimination. Further, Google Play's developer policies including the requirement that apps use GPBS for IAPs of digital goods apply to all apps on Google Play, including Google's own app.
 - 300.3. There is no violation of Section 4(2)(c) of the Act because Google is not active in the alleged payment processing market, and as such cannot have





abused that position to deny payment processors access to that market. Google does not carry out payment processing in India. Google subcontracts with third parties to conduct the payment processing for payments made through Google Play. Further, payment processors can and do provide their services through Google Play.

- 300.4. Further, the Investigation Report errs as a legal matter because it fails to examine the relevant market for payment processors, which is much broader than the market for in-app purchases and paid apps. Rather, the Investigation Report simply proceeds on an unverified, unsupported assessment which artificially narrows the market. The relevant precedent also requires the DG to define the relevant market in which the denial is alleged in order to assess whether there has been any anti-competitive effect. Further, the requirement to use GPB for in-app purchases and paid apps cannot possibly deny market access to payment processors. In-app purchases and paid apps on Google Play would comprise an insignificant proportion of the total number and value of transactions on these surfaces.
- 300.5. There is no violation of Section 4(2)(b) of the Act because the requirement to use GPBS does not impact the developers' ability to improve their services and compete. Apart from unsubstantiated statements, the DG has not relied on any other evidence to support the allegations that competition has been distorted or innovation has been prevented by Google's collection and use of data from third party developers. The Report relies merely on speculative theories of what Google may do with data collected.
- 300.6. On Google Play, developers have access to all the necessary data to innovate and compete effectively. Google Play provides access tools, programs, and insights that helps developers reach and engage users so they can grow their apps and games. Google also provides information in





relation to user payment data. Google collects information regarding users' subscription cancellations, and developers are able to view summaries of this information - including their reasons for unsubscribing - through the Google Play Console.

- 300.7. There is no violation of Section 4(2)(e) of the Act because Google does not leverage its alleged dominance in the markets for licensable mobile OS and app stores for Android OS. As noted above, developers have several alternative options to distribute their apps on Android devices, if they do not agree with Google Play's policies and thus, do not wish to distribute through Google Play.
- 300.8. Google's link-out provisions contained in the Payments Policy do not operate as described in the Investigation Report. Google's link-out provisions contained in the Payments Policy, restrict apps' ability to "link-out" to payment systems other than GPBS, including by leading users from the app to other payment methods which serve several legitimate business purposes. However, the Investigation Report mischaracterizes these link-out provisions to suggest they prevent app developers from informing consumers of the ability to purchase in-app content elsewhere.
- 301. The Commission has perused various averments made by Google and its observations are elaborated in succeeding paragraphs.
- 302. The DG investigation brings out that Google Play's Payments Policy is a part of Google's mandatory Developer Program Policies and Developer Distribution Agreement, which have to be agreed to by all app developers who want to list their app on the Play Store, without any scope for changes/negotiations. Google strictly monitors compliance with the Developer Program Policies through a review process. At the time of submitting an app for the review itself, app





developers have to specify to Google whether they offer IAPs. Google requires the App developers to exclusively and mandatorily use Google Play's Billing System (GPBS) not only for receiving payments for Apps (and other digital products like audio, video, games) distributed/sold through the Google Play Store but also for certain in-app purchases *i.e.* purchases made by users of Apps after they have downloaded/purchased the App from the Play Store. Further, app developers cannot, within an app, provide users with a direct link to a webpage containing an alternative payment method or use language that encourages a user to purchase the digital item outside of the app. Further, by virtue of various policy announcements, additional categories of apps are required to only use the GPBS for IAPs (such as fitness, dating, and education apps). All IAPs on these apps would now be redirected to Google's own payment system.

303. Selling of in-app digital goods constitutes an important means for app developers to monetize their creations/innovations. However, for in-app digital goods to be distributed to purchasing users, developers must configure their apps so that all purchases of the digital goods go through Google's payment system, which processes the transactions. The imposed tying represents what the academic literature refers to as vertical integration in digital aftermarkets where monopolistic tech firms condition the use of their platform on the added use of other complementary software or services. Play Store constitutes the main distribution channel for apps on the Android mobile ecosystem, which allows its owners to capitalize on the apps brought to market. While there are other app stores that may be available on Android OS mobile devices, Play Store is by far the largest app marketplace connecting app developers with users on Android ecosystem. Google's control over Play Store, the critical gateway between app developers and users, gives it the power to dictate terms to app developers, and compel them to mandatorily use its own payment system.





- 304. Google claims that GPBS provides a safe billing system which helps Google to protect users. The Commission notes that these arguments of Google are completely devoid of merits primarily for two reasons. *Firstly*, various digital payment processing solution providers in the country, operating under the regulatory framework prescribed by Reserve Bank of India, are providing safe and secured channel for processing digital payments. *Secondly*, Google itself employs few of these payment processors at the backend to process payments in the Play Store and Google has not presented any evidence as to what additional security features are added by Google to make the systems more secure *vis-à-vis* that provided by the other payment processors. *Thirdly*, many app developers of physical goods/services are allowed by Google to use their own system for IAPs through these third-party payment processors. and in-fact prohibited from using GPBS. It clearly reflects the contradiction in the averments made by Google.
- 305. Besides, service fee imposed on apps that compete with Google's proprietary apps, disadvantages Google's rivals and distorts competition dynamic in the apps market. For instance, as the DG investigation brings out, the fee charged by Google on video distribution platforms like ShareChat has not been made applicable to YouTube, which materially and adversely affects the ability of video sharing platforms to compete with YouTube. Google claims that its developer policies are applicable to all apps on Google Play including its own apps. However, evidence on record, clearly establishes that YouTube is not following these policies and thus, not subjected to service fee of Google.
- 306. Google, thus, sets out rules for the Play Store that may implicitly exclude or discriminate against downstream competition. The delayed response of Google in introducing these billing rules which it "modestly" attributes it to its tardiness has a very self-serving motive. In the build up to the network effects Google required app developers to develop apps that will attract consumers to the app stores. Once Google also started developing these competing apps and entered into these





"complementor" markets, its incentives changed. Now Google and complementors became direct competitors, as explained above in the case of YouTube. Once the network effects became operational the Google's incentive was to squeeze maximum rents for itself from its direct competitors, drive their surplus to near zero. In case of single homing users, the complements are left with no bargaining power ex-post. The imposition of the use of GBPS is one such strategy to disadvantage those very complementors that who in the initial years added value to the platform and provided it a competitive edge prior to network effects and other barriers to entry kicked in.

- 307. In addition to making its rival apps less competitive through its discriminatory service fee regime, the tying policy unfairly adds to the competitive advantage of Google's own apps as by having its payment system process all in-app transaction, Google gets access to critical and competitively relevant transaction/consumer data of all its rival apps. Google being in control of Android OS and Play Store is not only able to have control to the data which is primarily generated by a third-party app provider but also in a position to decide whether to share selectively or not to share the same with the app developers.
- 308. ADIF in its submission states that Google uses its control of the Android Appstore ecosystem *inter alia* to confiscate the entire user relationship. This confiscation results in Google having access to a vast amount of extremely valuable user data that Google is then able to exploit. While, Google does get data on app downloads, but it does not get any financial data on transactions within the app done using non GBPS payment systems. With mandatory usage of GPBS, Google will get details of all transactions- amounts, frequency etc, across all apps, thus enhancing Google's ability to track, profile and target users and giving them an unfair advantage over all other companies.

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- 309. Google claims that app developers have access to the necessary data to innovate and compete effectively. However, Google itself admitted that it collects information regarding users' subscription cancellations, and developers are able to view <u>summaries</u> of this information (emphasis added). Google further states that to protect users' privacy, individual payment information of users is not shared with developers. This includes information about the user's payment instruments, the user's name, and personal details such as their billing address, date of birth, etc. Google has submitted that when using Google Play to transact, users would not necessarily expect, or consent to, their private payment data being shared with third parties. However, the Commission notes that app developers are not third parties as is sought to be projected by Google as the users have already decided to transact with the concerned app developer. Google further states that specific data about individual users - is not necessary to compete. The Commission does not find any merit in this assertion of Google. In a data driven ecosystems, on the one hand, Google captures significant volume of data which can be potentially used for its various verticals (which has also not been denied by Google). However, at the same time, Google argues that this data is not necessary for the app developers to improve their products and compete effectively in the market. Thus, the assertion is contrary to its conduct. In any case, it is not for Google to unilaterally decide as to whether the data is required by app developers to improvise their services and offerings. Needless to add and reiterate, the obligations to protect privacy would apply to Google as well app developers. The privacy concerns can be adequately protected by suitable measures through contractual stipulations rather than blanket denial of access to data of their users.
- 310. As the DG investigation has brought out, since Google owns the Play store & also makes Google Play Billing as the default option to collect payments for subscription, now it has information of all Freemium & Premium users, Google has the ability and incentive to use this data to target the premium users with their





own product with a pricing aimed at attracting these users. The harm to competition can be two-fold, one disadvantaging rival apps with access to customer data that can allow it to outcompete them and second also further cement its position in the online target advertisement.

311. It is Google's argument that the fee charged is essentially the distribution fee/service fee for the services they provide to the apps for their in-app purchases and not as a transaction/bill processing fee. Therefore, the processing fee charged by the other payment gateways/ payment processing systems is not the right comparator to assess the reasonability of the fee charged by Google. It is observed that despite the service fee not being a bill payment processing fee, as claimed by Google, Google has started levying the fee simultaneously with the implementation of its policy of mandatory use of GPBS by the apps. It is only when the apps were asked to mandatorily use the GPBS is when the fee was also levied on them. The strategy to delink the two rather appears to be an afterthought in response to the regulatory developments in various jurisdictions. Be that as it may, if the commission/service fee is to be paid by the apps is indeed for the services that they avail from Google Play for in-app transactions, it was incumbent on Google to first provide a clear description of such services and the basis of determination of the fee amount to its users, i.e., the app developers. In the absence of the same, the sudden imposition of a commission which the users find exorbitant, appears to be an unfair imposition on them. Any deviation from a longstanding policy by a dominant platform which has attendant significant financial implication for its users and also the potential to distort competition in the downstream market ought to be objectively justified, which has not been done by Google in the instant case. Google has only provided a broad, vague and nonspecific ground, i.e., the fee is charged for the bouquet of services that app developers get from Google for in-app purchases. On a holistic appreciation of the issue, the manner in which the policy of charging commission from apps has been implemented by Google appears to be an abuse of dominant position, which





was only possible owing to it being the indispensable trading partner for apps in the Android mobile ecosystem.

- 312. The Commission notes that Google has made the use of GPBS mandatory and exclusive for processing of payments for apps and in-app purchases. If the app developers do not comply with Google's demand of using GPBS, they are not permitted to list their apps on the Play Store and thus, would lose out the vast pool of potential customers in the form of Android users. Further, making access to the Play Store dependent on mandatory usage of GPBS for paid apps and in-app purchases is one sided and arbitrary and devoid of any legitimate business interest. The app developers are left bereft of the inherent choice to use payment processor of their liking from the open market. The Commission is of the view that the conduct of Google constitutes an imposition of unfair condition on app developers. It has also been found during investigation that Google is following discriminatory practices by not using GPBS for its own applications i.e., YouTube. Therefore, the Commission concurs with the finding of the DG that Google has imposed unfair and discriminatory conditions in violation of the provisions of Section 4(2)(a)(i) of the Act. This also amount to imposition of discriminatory pricing as Google's own apps i.e., YouTube is not paying the service fee as being imposed on other apps covered in the GPBS requirements. Thus, the Commission is of the view that Google has violated Section 4(2)(a)(ii) of the Act.
- 313. The Commission also concurs with the DG that Google's restrictions for mandatorily using GPBS also have significant negative effect on the improvements and innovative solutions that third party payment processors / aggregators would be able to bring to the market. It takes away the incentives and ability that such payment aggregators would have to innovate in payment solutions designed for IAPs, by restricting their entry into this market. Further, mandatory imposition of GPBS also discourages app developers from developing





its own in-app payment processor especially the free download apps that contain in app purchases in India. Moreover, as already elaborated earlier, Google provides a truncated access to the app developers to the trove of data collected from the apps/ Play Store, while retaining full control over such data for monetization on commercial basis. These practices distort competition and disturb innovation incentives as well as ability of the app developers to undertake technical development and innovate in their respective sphere of business activities. Thus, the Commission is of the view that the practices followed by Google tantamount to limiting technical development in the market for in-app payment processing services in violation of the provisions of Section 4(2)(b)(ii) of the Act.

- 314. The Commission notes that Google's Payments Policy requiring mandatory and exclusive use of GPBS denies the payment aggregators/ payment gateways access to the market for processing of payments and allied services availed by app developers who sell in-app purchases and subscriptions of digital goods and services. Google claims that the DG has failed to examine the relevant market for payment processors, in which the denial is alleged in order to assess whether there has been any anti-competitive effect. Further, IAPs and paid apps on Google Play would comprise an insignificant proportion of the total number and value of transactions to establish any denial of market access.
- 315. The Hon'ble Supreme Court in Competition Commission of India vs. Fast Way transmission Pvt. Ltd. & Ors. (Civil Appeal No. 7215 of 2014), has interpreted denial of market access under Section 4(2)(c) widely, noting that denial of market access 'in any manner' would fall under its ambit, regardless of whether it is a denial of access to competitors or denial of access to players in vertically affected markets. The Commission notes that payment processors are placed vertically with Google in relation to providing Play Store services to the app developers and app users. In the present matter, the practices followed by Google, by virtue of its





dominant position in the app store for Android OS market, results in denial of market access to the payment processors in the vertically affected market. Google argues that DG has not defined the relevant market in which the denial is alleged in order to assess whether there has been any anti-competitive effect. In this regard, the Commission notes that there is no legal requirement to precisely define a separate relevant market where the impact of an abusive conduct takes place. Be that as it may, as already stated above, the dominant position in the app store market has been abused to cause denial to payment processors in general. This is sufficient to give a finding under Section 4(2)(c) of the Act. Further, as already stated, access to Play Store is dependent on agreeing to use GPBS and thus, app developer would lose access to market, if it does not agree to mandatory use of his GPBS. Thus, the Commission finds that the practices followed by Google results in denial of market access for payment aggregators as well as app developers, in violation of the provisions of Section 4(2)(c) of the Act.

- 316. The Commission further notes that by charging high fee from the competing apps and not charging from its own apps Google is able to increase the cost of its competitors in the downstream markets. Further, by having control on the data, Google is in a position to put its competitors in a disadvantageous position in the downstream markets. Moreover, unlike the industry practice of making payment in 2-3 days, Google provide itself a leeway to make the payment to the App developers after a gap of 15 to 46 days from the date of the transaction. This conduct of Google also put the competing apps in the downstream market in disadvantageous position (as already discussed)
- 317. Google claims that app developers have several alternative options to distribute their apps on Android devices, if they do not agree with Google Play's policies and thus do not wish to distribute through Google Play. The Commission is of the view that these theoretical possibilities of alternative distribution channels for the app developers are not substitutable with app stores for various reasons, as





discussed *supra*. Therefore, the app developers are dependent to Google to access the users on its platform. Accordingly, there is no merit in the assertions made by Google in this regard. Accordingly, the Commission is of the view that the practices followed by Google results in leveraging its dominance in market for licensable mobile OS and app stores for Android OS, to protect its position in the downstream markets, in violation of the provisions of Section 4(2)(e) of the Act.

318. To summarize, the Commission finds that Google has violated the provisions of Section 4(2)(a)(i), Section 4(2)(a)(ii), Section 4(2)(b)(ii), Section 4(2)(c) and Section 4(2)(e) of the Act.

Unfair/ Excessive Pricing

- 319. The DG after its Investigation has also found that Google imposes unfair price (*i.e.*, 15-30% service fee), in violation of the provisions of Section 4(2)(a)(ii) of the Act. The observations of the DG, in this regard, are summarized below:
 - 319.1. The service fee of Google is applicable only for paid apps or apps offering in-app purchases of digital content and the same is not applicable to free apps. Google provides payment processing services, through GPBS, to app developers offering paid apps or apps offering in-app purchases of digital content in the Play Store.
 - 319.2. For processing the payments on Play Store for app-purchases and in-app purchases Google has signed Agreements with other payment service providers.
 - 319.3. Google is paying/ paid only transaction/ service fee for processing payments on Google Play. On the other hand, Google charges an exorbitant service fee of 15-30% on all paid downloads and IAPs from App developers. The 30% transaction processing fee is more than times





that of other competing payment gateways in India. The DG noted that the actual cost of the services to Google is significantly less compared to the fee (price) charged by Google from the App developers for providing the same services; the difference in costs for Google (transaction processing costs) and the price actually charged (30% commission) is excessive.

- 319.4. As compared to Google, many payment service providers in India charge a fee within a range of 0-3% only which is levied on per transaction basis and the same varies as per the method/form of payment used. *E.g.*, when the payment transaction is made through a credit card or debit card or net banking, the transaction fee charged by the Payment Service Providers differs in each case. In case of payments processed through UPI, the fee is 0%.
- 319.5. Therefore, the service fee charged by Google for providing the payment processing services is exorbitantly higher than the fee charged by other players for the competing services in Indian market.
- 319.6. Google doesn't provide any additional service to App developers which have in-app purchase option. Thus, Google is charging service fee without providing any additional services to the App developers.
- 319.7. Service fee imposed on App developers by Google is not negotiated.
- 319.8. Google is able to charge exorbitantly high fee from App developers because of unavoidable dependence of App developers on Play Store for distribution of their apps to Android users in India.
- 319.9. Accordingly, the DG found that charging of 15%-30% fee by Google is excessive and therefore unfair in terms of Section 4(2)(a)(ii) of the Act.





- 320. Google on the other hand has contested the findings of the DG. The arguments advanced by Google are summarized below:
 - 320.1. Google is not a payment processor and Google Play's service fee cannot be compared to a payment processing fee. Rather, the service fee supports the hundreds of services provided by Google Play to developers and users. Payment processors facilitate financial transactions between users and businesses through a variety of forms of payment. By contrast, Google Play offers payment processing as one among hundreds of services that help developers create, distribute, and monetize their apps. Payment processing costs account for only a small proportion of Google Play's service fee. Google Play is able to provide developers and users with its feature-rich distribution platform precisely because the service fee covers much more than mere payment processing.
 - 320.2. As a digital storefront, Google Play provides space and support for developers to develop, optimize, and distribute their apps, alongside a checkout service to allow users to purchase, and developers to charge for, certain products. In turn, Google covers its investment in Google Play primarily by charging a service fee when developers sell apps, in-app content, or subscriptions for digital goods and services. Google Play charges, and is entitled to charge, for the hundreds of services and the value it provides.
 - 320.3. Developers that are subject to a service fee pay a proportionate contribution to the maintenance of the platform and the services that Google Play provides. This in turn ensures that smaller developers are not disadvantaged by having to pay a proportionately higher amount than larger, established developers.





- 320.4. Under competition law, unfair pricing is prohibited where the price charged is either excessive or predatory. Further, to establish excessive and predatory pricing, it must be shown that the fee has had an adverse effect on competition. The DG did not satisfy the relevant legal standard and failed to present sufficient evidence to establish that Google Play's service fee is excessive.
- 320.5. It would be highly inappropriate and inconsistent with its previous decisions if the Commission sought to override the service fee model determined by the market and substitute its own judgment as to what the Google Play service fee model ought to be. This would amount to the Commission acting as a price-setting regulator, which it has consistently found is not its role.
- 320.6. Google Play has adopted a fee structure that is fair, reasonable and competitive with other digital content distribution channels, and is intended to maximize the benefits to all stakeholders in the Google Play ecosystem. Under Google Play's fee structure, the overwhelming majority of developers (97%) pay only a nominal registration fee of USD 25 to access Google Play.
- 320.7. Google charges a service fee only when developers charge users a price for apps downloaded through Google Play or in-app purchases of digital content in apps downloaded through Google Play. This structure allows developers to avoid up-front costs when distributing their apps on Google Play, and aligns Google's success with the developers' success, in that Google only receives a fee when app developers generate revenue. Through this business model, the majority of developers (especially new developers trying to build a user base) can access Google Play's app





development tools, the distribution channel and the broader ecosystem for free.

- 320.8. Only 3% of developers on Google Play are subject to a service fee. Moreover, out of those 3%, 99% are eligible for a service fee of 15% or less. Even where it arises, the service fee represents a small percentage (between 10 and 30%) of the price the developer decides to charge. The only developers required to pay a fee of 30% earn more than USD 1 million per year, which based on Google's estimates, would be relevant for
- 321. Both the Informants have supported the abovementioned findings of the DG and have *inter alia* as under:
 - 321.1. Google argues that service fee is the compensation for the services it offers to users and developers, including (i) hosting and distribution, (ii) discovery, (iii) development, (iv) support and compliance, (v) technical infrastructure, (vi) development tools, *etc.* However, the apparent contradiction in Google's claim is that on one end, it claims that the service fee only applies to 3% of app developers and not to the vast majority of 97% of the free apps, but on the other end, it asserts that these services are provided to all apps, whether they are paid or not, and regardless of whether they offer IAP or not. Hence, although these services are provided to all apps, these services are compensated for, by way of service fee, only by the paid apps and IAPs.
 - 321.2. By relying on Google's arguments, it is expressly unfair and discriminatory that while Google claims to be charging a service fee for the services that it is rendering *via* Google Play Store, only 3% of the apps that provide digital goods and services are required to pay the excessive service fee of 30% of





the transaction value in order for Google to recover the costs it has incurred to develop and maintain the Play Store and for providing these very services.

- 321.3. The 97% of developers (including well-known applications like Uber, Ola, Zomato, Swiggy, and MMT, among others) have access to the same services and simply have to pay a one-time registration fee of USD 25 to host/list on Google's platform. The fact that these 97% of apps do not require GPBS in order to function and the remaining 3% of apps do, is the only distinction between them.
- 321.4. Google itself acknowledges in the Reply that only a very small proportion of the service fee for Google Play is ascribable towards the costs of processing payments. The other services offered by Google Play and GPBS account for the majority of the service fee. This alone demonstrates that (i) the other services provided by Google are unrelated to payment processing and are thus used by all developers; and (ii) the fee of 30% is *ex facie* unreasonable and excessive given that the cost of payment processing comprises a minor proportion of the total fee.
- 321.5. By requiring only 3% of apps to subsidize all other apps on the Play Store as well as Google's costs for operating the entire Play Store, Google imposes an unfair, discriminatory, and unlawful fee structure on app developers offering digital goods/services.
- 322. Another connected issue highlighted by Match Group in its submission is that of selection of category of apps on which service fee is imposed by Google. As already stated, service fee of Google is applicable on apps offering digital content. Match Group in this regard has submitted that Google's distinction between apps offering digital content in comparison to those offering physical goods or services is arbitrary. Ride sharing apps such as Uber and Ola, offer a digital platform





connecting two sets of users *i.e.*, a rider and a driver. Google considers these as physical goods / services and permits them to use alternative payment solutions, although Uber or Ola themselves are not providing the cab service. Google however classifies dating services, such as those provided by the Match's portfolio brands, as digital goods / services. Both dating and ridesharing apps, however, share the same fundamental purpose, *i.e.*, matching two people online to meet in the real world for an offline interaction. The distinction between the two is therefore inherently arbitrary. The Commission notes that there are multiple category of apps which are subjected to service fee. Further, within these apps, the service fee varies based on the type of service fee offered by the app. However, as alleged by the Informants, there seems to be ambiguity and not adequate transparency and justification for differential treatment accorded to apps by Google leaving it susceptible to discrimination.

- 323. The Commission has carefully perused the findings of the DG which are supported by the Informants as well as rival submission of Google. The Commission notes India has one of the most robust digital and start-up ecosystems in the world and the same has resulted in rapid digitalization of each and every aspect of the economy. Smart mobile devices have proved to be a gamechanger in this process wherein not only the business activities/ processes have been entirely overhauled but also the delivery of Government services has seen a revolutionary transformation. Any hindrance in this space, by technology players by virtue of their gatekeeper position, is likely to affect the state of competition, innovation incentives, and entrepreneurship.
- 324. Based on the information available on record, the Commission further notes that more than Indian app developers are currently using GPBS and with mandatory imposition of GPBS going forward, this number is only going to grow. Considering, the gatekeeper role played by Google in the Android ecosystem, any unfair and discriminatory conduct on its part can prove to be detrimental to the





growth of the small app developers as well as the flourishing digital economy in India.

- 325. Google has submitted that about 97% app developers pay only a nominal registration fee of USD 25 to access Google Play, whereas only 3% of developers on Google Play are subject to a service fee. Even with-in this 3%, a limited number of apps are subjected to a service fee of 30% and others pay a service fee of 10% of 15% depending on various parameters. Going by these assertions of Google, it is noted that the monetization model of Google is based on crosssubsidization by Google where the 3% of the apps offering paid apps or IAPs are made to bear the entire cost of the Play Store, even though all the apps are using similar services of the Play Store. Therefore, the question to be determined is whether it is reasonable and fair for these 3% of the apps to bear the 100% cost of the Play Store. In the same vein, the Commission also notes that amongst these 97% are those apps also, which have significant business operations but are not contributing towards recoupment of Play Store costs, directly through service fee. The Commission also notes that Google has other revenue streams also from the 'free apps' listed on Play Store, in the form of advertisement related revenue earned by Google from the apps hosted on Play Store and otherwise. These revenue streams are also contributing towards recoupment of the costs associated with Play Store and Android ecosystem, in addition to the service fee. The determination of issues at hand requires examination of all these aspects.
- 326. Be that as it may, the Commission is of the view that in general any conditions (including price related conditions) imposed on business users, by the gatekeepers or platform operators, should be fair, reasonable and non-discriminatory. The pricing and other general conditions should not grant any benefit on the gatekeeper which is disproportionate to the service provided by the gatekeeper to business users.





327. Based on the foregoing, the Commission is of the view that information available on record is not sufficient to give a finding on the monetization model, as sketched *supra*, followed by Google. Therefore, the Commission is not inclined to give any finding on this aspect, at this stage. Google is, however, directed, to ensure that its policies are in alignment with the aforesaid principles given the special responsibilities cast upon it being a dominant entity holding the position of a gatekeeper in the Android ecosystem.

Issue 2: Whether exclusion of other UPI apps/mobile wallets as effective payment options on Play Store is unfair and/or discriminatory as per Section 4(2) of the Act?

- 328. It was alleged that Google through its Play Store is differentiating between Google Pay and other apps facilitating payment through UPI, such as, BHIM, Paytm, PhonePe, *etc.* by only allowing its own payment offering *i.e.*, Google Pay on its platform. It was averred by the Informant that UPI as a system allows interoperability between different apps which means that a person with a HDFC, Paytm or PhonePe UPI ID will also be able to pay through Google Pay for a transaction in the Play Store, but the transaction will be inconvenient as compared to transacting with a Google Pay UPI ID.
- 329. The Commission after examining the allegations of the Informant and rival submissions of Google, directed an investigation on this aspect as well. The relevant excerpts from the Order of the Commission passed under Section 26(1) of the Act in the instant matter, are as follows:
 - "50. Based on the above, the Commission notes that allegations of the Informant are primarily two-fold i.e., (a) mandatory use of Google Play's payment system for purchasing the apps & IAPs in the Play Store and (b) excluding other mobile wallets/UPI apps as one of the effective payment options in the Google Play's payment system.

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54. In relation to the second allegation related to exclusivity given to Google Pay, it is noted from the Information provided by the Opposite Party that Google Pay has been integrated with intent flow methodology whereas other UPI apps can be used through collect flow methodology. In regard to difference between collect flow and intent flow, the Opposite Party has admitted that there are differences between these flows on Play (though claimed to be minor and not competitively significant). Google has stated that both flows involve the user transitioning from Play, to the UPI payment app, and back again. This transition is automated in the intent flow, whereas the same is required to be manually undertaken by users in the collect flow. Therefore, it becomes critical to examine whether such difference in the process, favoured Google Pay to the disadvantage of other competing apps. Further, given the apparent better user experience for intent flow, it also needs to be examined whether Google allows other UPI based payment apps to be integrated using intent flow..."

(Emphasis added)

- 330. Thus, during the course of making a *prima facie* finding, it was revealed that Google Pay has been integrated with intent flow methodology whereas other UPI apps can be used through collect flow methodology. In this context, the DG formulated following issues for examination:
 - a.) Discrimination with other UPI apps on the Play Store by integrating Google Pay UPI app with intent-flow methodology and other UPI apps through collect-flow methodology.
 - b.) Whether Google has favoured its own UPI app to the disadvantage of other competing UPI apps.
- 331. The DG based on its examination has concluded that Google has excluded other UPI apps as effective payment option on the Google play Store. Google follows a discriminatory approach towards other UPI apps, while making payment on Google play Store. Google Payments Platform enabled the intent flow with the Google Pay UPI App. Whereas, other UPIs were integrated with more



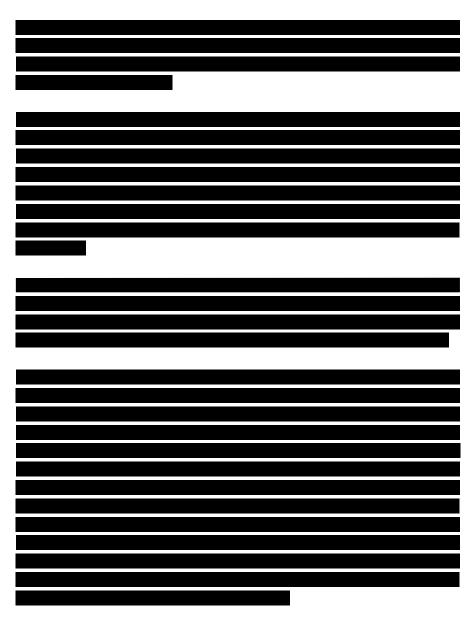


cumbersome collect flow method for payment on Google Play. The implication of the same was that Google favoured its own UPI App to the disadvantage of other competing UPI Apps. The preference to its own UPI App is evident from data that although Google Pay UPI App's market share in the overall market in India is not very high but so far as the UPI payment on Play Store is concerned the Google Pay UPI App has the largest market share. Therefore, Google is imposing unfair and discriminatory conditions in violation of the provisions of Section 4(2)(a)(i) of the Act. Moreover, Google's conduct was also found to be resulting in denial of market access to competing UPI apps since the market for UPI enabled digital payment apps is multi-sided, and the network effects will lead to a situation where Google Pay's competitors will be completely excluded from the market in the long run. Such conduct amounts to violation of the provisions of Section 4(2)(c) of the Act. Further, being the gateway to Android smartphones due to dominance in the markets for licensable mobile OS and app stores for Android OS, Google is uniquely placed to (and is) leveraging its dominance in favour of Google Pay UPI App in violation of the provisions of Section 4(2)(e) of the Act. Google on the other hand has contested the findings of the DG.

- 332. The Commission has considered the findings of the DG along with the rebuttals of the same by Google. The observations of the Commission are elaborated in succeeding paragraphs.
- 333. In order to assess the allegations in the matter, it is important to understand the differences between two methodologies used for integrating UPI apps in a payment platform. The DG has succinctly brought on record the differences between intent-flow and collect-flow methodology of payments on UPI. In this context, it would be useful to refer to reply filed by NPCI, wherein it has differentiated collect flow and intent flow technology. The relevant extracts of the reply of NPCI are reproduced below:







334. Further, the differences in the two methodologies can also be tabulated in the following manner (on the basis of Information provided by NPCI):

Sr. No.	Activity	Intent Flow	Collect Flow
1.			
2.			





Sr. No.	Activity	Intent Flow	Collect Flow
3.			
3.			
4			
4.			
5			
5.			
6.			





- 335. The Investigation has revealed that intent flow technology is far superior and user friendly than collect flow technology, with intent flow offering significant advantages to both customers and merchants. The customers need not remember or enter their lengthy, alphanumerical VPA; don't have to switch to push/SMS notifications; no longer have to shuffle between three apps/services (merchant app, SMS, UPI app) to complete a transaction. Thus, this ease of making payments results in an optimal user experience for the customer.
- 336. The DG has also observed that the success rate with the intent flow methodology is higher, largely on account of the benefits described above, but also because there is lower latency³⁴ compared to the collect flow methodology. Here, it is relevant to mention that the collect flow is a broken chain of steps which requires that the customer actively engage with several, disconnected applications to manually complete a purchase. Further, the lack of integration of available UPI applications with the merchant's application/website means that there is a delay between when a customer enters their VPA, and a collect request is received on the corresponding UPI application. Often, this delay is exacerbated by the time it takes for the merchant's website/application to identify and process the entered VPA and for the Bank's Application Programming Interface (API) to validate the VPA before initiating the UPI collect payment. Whereas in intent flow, the latency is much lower because the transaction is processed as a seamless, unbroken chain of steps. The technological integrations and automatic redirections allow customers to complete the purchase faster. The integration of UPI applications into the merchant's application/website also means that the time between a

Latency is the delay between a user's action and an application's response to that action. Latency is extremely determinative of consumer behaviour in that higher latency leads the consumer to abandon the internet related activity and lower latency, *i.e.*, quicker response times encourages the consumer to follow through with the internet related activity. For example, an extra 0.5 seconds in search page generation time dropped traffic by 20%. A broker could lose \$4 million in revenues per millisecond if their electronic trading platform is 5 milliseconds behind the competition. Available at https://razorpay.com/blog/upi-collect-razorpay-business-growth/.





customer selecting their preferred UPI application and the redirection to that application to facilitate payment is only a few seconds. Thus, the intent flow method inherently has a lower latency and therefore, higher conversion rates for merchants.

337. The Investigation has also presented the difference between the two methodologies through following screenshots which portray the number of steps that are required to complete the purchase transaction on Google Play, while, using UPI app supporting intent flow *i.e.*, Google Pay UPI app *vis-à-vis* an app supporting only collect function *i.e.*, other UPI Apps.

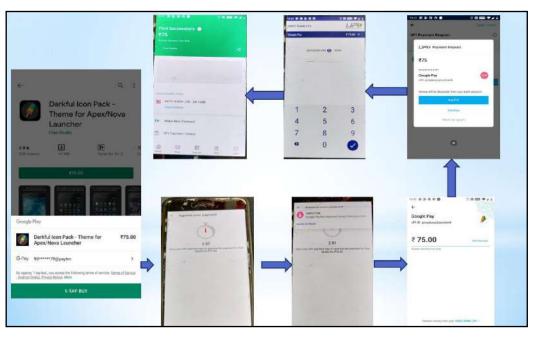
VPN Promition VPN Pr

Intent Flow





Collect Flow



- 338. It is noted from the above screenshots that paying for an app on the Play Store's payment page with a non- Google Pay app is inconvenient, involves more steps, and the user also has to change forums/ apps (*i.e.*, switch from Play Store to the other app (for instance Paytm app). Payment through a Google Pay UPI ID has deliberately been made much faster, simpler and does not require the user to switch between forums/apps. The Investigation has further revealed that this situation would be further aggravated in case of in-app purchases (*IAPs*) as the user will have to change three forums *i.e.*, the app, the Play Store's payment page and the UPI app.
- 339. In this regard, it is noted that in the year 2019, of the UPI transactions in Play Store ware carried on through GPay UPI App, while and of such transaction were carried out using PhonePe and Paytm UPI Apps, respectively. Whereas, in year 2020, of the UPI transaction in Play Store in the year 2018 was carried on through GPay UPI App, while and of such transaction were carried out using PhonePe and Paytm UPI Apps, respectively. Whereas, in the overall market of UPI apps, PhonePe has the largest





market share with a market share of 46.04%, followed by Google Pay and Paytm having market share 34% and 11.63%, respectively (in terms of volume of transactions).³⁵

- 340. From the above-mentioned comparative analysis, it is noted that although Google Pay UPI app does not have largest market share in overall UPI payment market in India but so far as the UPI Payment on Play Store is concerned, the Google Pay UPI app has the largest market share. Thus, Google Pay UPI app have a clear competitive advantage on the Play Store through use of intent-flow methodology for its own App and using collect-flow methodology for other UPI Apps.
- 341. The Investigation has further revealed that in 2019 and 2020, the role of UPI in the total payments processed on the Play Store has increased over the previous years.

Thus, UPI platform

is being increasingly used for transacting on Play Store.

- 342. Google has not contested that intent flow integration involves fewer steps but has contested the finding of violation of various provisions of Section 4(2) of the Act. Various averments of Google are summarised below:
 - 342.1. Google avers that to establish an infringement of S.4(2)(a)(i) of the Act, the Report must demonstrate that Google has engaged in dissimilar treatment of equivalent transactions, and such treatment harmed competitors. Google has further claimed that the Investigation Report errs in alleging that Google's decision to support third party UPI apps on Play with the collect payment flow (but GPay with the intent flow) was discriminatory.

35 https://www.statista.com/study/67837/digital-payment-market-in-india/

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0.40.4.4	
342.1.1.	
342.1.2.	Google avers that the collect flow is the universal interoperability
	standard under the NPCI requirements. Every UPI app was and is
	compatible with the collect flow, so supporting the collect flow for
	third-party UPI apps ensured that all UPI apps worked on Google Play straightaway. Further, by contrast,
	straightaway. Turther, by contrast,
342.1.3.	Google's decision was in line with NPCI requirements, which in 2018
	did not require market participants to support one payment flow over
	another. For the same reason, Google had no reason to believe that
242.4.4	one payment flow was inferior to the other.
342.1.4.	
	The Investigation Report is therefore
	wrong to allege Google discriminated against third party UPI apps by





actively refusing to support such apps on intent, or actively requiring such apps to use collect

- 342.2. As per Google, in order to establish an infringement of the Act, the Investigation Report must have demonstrated that Google's alleged conduct had anticompetitive effects on rival UPI apps. The Report finds that GPay's share of UPI payments on Google Play was higher than its share of overall UPI payments, which the Report finds was "clearly arising from its [Google] giving preference to its own UPI App [in Google Play]". The Report is wrong to draw such a conclusion and the same is based on mere inference. There may have been many other reasons why GPay was more frequently used on Google Play than other UPI apps (e.g., users may have trusted that GPay would be as safe and secure as Google's other services in Google Play). The Report cannot assume that this was because of GPay's integration with the intent flow (without providing correlating evidence, which it does not).
- 342.3. The Investigation Report's conclusion (that GPay's integration with the intent flow in Google Play was driving more users to use GPay over rival UPI apps) is directly undermined by the evidence and data provided.
- 342.4. The Investigation Report fails to show that Google's conduct had an effect outside Google Play:
 - 342.4.1. Google Play accounts for a proportion of total UPI transactions (only in 2022 to date). The of the alleged market for UPI-enabled digital payment apps cannot be directly affected by Google's conduct on Google Play. It is simply inconceivable that any of Google's behaviour on Google Play could affect UPI competition at large.





- The DG's case relies on the notion that network effects will drive switching to GPay and marginalise its rivals. However, Google claims that that there is no evidence of such network effects occurring in practice, or that GPay has derived any advantage over rivals from the conduct. GPay's share of overall UPI transactions has actually declined from 2020 to today (from around 44% to 35%), and other UPI apps are flourishing. Further, in any event, the architecture of the UPI system minimizes the potential for network effects. The interoperability specifications set out by the NPCI mean that any UPI user can transact with any other UPI user. This means that no one app will become more popular than others simply because it has more users. Therefore, even assuming that Google's conduct was to increase user adoption of GPay (which it has not), a given merchant using, for example, PhonePe could still accept a UPI payment from GPay - and would therefore have no incentive to switch to GPay to transact with those GPay users.
- 343. The Commission has perused the detailed submissions made by Google and the observations of the Commission are elaborated in succeeding paragraphs.

344. Google has asserted that

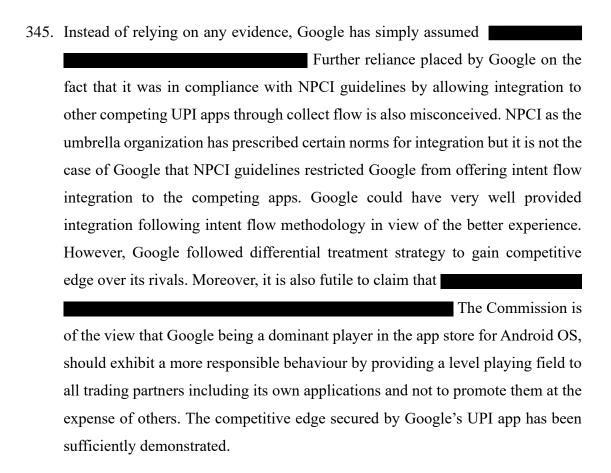
The

Commission is of the view that these assertions of Google are untenable and notes that all the UPI apps operating in the country are providing similar functionality and therefore, Google cannot apply different standards for its own app vis-à-vis other competing apps. The classifications criteria being advanced by Google i.e., first party app and a third-party app is not a reasonable classification in terms of Section 4(2)(a) of the Act. Google being a dominant player in the app store for Android OS, has a special responsibility that access to its platform are available at non-discriminatory terms for all trading partners. Simply because, Google pay





UPI app is an in-house app, does not grant Google any right to self-preference and offer dissimilar treatment to other competing UPI apps. The Commission is of the view that the justification advanced by Google and the classification criterion for discrimination is wholly arbitrary, artificial and evasive. It only seems to be an afterthought on the part of Google.



346. Google also claims that in order to establish an infringement of the Act, the Investigation Report must have demonstrated that Google's alleged conduct had anticompetitive effects on rival UPI apps. In this regard, the Commission notes that under the scheme of the Act, the Commission is, amongst others, obligated "to prevent" practices having adverse effect on competition. This is clearly borne out from the long title to the Act, which reads as under:





"An Act to provide, keeping in view of the economic development of the country, for the establishment of a Commission to **prevent** practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto".

- 347. In view of the above regulatory framework as provided under the Act, the Commission has carefully perused the provisions of Section 4 of the Act and on a holistic consideration thereof, it is observed that "dominant position" under the Act has been defined as meaning a position of strength, enjoyed by an enterprise, in the relevant market which enables it to operate independently of competitive forces or to affect its competitors or consumers in its favour. Thus, once an entity is found to be dominant in the relevant market, the Act recognizes its ability to adversely affect competition in the market unilaterally through its conducts. As such, the dominant enterprise is clothed with a special responsibility not to indulge in the conducts which are enumerated in Section 4(2) of the Act. Resultantly, once a dominant undertaking is found to have indulged in any of the acts provided in Section 4(2) of the Act, the contravention of the Act stands established. This is further evident from the phraseology used in Section 4(2) of the Act which, inter alia, provides that there shall be an abuse of dominant position if an enterprise directly or indirectly "imposes" unfair or discriminatory condition/ price in purchase or sale of goods or services. The moment there is any imposition of any unfair or discriminatory condition by a dominant player, the statutory prohibitions shall trigger. The same is true for other instances of abuse as enshrined in Section 4(2) of the Act as well and the same also have to be read in this manner, which is consistent with the avowed objectives of the Act, as highlighted above.
- 348. The Commission also observes that Section 32 of the Act which deals with "Acts taking place outside India but having an effect on competition in India", clearly inter alia provides that the Commission shall notwithstanding that any enterprise





abusing the dominant position is outside India, have the power to inquire into abuse of dominant position by such player if such dominant position has or <u>is</u> <u>likely to have</u> an appreciable adverse effect on competition in India. That being the statutory scheme in respect of anti-competitive acts taking place outside India, there cannot be any higher threshold for examining the abusive conduct which has taken place within the municipal limits of India.

349. Furthermore, the statutory architecture is also in accord with the underlying objectives of the Act by empowering the Commission to issue peremptory interim orders when an act in contravention of the provisions of the Act *is about to be committed*. This is exemplified from a plain reading of the provisions of Section 33 of the Act and for felicity of reference, the same are reproduced hereinbelow:

Power to issue interim orders

Section 33

Where during an inquiry, the Commission is satisfied that an act in contravention of sub-section (1) of section 3 or sub-section (1) of section 4 or section 6 has been committed and continues to be committed or that **such act is about to be committed**, the Commission may, by order, temporarily restrain any party from carrying on such act until the conclusion of such inquiry or until further orders, without giving notice to such party, where it deems it necessary.

- 350. Be that as it may, in the present case, the competitive advantage secured by Google for its UPI app is evidenced from the fact that Google Pay UPI app has a higher market share than PhonePe in the UPI transactions on Play Store as compared to overall UPI market where PhonePe has a higher market presence. Thus, the market outcome has evidenced the effect of the conduct on the part of Google in the market. Thus, it is unnecessary to dilate any further on this aspect.
- 351. Google also claimed that supporting the collect flow was in line with the industry practice. In this regard, the Commission notes that Section 4 of the Act places a





special responsibility on the dominant players that their conduct should not impinge on the competition on merits. Similar practices by non-dominant player may not fall within the ambit of Section 4 of the Act. Accordingly, a dominant player engaged in conduct proscribed under Section 4 of the Act cannot take the plea of standard industry practice.

- 352. Google also claims that it is inconceivable that Google's conduct on Google Play could affect competition in the wider UPI segment, which is highly dynamic and competitive. The Commission notes that UPI apps are meant for usage on smart mobile devices and Android OS has the widest coverage in the smart device segment with more than 90% market share in the smart mobile devices. Thus, Google becomes the gateway to Android smartphones due to dominance in the markets for licensable mobile OS and app stores for Android OS. Thus, by giving a better experience to users through intent follow integration for its own UPI app, Google is in a position to drive up its customer base. Given the interoperability offered by UPI ecosystem, generally the user does not multi-home and uses only one UPI app. Once the user starts using Google Pay UPI app for the Play Store, the natural tendency for the user is to stick to same app for other payments also. In this regard, it is pertinent to note that Google (with a market share of 34%) occupies the second position in the overall UPI market just behind PhonePe (with a market share of 46%) and Paytm is distant third at 11%.
- 353. To summarise, the Investigation has revealed that the intent flow technology is superior and user friendly than collect flow technology, with intent flow offering significant advantages to both customers and merchants and the success rate with the intent flow methodology being higher due to lower latency. Collect flow is a broken chain of steps, which requires that the customer actively engage with several, disconnected applications to manually complete a purchase. Payment through a Google Pay UPI is faster, simpler and does not require the user to switch between apps. This disincentivises a repeat user to use a non-Google UPI, which





is cumbersome and inconvenient. In terms of whether the difference in the two methodologies used to connect Google and non-Google apps can materially influence consumer choice and hence provide distinct competitive advantage to Google thereby distorting competition on the merits between Google and non-Google apps on Play Store, the data on market share collected by the DG provides useful insights. The data shows that Google Pay app enjoys the largest market share (around in UPI payments on Play Store, PhonePe is the distant second with around share. This does not represent the overall market share scenario in the UPI payment market in India, where PhonePe is the largest player with 46% market share, followed by Google Pay accounting for 34% of the market.

- 354. The Commission is of the view that Google has differentiated between Google Pay UPI app and other competing UPI apps such as, BHIM, Paytm, PhonePe, *etc.* by integrating its own payment offering using intent flow technology, while the other UPI apps have access to only the collect flow technology on the Play Store. In other word, Google has discriminated between developers of similarly placed apps, for equally placed transactions.
- 355. It is also noted that such discrimination has resulted in increasing the number of transactions being processed by Google Pay UPI app and also results in increased access to data and revenues by Google on Play Store. As payment through any other UPI app on Play Store's payment system is cumbersome, this resulted in more users shifting to Google Pay, thus increasing its popularity and value. Further, Google Pay being the only UPI app facilitating payments through intent flow methodology on the Play Store (which is a "must-have app"), lead to more users downloading Google Pay UPI app for the sake of convenience which would further increase the popularity and value of Google Pay UPI app and its usage outside the Play Store (and conversely decreasing the downloads and usage of other competing UPI apps).

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- 356. The Commission also notes that Google's conduct is also resulting in denial of market access to competing UPI apps since the market for UPI enabled digital payment apps is multi-sided, and the network effects will lead to a situation where Google Pay's competitors are at a competitive disadvantage in the long run. When the usage and downloads of other UPI apps reduce, not only will such apps lose the incentive to innovate, but they will also lose the capability to innovate as they would not be able to collect user data to understand consumer preference, which would in the long term make the app irrelevant.
- 357. Further, being the gateway to Android smartphones due to dominance in the markets for licensable mobile OS and app stores for Android OS, Google is uniquely placed to (and is) leveraging this dominance in favour of Google Pay. These markets are closely related to each other as UPI is used as a method of payment (both for paid apps as well as IAPs on the Play Store). Accordingly, Google's imposition of collect flow technology on other UPI apps, while only allowing Google Pay to use intent flow technology for payments on the Play Store, amounts to leveraging of its position in the markets for the licensable of mobile OS and app stores for Android mobile to protect and promote its position in the market for UPI enabled digital payment apps. The situation is worsened by the fact that Google forces users to only use the Google Payment System for processing paid downloads and IAPs, and therefore, Google Pay essentially gets an advantage on every transaction on the Play Store.
- 358. Thus, the Investigation confirms the discriminatory treatment that is meted out by Google to its competing UPI apps for making payments on Play Store and its distortionary implications for competition within Play Store, which is the largest app marketplace on Android ecosystem. This discrimination has not been explained or justified by Google on any objective and rational basis, such as any technical constraints limiting seamless integration of third-party apps. It is now well known how dominant platforms that operate within multiproduct/multi-





platform ecosystems, through even small actions, can leverage and extend their dominance in related markets. Platforms with gatekeeper power can engage in 'self-preferencing' to leverage their position into vertically related markets. Their ability to do this may be enhanced by consumer behavioural biases, which increase the ability of platforms to guide their activity towards their own vertically related services, through carefully designed choice architecture. The Commission is of the view that conduct of Google undoubtedly amounts to leverage its position in the app store market to confer competitive advantage to its own product.

- 359. In view of the foregoing, the Commission holds Google to be in violation of Sections 4(2)(a)(ii), 4(2)(c) and 4(2)(e) of the Act.
- 360. Google also claims that intervention of the Commission in this area is unnecessary, for the following reasons:
 - 360.1. the NPCI's market share cap circular of 05.11.2020 implies that GPay will be regulatorily prevented from processing more than 30% of all UPI transactions when it comes into force. Therefore, even if the Investigation Report was right, and GPay gains market share at the cost of rivals, the NPCI would prevent GPay from exceeding 30% of the market. The NPCI regime therefore precludes the very effects the Investigation Report alleges and provides robust comfort that the landscape for digital payments and the UPI segment in particular will remain highly competitive in India.

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361. In relation to above averments of Google, the Commission notes that any regulatory action taken by NPCI would not absolve Google of the anti-competitive practices adopted by it. The competition should be allowed to flourish on merits.

Issue 3: Whether pre-installation and prominence of Google Pay UPI App (GPay) by Google is in violation of Section 4(2) of the Act?

- 362. As per the Informant, Google encourages pre-installation and opting of Google Pay as the default payment option on new smart mobile devices using the Android OS at the time of initial set up. This will encourage the users to use Google Pay over other apps facilitating payment through UPI. Such preferential placement of Google Pay on Play Store drive the users to exclusively use Google Pay instead of looking for alternatives due to a "status quo bias". As per the Informant, given the dominance of Android and Play Store, the OEMs have no choice but to agree to the terms and conditions imposed by Google. The Informant alleged that the preinstallation and prominence of Google Pay amounts to the imposition of an unfair and discriminatory condition in contravention of Section 4(2)(a)(i), limits technical and scientific development in contravention of Section 4(2)(b), can result in the exclusion of competing apps from the market in contravention of Section 4(2)(c) and amounts to leveraging of Google's position in the markets for the licensing of smart mobile OS and app stores for Android OS to protect its position in the market for facilitating payment through UPI, in contravention of Section 4(2)(e) of the Act.
- 363. On the other hand, Google *inter alia* submitted that the GPay app (Tez) is not preinstalled on all Android devices and is not the default payment app. Google



364.



licenses Play to OEMs as part of a suite of apps under its Mobile Application
Distribution Agreement ("MADA"). The MADA does not require OEMs to
preinstall the GPay app (Tez) and the GPay app (Tez) is not part of the suite of
apps that OEMs must preinstall with Play. However,
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I. The DG has examined the allegations made by the Informant and its findings are
summarised below:
364.1. The Investigation has analysed the Revenue sharing Agreement dated
364.2.





364.3.	
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364.4.	
364.5.	tool i.e., financial incentive through Placement Bonus Agreement for pre-
	installation of G-Pay App on qualified devices. Accordingly,





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- 364.7. Based on replies of few third parties, the DG observed that some other UPI Apps such as PhonePe and Paytm have also signed the pre-installation Agreement with the various OEMs.
- 364.8. Google has submitted that the Google Pay UPI App was pre-installed on less than of the total mobile devices sold in India, in the year 2020.
- 364.9. None of the competing UPI apps have submitted any evidence to corroborate denial by OEMs for pre-installation of their Apps.
- 365. Based on the foregoing, the Investigation has concluded that:
 - 365.1. Google has made Agreements with OEMs for pre-installation of G-Pay App (UPI App) and provide financial incentives through RSAs and PBAs. These Agreements do not prohibit pre-installation of competing UPI Apps.
 - 365.2. Google Pay UPI App was pre-installed on about of the total mobile devices sold in India, in the year 2020.





- 365.3. Other UPI Apps such as PhonePe, Paytm, Amazon Pay *etc.* also have Agreements with OEMs for pre-installation of their UPI Apps and the same are pre-installed on mobile devices. These UPI apps also provides financial incentives to the OEMs for pre-installation of their Apps.
- 366. Accordingly, the Investigation did not find sufficient evidence to indicate that Google has abused its dominant position so far as the issue pertaining to pre-installation of Google Pay UPI App is concerned.
- 367. The Commission has perused the evidence collected by the DG and its findings. Investigation has revealed that Google enters into Revenue Sharing Agreements with OEMs for preinstallation of GPay app, typically along with some other Google proprietary apps. It also offers financial incentive through Placement Bonus Agreement for pre-installation of G-Pay app on qualified devices for premium placement of GPay. For premier devices, pre-installation of the GPay app is required to be on the Default Home Screen. Further, Google Pay is to be set as the default payment service for Premier devices. It is also observed that the clause associated with Google Pay

for all three kinds of devices, *i.e.*, *B*asic, Tier 2 and Premier devices. However, the Investigation has not examined the aspect of default status of GPay. The Commission is of the view that setting Goole Pay UPI app as the default payment application can outweigh, or even nullify, the benefits of having multiple payment applications pre-installed. Viewed in light of the remarkable growth in number of mobiles/tablets with GPay pre-installed in 2020, such incentivisation of default status through revenue sharing agreements appears to have the potential to interfere with competition on the merits. Further, the DG has not examined the implication of tying Google Pay UPI app with the other apps/ services of Google under the RSAs. Accordingly, the Commission is not inclined to give any finding on this aspect as well, and the same is left open to be examined appropriately.





Procedural Errors

- 368. Before concluding, the Commission deems it appropriate to deal with some alleged procedural errors highlighted by Google in its response.
- 369. Google has averred that the DG has disregarded critical evidence submitted by it, which includes fundamental factual information underlying many of the core issues under investigation such as Play's service fee, GPBS, collect flow and intent flow integration. Further, the DG confined itself only to consider the evidence gathered during investigation against Google. Rather, the DG ought to have considered the explanations and evidence provided by Google in conducting a fair, independent, judicious and accurate investigation. Google claims that the DG's decision to ignore evidence submitted by Google has resulted in a fundamental misunderstanding of Google's products and their functioning which, in turn, is reflected in the DG's faulty conclusions in the Report.
- 370. Google further claims that the Investigation Report selectively relies on the responses of biased third parties that ostensibly confirm the Informants' allegations and, at the same time, ignores the responses of other objective third parties whose evidence demonstrates that Google's conduct is not anti-competitive.
- 371. In this regard, the Commission notes that the assertions made by Google do not appear to be validated from perusal of the Investigation Report. Not only has DG incorporated the response of Google in the Investigation Report but has also forwarded the entire submissions made by Google before it to the Commission while forwarding the Investigation Report. It cannot be gainsaid that the role of the DG in the investigation process is that of fact-finding nature and at the stage of the investigation, the DG is not expected to embark upon any adjudicatory process. Be that as it may, the Commission has independently examined the entire





material collected by the DG during the course of investigation, as detailed in the earlier part of this order while examining the merit of the case and in these circumstances, the Commission finds no merit in the submissions made by Google alleging procedural bias.

- 372. As already shown in this order, the Commission has also examined and dealt with such submissions of Google at appropriate places. In sum, findings of the Commission, as detailed in this order, are based on holistic assessment of all the evidence presented by the DG, third parties, the Informants and response of Google thereon.
- 373. Google has further contended that the DG has failed to discharge its obligation and ascertain the facts and circumstances and collect evidence in the matter. The DG is vested with the power of a Civil Court under the Code of Civil Procedure 1908, including the power to receive evidence on affidavit, require discovery and production of documents, summon and enforce attendance of any person, and examine him on oath. However, the DG did not consult Google regarding the crucial and complex factual background surrounding the allegations or clarify the unsupported evidence submitted by biased third parties. Further, the DG failed to consult Apple, which is one of Google's primary competitors, to assess, verify and understand the claims made by Google, especially in relation to the competitive constraints exercised by iOS on Android and Apple's App Store on the Play Store.
- 374. Also, it was alleged that the DG failed to consult a representative cross-section of allegedly affected or interested participants. Investigation Report does not clarify how the DG identified the participants for market consultations and why the evidence of only some of them was relied upon in the DG Report.
- 375. The Commission has considered the aforesaid submissions made by Google and is of the opinion that the same are misconceived. No doubt, the DG has been





vested with the limited powers of Civil Court as also the power to conduct search and seizure operations, however, it is for the DG to exercise such powers in the manner as deemed appropriate in the facts and circumstances of each case. No party, much less a party under investigation, can dictate as to the mode and manner of investigation to be undertaken by the DG. As previously pointed out, the role of DG during investigation is essentially fact finding in nature by collecting documents and evidence and to present its recommendations to the Commission based on their analysis. While conducting the investigation, it is neither requirement of the law nor any obligation of the investigator to consult each and every affected or interested participant. On careful perusal of the Investigation Report, the Commission is satisfied that the DG has contacted a cross-section of stakeholders including third parties and in this view of the matter, the allegations, and suggestions of bias in investigation as attributed by Google to the DG lack merit and are rejected. The Commission notes the submission of the Google that the DG has not consulted it "regarding the crucial and complex factual background surrounding the allegations", as thoroughly misconceived. It is on record that the DG has issued multiple probe letters to Google and the Commission is satisfied that Google was given sufficient and ample opportunities to present case during investigation. Even after investigation, Google has been provided with enough opportunities to present its objections and suggestions in the matter.

376. Google has further contended that the DG was unduly swayed by prior observations of the Commission, in breach of the order passed by the Commission under Section 26(1) the Act directing investigation. It was argued that an order passed under Section 26(1) of the Act, directing the DG to cause an investigation, is an "administrative direction" and no reliance can be placed upon it. Recognising this position, the Commission in each order passed under Section 26(1) of the Act notes that, "nothing stated in this order shall tantamount to a final expression of opinion on the merits of the case". However, the DG continues





to place reliance on such *prima facie* orders, which were passed not only in the present case, but also in other cases as well. Such non-application of mind vitiates the findings in the Investigation Report on relevant market and dominance.

- 377. In this regard, the Commission notes that there can be no dispute with the legal propositions that the orders directing investigations are administrative in nature, which delineate the scope of investigation. At the same time, the investigation is an independent process to collect evidence within the framework of investigation as provided in the administrative orders directing inquiry. Antitrust investigations require deep understanding of markets and for undertaking such exercise, the investigators review literature on the subject matter of inquiry which include not only the orders passed by the Commission, but even the orders passed by Competition Agencies and market study reports.
- 378. For the reasons already mentioned, in antitrust investigations, which are market centric and inquisitorial in nature, the traditional tools and approaches of adversarial set up are not only inapplicable but are unsuitable with such inquiries. Thus, no fault can be found with the DG in referring orders passed by the Commission in understanding the background and issues involved in the matter. Having said that, the Commission is of the considered opinion that the recommendation of the DG cannot be based upon such orders and the same have to be arrived at independently after gathering documents and evidence in accordance with law. Having perused the investigation report, the Commission is satisfied that while analyzing the allegations and reaching its recommendations, the DG has not relied upon such orders and the same are based upon the documents and evidence gathered during the course of investigation. The reference to the *prima facie* order as made by the DG in the Investigation Report is only to understand the scope of investigation and such reference, by no stretch of arguments, be construed as swaying the independence of the recommendations made by the DG. In fact, if the argument of Google is taken to its logical

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conclusion, there can be no independent adjudication by the authority also (in this case, the Commission) after making a *prima facie* opinion while ordering investigation.

- 379. Google has also contended that that the DG posed leading questions to third parties in violation of various order of Courts which have held that a leading question to be one which "suggests the answer which the interrogator wishes or expects to receive, or which embodying a material fact admits of a conclusive answer by a simple negative or affirmative." Reference was also made to the decision of the Hon'ble Supreme Court in Varkey Joseph case³⁷ and averred that leading questions violate the right to a fair trial enshrined under Article 21 of the Constitution of India. Google claimed that the DG disregarded the fundamental principle and asked leading questions that encouraged "acquiescence bias" in favour of finding Google guilty of violating the provisions of the Act. While the fact of the leading questions alone invalidates the Investigation Report, the conclusions therein are further undermined by the fact that the DG relied extensively on responses received to such leading questions.
- 380. The aforesaid plea is based on wrong understanding of the nature of the proceedings before the Commission. As a market regulator, proceedings before the Commission are inquisitorial and *in rem* in nature. The Hon'ble Supreme Court of India in the case of *Competition Commission of India* v. *Steel Authority of India Limited*, CIVIL APPEAL NO.7779 OF 2010 decided on 09.09.2010 has expressly noted that the Commission performs various functions including regulatory, inquisitorial and adjudicatory. In this view of the matter, the plea raised by Google and the judgments relied in the context of adversarial setting are of no assistance. The inquisitorial proceedings by very nature require the authority to actively involved in inquiry unlike the case of an adversarial or accusatory system,

³⁶ Dobariya & others v. State of Gujarat, 2015 Cri LJ 3807, 17 April 2015

³⁷ Varkey Joseph v. State of Kerala, 1993 AIR 1892, April 27 1993





in which the role of the authority is primarily that of an impartial referee between the competing parties. Google has not been established to show any prejudice much less any miscarriage due to the procedure adopted by the DG. Google has been given sufficient opportunity to rebut the evidence gathered by the DG and to file its objections and suggestions to the investigation report prepared by the DG.

- 381. Google also avers that Investigation Report places heavy reliance on a draft working paper and often interim market study reports from other competition authorities. Google avers that the DG's reliance on foreign documentation of a preliminary nature and without analyzing the Indian market is wholly inappropriate. Further, the majority of these sources are non-final. The DG also categorically disregarded any observations made in these interim reports which favored Google.
- 382. As previously noted, antitrust investigation is complex in nature and require greater understanding of the subject and so long as the recommendations are made in an independent manner based on material and evidence gathered during investigation, mere reference to such reports for the limited purpose of understanding the issues in itself cannot be said to sway, much less vitiate, the conclusions arrived at by the DG.
- 383. Next, Google contended that the DG committed numerous contraventions of the principles of natural justice and failed to comply with the processes established under the Act. The DG did not grant Google the right to cross-examine witness testimony in the investigation process. The DG's denial of cross-examination on the ground that the findings are based on "analysis of written replies/submissions of various parties" is inconsistent with the accepted legal position. Google has been deprived of the right to test the veracity of the claims/ assertions made by the Informants and the third parties, including on such important issues as impact of Play's service fee.

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- 384. Google has averred that Regulation 41(5) of the Competition Commission of India (General) Regulations, 2009 (General Regulations) provides that when a witness leads evidence, the other party (Google in the present case) should be afforded an opportunity to cross-examine the said witness giving such evidence. Further, right to cross-examination is not restricted to oral statements, but extends to the allegations, statements, and evidence contained in each of the Information(s) as well as responses provided by third parties. Unless such allegations, statements, or evidence are admitted or subject to cross-examination, they are unverified and cannot be relied upon.
- 385. The Commission is afraid that the submissions of Google are contrary to the express provisions of General Regulations. Unlike civil courts where cross-examination is a matter of course, cross-examination before the DG or the Commission is highly circumscribed by regulatory framework and can be granted on fulfilling requirements of Regulation 41(5) of the General Regulations.
- 386. In this regard, reference may be made to the provisions contained in Regulation 41 of the Competition Commission of India (General) Regulations, 2009 which deals with the procedure for taking evidence including cross-examination of the persons giving evidence. The same is quoted below.

Taking of Evidence

Regulation 4l(1)...

(2)...

(3)...

- (4) The Commission or the Director General, as the case may be, may call for the parties to lead evidence by way of affidavit or lead oral evidence in the matter.
- (5) if the Commission or the Director General, as the case may be, directs evidence by a party to be led by way of oral submission, the Commission or the Director General, as the case may be, if considered necessary or expedient, grant an opportunity to the other party or parties as the case may be, to cross-examine the person giving the evidence.





(6)... (7)...

(emphasis supplied)

- 387. It is, thus, evident that the Commission or the DG has the discretion to take evidence either by way of Affidavit or by directing the parties to lead oral evidence in the matter. However, if the Commission or the DG, as the case may be, directs evidence by a party to be led by way of oral submissions, the Commission or the DG, as the case may be, if considers necessary or expedient, may grant an opportunity to the other party or parties, as the case may be, to crossexamine the person giving the evidence. Thus, it is only when the evidence is directed to be led by way of oral submissions that the Commission or the DG may grant an opportunity to the other party or parties to cross-examine the person giving the evidence, if considered necessary or expedient. Hence, even when the evidence is led by oral submissions, the Commission or the DG retains the discretion to consider the request for grant of opportunity to the other party or parties to cross-examine the person giving the evidence if the same is considered necessary or expedient. Thus, the only issue which needs to be examined is when it would be necessary and expedient to grant an opportunity to the other party or parties to cross-examine the person giving evidence by way of oral submissions. It is not the case of Google that it is seeking cross-examination of a witness whose oral testimony has been recorded by the Google. As such, the request of Google for seeking cross-examination is not maintainable as per the statutory scheme. Google has been given ample opportunities to controvert the findings of the DG and accordingly, the Commission finds no substance in the grievance made by Google on this count as well.
- 388. Google further contended that under Regulation 20(4) of the General Regulations, the DG is under a strict obligation to include in the report all documents it has collected during its investigation. However, when the non-confidential version of the Report was provided to the parties on 16.03.2022, it did not include the full





information/ evidence/ documents collected by the DG. In order to obtain access to these documents, Google had to file multiple requests for file inspection. Thereafter, Google filed applications seeking certified copies of these documents, which were granted on 12.05.2022.

- 389. The plea is thoroughly misconceived. In the instant case, Google has been given full and complete access to the entire case records including confidential documents and in fact, the same has not even been disputed by Google. Moreover, Google has been given sufficient time to respond to the Investigation Report both trough written submissions as well as during oral hearing. In these circumstances, it is not understood as to on what basis such plea has been raised at this stage.
- 390. Google next argued that the DG unjustifiably cloaked third party-submissions in confidentiality, improperly shielding them from Google's scrutiny and challenge. It was averred that before granting a confidentiality request, the DG is required to assess it to confirm that it fulfils the criteria laid down under the erstwhile Regulations 35(3) and 35(9) of the General Regulations. However, in this case, the DG completely ignored both the letter and spirit of Regulation 35 and impermissibly granted confidentiality over submissions by third parties. As per Google, the DG did not apply its mind and instead indiscriminately, and arbitrarily granted confidentiality for information that is generic and in the public domain. Such cavalier and unreasoned grants of confidentiality by the DG not only contravene the regulatory scheme, but they also ignore their profound impact on Google's rights of defence.
- 391. As already noted, Google has been given complete and unfettered access to even the confidential information of the third party(ies) and in this view of the matter, nothing survives in the point raised by the Google.
- 392. The Commission concluded that,





- 392.1. making access to the Play Store, for app developers, dependent on mandatory usage of GPBS for paid apps and in-app purchases constitutes an imposition of unfair condition on app developers. Thus, Google is found to be in violation of the provisions of Section 4(2)(a)(i) of the Act.
- 392.2. Google is found to be following discriminatory practices by not using GPBS for its own applications *i.e.*, YouTube. This also amount to imposition of discriminatory conditions as well as pricing as YouTube is not paying the service fee as being imposed on other apps covered in the GPBS requirements. Thus, Google is found to be in violation of Section 4(2)(a)(i) and 4(2)(a)(ii) of the Act.
- 392.3. mandatory imposition of GPBS disturbs innovation incentives and the ability of both the payment processors as well as app developers to undertake technical development and innovate and thus, tantamount to limiting technical development in the market for in-app payment processing services. Thus, Google is found to be in violation of the provisions of Section 4(2)(b)(ii) of the Act.
- 392.4. mandatory imposition of GPBS by Google, also results in denial of market access for payment aggregators as well as app developers, in violation of the provisions of Section 4(2)(c) of the Act.
- 392.5. practices followed by Google results in leveraging its dominance in market for licensable mobile OS and app stores for Android OS, to protect its position in the downstream markets, in violation of the provisions of Section 4(2)(e) of the Act.
- 392.6. different methodologies used by Google to integrate its own UPI app *visàvis* other rival UPI apps with the Play Store results in violation of Sections 4(2)(a)(ii), 4(2)(c) and 4(2)(e) of the Act.





ORDER

- 393. In view of the foregoing analysis, the Commission delineates the following relevant market(s) in the present matter:
 - a. Market for licensable OS for smart mobile devices in India
 - b. Market for app stores for Android smart mobile OS in India
 - c. Market for apps facilitating payment through UPI in India
- 394. The Commission holds Google to be dominant in in the first two relevant markets *i.e.*, market for licensable OS for smart mobile devices in India and market for app store for Android smart mobile OS in India. Further, Google is also found to have abused its dominant position in contravention of the provisions of Section 4(2)(a)(i), Section 4(2)(a)(ii), Section 4(2)(b)(ii), Section 4(2)(c) and Section 4(2)(e) of the Act, as already discussed in the earlier part of this order.

Remedies

- 395. Accordingly, in terms of the provisions of Section 27 of the Act, the Commission hereby directs Google to cease and desist from indulging in anti-competitive practices that have been found to be in contravention of the provisions of Section 4 of the Act, as detailed in this order. Some of the measures, in this regard, are indicated below:
 - 395.1. Google shall allow, and not restrict app developers from using any third-party billing/ payment processing services, either for in-app purchases or for purchasing apps. Google shall also not discriminate or otherwise take any adverse measures against such apps using third party billing/ payment processing services, in any manner.





- 395.2. Google shall not impose any Anti-steering Provisions on app developers and shall not restrict them from communicating with their users to promote their apps and offerings, in any manner.
- 395.3. Google shall not restrict end users, in any manner, to access and use within apps, the features and services offered by app developers.
- 395.4. Google shall set out a clear and transparent policy on data that is collected on its platform, use of such data by the platform and also the potential and actual sharing of such data with app developers or other entities, including related entities.
- 395.5. The competitively relevant transaction/ consumer data of apps generated and acquired through GPBS, shall not be leveraged by Google to further its competitive advantage. Google shall also provide access to the app developer of the data that has been generated through the concerned app, subject to adequate safeguards, as highlighted in this order.
- 395.6. Google shall not impose any condition (including price related condition) on app developers, which is unfair, unreasonable, discriminatory or disproportionate to the services provided to the app developers.
- 395.7. Google shall ensure complete transparency in communicating to app developers, services provided, and corresponding fee charged. Google shall also publish in an unambiguous manner the payment policy and criteria for applicability of the fee(s).
- 395.8. Google shall not discriminate against other apps facilitating payment through UPI in India *vis-à-vis* its own UPI app, in any manner.





- 396. The anti-competitive clauses of different policies of Google, as identified in this order, shall not be enforced by Google, with immediate effect.
- 397. Google, however, is allowed three months from the date of receipt of this order to implement necessary changes in its practices and/or modify the applicable agreements/ policies and to submit a compliance report to the Commission in this regard.

Imposition of Penalty

- 398. The Commission has also considered the issue of imposition of monetary penalty upon Google and has given it a thoughtful consideration thereon. It is evident that the legislature has conferred wide discretion upon the Commission in the matter of imposition of penalty. Under the provisions contained in Section 27(b) of the Act, the Commission may impose such penalty upon the contravening parties as it may deem fit which shall be not more than ten per cent of the average of the turnover for the last three preceding financial years, upon each of such person or enterprises which are parties to such agreement or abuse.
- 399. Google in its submissions has also averred that several factors mitigate against the imposition of any penalty *i.e.*, (a) the benefits to app developers and users arising from Google's conduct; (b) the absence of any evidence of harm to app developers and consumers; (c) matter being first of its kind globally and involves novel theories of harm; (d) the lack of any evidence of anti-competitive intent; (e) the fact that the potential concerns regarding GPay have been addressed; and (f) Google's beneficial contribution to the Indian market, especially its procompetitive business model. Accordingly, Google has requested that even if an infringement is found, the Commission ought to exercise its discretion and refrain from imposing any penalty. Google has also submitted that any potential concerns relating to GPay have already been addressed by its decision to move all UPI apps on the intent flow in Google Play. Google in its submissions have also referred to

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user choice billing pilot which allows eligible and participating developers to offer an additional billing option next to Google Play's billing system. The pilot program has also been stated to extended to developers serving users in select countries, including India.

- 400. The Commission has carefully perused various averments of Google in relation to imposition of penalty. The Commission notes the two measures referred to by Google in relation to *Issue 1* and *Issue 2*, as mentioned above, have been adopted very recently in 2022. In relation to allowing non-Google UPI apps to be integrated as per intent flow methodology, Google *vide* its submissions dated 01.08.2022, has stated that "...Google currently expects the integration of all transactions with the intent flow to be completed in the coming weeks...". Similarly, the pilot project for allowing user choice billing pilot for *eligible* and participating developers has been launched on a limited basis and the same has been extended to India w.e.f. 01.09.2022 i.e., after the receipt of the Investigation Report and oral hearing in the matter.
- 401. Further, the Commission notes that the objective behind imposition of penalties is: (a) to reflect the seriousness of the contravention; and (b) to ensure that the threat of penalties will deter the parties concerned from violating the provisions of the Act. Therefore, the quantum of penalties imposed must correspond with the gravity of the offence and the same must be determined after having due regard to the mitigating and aggravating circumstances of the case. Considering the totality of factors, the Commission does not find any reason to refrain from imposing penalty in the matter.
- 402. The plea related to lack of any anticompetitive intent as well as that of novelty of the issues is a clear misrepresentation and hence not acceptable. The present conduct of Google is a continuation of its vertical integration strategy based on data collection and monetization. Since, the enforcement of provisions of Section

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4 of the Act in the year 2009, every dominant entity is required to adhere to the law of the land and ensure its conduct remains in compliance of the same. The prohibitions laid down in the Act are straight forward and any abuse of dominant position in terms of imposition of unfair conditions, denial of market access, leveraging, imposition of supplementary obligations *etc.*, is prohibited. Google, after imposing unfair conditions as well as undertaking other conducts found violative of Section 4 of the Act, cannot take a plea that it lacked anti-competitive intent. The dominant undertakings are expected to ensure their conduct in comport with the provisions of the Act. Thus, the pleas raised by Google are devoid of any merit and the same are rejected.

- 403. In relation to computation of penalty, it would also be apposite to refer to the decision of the Hon'ble Supreme Court of India in *Excel Crop Care Limited v. Competition Commission of India & Anr.*, Civil Appeal No. 2480 of 2014 wherein the Hon'ble Supreme Court considered the issue as to whether penalty under Section 27(b) of the Act should be imposed on the total/ entire turnover of the offending company or only on "relevant turnover". The Hon'ble Supreme Court opined that adopting the criteria of 'relevant turnover' for the purpose of imposition of penalty will be more in tune with the ethos of the Act and the legal principles which surround matters pertaining to imposition of penalties. While reaching this conclusion, the Hon'ble Supreme Court recorded the following reasons:
 - "...When the agreement leading to contravention of Section 3 involves one product, there seems to be no justification for including other products of an enterprise for the purpose of imposing penalty. This is also clear from the opening words of Section 27 read with Section 3 which relate to one or more specified products. It also defies common sense that though penalty would be imposed in respect of the infringing product, the 'maximum penalty' imposed in all cases be prescribed on the basis of 'all the products' and the 'total turnover' of the enterprise. It would be more so when total turnover of an





enterprise may involve activities besides production and sale of products, like rendering of services etc. It, therefore, leads to the conclusion that the turnover has to be of the infringing products and when that is the proper yardstick, it brings home the concept of 'relevant turnover'..."

- 404. Following the parameters set by the Hon'ble Supreme Court's as mentioned *supra*, the Commission now proceeds to determine relevant turnover and thereafter, would calculate appropriate percentage of penalty based on facts and circumstances of case.
- 405. Google filed written submissions dated 12.09.2022 on quantum of penalty which may be levied by the Commission in the event it is held to be in contravention of the provisions of the Act. Having considered the submissions made by Google on the potential penalties, the Commission vide its order dated 14.09.2022, directed Google to submit details of its turnover and profit generated or arising/accruing from India (including any of its group entities), from various revenue streams associated with Play Store (including advertising whether delivered/displayed inapp or otherwise from apps hosted on Play Store, paid apps and in-app purchases, developer fees, etc.) along with break-up thereof, for three preceding financial years. Google was also directed to submit details of its turnover and profit generated or arising/accruing from its entire business operations in India (including any of its group entities), for three preceding financial years. It was also clarified that the details requisitioned should include revenue and profit generated or arising/accruing from India or attributable to services delivered in India irrespective of the global nature of the underlying agreements/transactions or jurisdiction where the turnover is booked. Google filed its reply to the said order of the Commission on 06.10.2022. In this regard, Google was also granted extension of time by 14 days, as prayed.





- 406. In its submissions, Google has inter alia averred that "...if any penalty is imposed......it should be based only on turnover from Google Play's service fee when Google Play's billing system is used in India for purchases of paid apps, inapp purchases and subscription purchases...".
- 407. The Commission notes that to determine relevant turnover in relation to technology platforms, such as one operated by Google, it is important to appreciate the business model, incentives of the platforms and their revenue streams. Various products of Google work on the basis of network effects *i.e.*, with the increase in numbers of users on its platform, the attractiveness of the platform/ products for the advertisers increases multi-fold. In such platforms, not only two/ multi sides are intricately intertwined and interwoven with each other, but the products/ services offered by the platform operator (Google in this case) derive strength from each other due to economies of scope and scale. Replicating such an ecosystem becomes extremely difficult for a new entrant. Competition in such a scenario is amongst ecosystems and not just the verticals or independent services. In such a case, the entire platform has to be taken as one unit to account for the cross-market externalities between platform sides, and revenue generated therefrom has to be seen as a whole.
- 408. In this regard, the Commission has also perused the Alphabet Inc.'s Annual Reports and specifically the "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained therein, which was submitted by Google on 04.05.2022. Some of the important observations from the same re as follows:

"Users' behaviors and advertising continue to shift online as the digital economy evolves."

"Users are increasingly <u>using diverse devices</u> and modalities to access our products and services, and our advertising revenues are increasingly coming from new formats."





"We generate our advertising revenues increasingly from different channels, including mobile, and newer advertising formats"

"As online advertising evolves, we continue to expand our product offerings which may affect our monetization."

- "Google advertising revenues consist primarily of the following:
 Google Search & other consists of revenues generated on Google search properties....and other Google owned and operated properties like Gmail, Google Maps, and Google Play."
- "...We <u>generate advertising revenues</u> primarily by delivering advertising on Google properties, including Google.com, the Google Search app, YouTube, <u>Google Play</u>, Gmail and Google Maps; and Google Network Members' properties..."
- 409. Google also states that "...Google Services' core products and platforms include Android, Chrome, Gmail, Google Drive, Google Maps, Google Photos, Google Play, Search, and YouTube, each with broad and growing adoption by users around the world...". The Commission notes that most of these products are offered for free to users and primarily monetized through advertising revenue for Google. The foregoing analysis as well as financial details clearly reflect the singularity and focus of Google on advertising, in its business operations. Google Play is also an important cog in this wheel where it generates more revenues through advertising rather than through service fee (discussed below). In this complex web of various products which are mostly offered free to users in return for collecting user data for monetization through advertisement, it would be completely inappropriate to consider only service fee as relevant turnover.
- 410. The Commission notes that there are *inter alia* two other major advertisement-based revenue streams directly associated with the Play Store *i.e.*, *Revenue from Advertisements displayed on Google Play* and *Revenue from In-app Advertisements*. As per the revenue data submitted by Google, for the FY 2020-





	21, the advertising revenue from these two heads was whereas revenue related to Google's service fee was Rs.
411.	The Commission further notes that these data sets are subject to various disclaimers & caveats and because of which they are claimed to be not comparable and thus, cannot be summed up.
412	Even the data in magnest of never we concented an origin of a convince from their antique.
412.	Even the data in respect of revenue generated or arising/ accruing from their entire business operations in India, has been caveated with the following:





- 413. In this regard, it is apposite to note that the Commission has given an unambiguous direction to Google that the data should be *supported by certificates* of Chartered Accountants. However, Google has not provided the same and rather has provided certificates of its own officers.
- 414. The Commission takes a serious note of such glaring inconsistencies and wide disclaimers in presenting various data points by Google. The Commission is constrained to observe that despite commanding enormous resources, Google has failed to provide the data in the manner sought by the Commission despite grant of sufficient time, as sought by it. Be that as it may, in the interest of justice and with an intent of ensuring necessary market correction at the earliest, the Commission decides to proceed to quantify the provisional monetary penalties on the basis of the data presented by Google. Accordingly, the Commission decides to take the revenue data of Google's business operations in India, as submitted by it *vide* submission dated 06.10.2022, as relevant turnover for computation of quantum of penalty.
- 415. Now, coming to determination of an appropriate amount of penalty to be imposed, the Commission has given a thoughtful consideration to the same including the averments and submissions made by Google. The Commission has taken a note of measures announced/ adopted by Google related to issues under investigation. The Commission also notes that it can impose penalty on average of the turnover for the last three preceding financial years *i.e.*, effectively restricted to one-year turnover of the infringing entity. However, the conduct of Google is going on for many years. In this regard, it is pertinent to note the submission of Google wherein it states that, "... The scope of the Payments Policy has largely remained consistent





since 2011. Developers selling apps or distributing apps with in-app purchases have always been required to use GPB..." Also, that "...Developers have always been required to use GPB for in-app purchases and paid apps...".

416. On a holistic appreciation of the facts and circumstances of the case and the mitigating factors put forth by the OPs, the Commission is of the view that the ends of justice would be met if a penalty of 7 % of the relevant turnover. Accordingly, the Commission imposes a penalty on Google @ 7 % of its average of the average of relevant turnover for the last three preceding financial years 2018-19, 2019-20 and 2020-21, as provided by Google. Accordingly, the computation of the quantum of penalty imposed on Google is set out below:

(in INR crore)

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- 417. Consequently, the Commission imposes a penalty of Rs. 936.44 crore (Rupees Nine Hundred Thirty-Six crore and forty-four lakhs only) upon Google for violating Section 4 of the Act. Google is directed to deposit the penalty amount within 60 days of the receipt of this order.
- 418. It is made clear that the aforesaid penalty is provisional and subject to revision on Google furnishing the requisite financial details and supporting documents as sought by the Commission *vide* order dated 14.09.2022. Google is directed to do





the needful within a period of 30 days from the receipt of this order. It is further clarified that the basis of determination of penalty *i.e.*, relevant turnover as well as appropriate percentage thereof has already been decided *vide* this order. However, the actual quantum of penalty may undergo a revision based on revenue data to be submitted by Google and to that extent only, the present penalty is provisional.

419. Before parting, the Commission deems it appropriate to deal with the request of the parties seeking confidentiality over certain documents / data / information filed by them under Regulation 35 of the General Regulations, 2009 (as amended). Considering the grounds given by the parties for the grant of confidential treatment, the Commission grants confidentiality to such documents / data / information in terms of Regulation 35 of the General Regulations, 2009, subject to Section 57 of the Act, for a period of three years from the passing of this order. It is, however, made clear that nothing disclosed in the public version of this order shall be deemed to be confidential or deemed to have been granted confidentiality, as the same have been used and disclosed for purposes of the Act in terms of the provisions contained in Section 57 thereof. Accordingly, the Commission directs that two versions of the present order may be issued i.e., public version shall be served upon the parties and a confidential version shall be shared with Google through members of the confidentiality ring. The public version of the order shall be prepared keeping in mind the confidentiality requests and the provisions of Section 57 of the Act read with Regulation 35 of the CCI General Regulations, 2009 (as amended). For convenience, it is directed that the confidential version of this order may be provided to such ring members/ individuals through one of the ring members, who may then share the same with the other ring members nominated by Google.





420. The Secretary is directed to forward certified copies of the present order to the parties, in terms of the directions above.

Sd/-(Ashok Kumar Gupta) Chairperson

> Sd/-(Sangeeta Verma) Member

Sd-(Bhagwant Singh Bishnoi) Member

New Delhi

Date: 25 / 10 /2022