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17 **UNITED STATES DISTRICT COURT**
18 **NORTHERN DISTRICT OF CALIFORNIA**
19 **SAN FRANCISCO DIVISION**

20
21
22 **IN RE GOOGLE PLAY STORE**
ANTITRUST LITIGATION

23 THIS DOCUMENT RELATES TO:

24 *Epic Games Inc. v. Google LLC et al.*, Case
25 No. 3:20-cv-05671-JD
26
27

Case No. 3:21-md-02981-JD

**AMICUS CURIAE BRIEF OF THE
FEDERAL TRADE COMMISSION**

Judge: Honorable James Donato

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FTC v. Nat’l Lead Co.,
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In re Silicon Graphics, Inc.,
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In re Union Oil Co. of Calif.,
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Int’l Salt Co. v. United States,
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Jacob Siegel Co. v. FTC,
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2 *Nat'l Soc. of Pro. Engineers v. United States*,
 3 435 U.S. 679 (1978)..... 4, 13

4 *NLRB v. Express Publ'g Co.*,
 5 312 U.S. 426, (1941)..... 2, 4

6 *Nw. Env'tl. Def. Ctr. v. Bonneville Power Admin.*,
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7 *Ohio v. Am. Express Co.*,
 8 585 U.S. 529 (2018)..... 9

9 *Optronics Techs. Inc. v. Ningbo Sunny Elec. Co.*,
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10 *Otter Tail Power Co. v. United States*,
 11 410 U.S. 366 (1973)..... 13

12 *Pacific Bell Telephone Co., dba AT&T California, et al. v. linkLine Communications,*
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14 *Schine Chain Theatres v. United States*,
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16 *Steves & Sons, Inc. v. JELD-WEN, Inc.*,
 17 988 F.3d 690 (4th Cir. 2021) 1, 8, 14

18 *United States v. Aluminum Co. of Am.*,
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19 *United States v. Am. Tel. & Tel. Co.*,
 20 552 F. Supp. 131 (D.D.C. 1982)..... 1

21 *United States v. E.I. du Pont de Nemours & Co.*,
 22 366 U.S. 316 (1961)..... 1

23 *United States v. Google LLC*,
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24 *United States v. Grinnell Corp.*,
 25 384 U.S. 563 (1966)..... 3, 4, 6

26 *United States v. Microsoft Corp.*,
 27 253 F.3d 34 (D.C. Cir. 2001) 9, 10

28 *United States v. Nat'l Lead Co.*,
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1 *United States v. Paradise*,
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2 *United States v. Paramount Pictures*,
3 334 U.S. 131 (1948)..... 12, 14

4 *United States v. Topco Assocs., Inc.*,
5 405 U.S. 596 (1972)..... 1

6 *United States v. U.S. Gypsum Co.*,
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7 *United States v. United Shoe Mach. Corp.*,
8 391 U.S. 244 (1968)..... 3

9 *Va. Ry. Co. v. Sys. Fed’n No. 40*,
10 300 U.S. 515, 552 (1937)..... 7

11 *Verizon Commc’ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*,
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12 *Zenith Radio Corp. v. Hazeltine Rsch., Inc.*,
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14 **Statutes**

15 15 U.S.C. § 41..... 2

16 15 U.S.C. § 45..... 2

17 15 U.S.C. § 46(b)..... 3

18 **Other Authorities**

19 Big Data: A Tool for Inclusion or Exclusion? Understanding the Issues, FTC Report
20 (January 2016) 3

21 *Epic v. Google*,
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22 *Epic v. Google*,
23 Epic’s Response to Google’s Proffer Regarding Epic’s Proposed Injunction, Case
24 No. 3:21-md-02981-JD (N.D. Cal.) 6

25 *Epic v. Google*,
No. 3:20-cv-05671-JD (N.D. Cal. Nov. 17, 2022) 7

26 FTC’s Merger Remedies 2006-2012: A Report of the Bureaus of Competition and
27 Economics, FTC Report (February 2017) 3

28 House Committee on Appropriations Subcommittee on Financial Services and General
Government (May 15, 2024)..... 3

1 Inside the Bureau of Competition (detailing work of the FTC’s Technology Enforcement
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2

3 Nicole Martin, “How Much Does Google Really Know About You? A Lot.” Forbes,
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4

5 Non-HSR Reported Acquisitions by Select Technology Platforms, 2010-2019: An FTC
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6 *Report of the American Bar Ass’n Section of Antitrust Law, Special Committee to Study*
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 58 Antitrust L.J. 43, 103 (1989)..... 3

7

8 Stigler Committee on Digital Platforms,
 Final Report (2019)..... 10

9

10 The FTC’s Office of Technology (describing the FTC’s in-house technical expertise),
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11

12 U.S. Dep’t of Justice & Fed Trade Comm’n, Merger Guidelines 2.6.A. (2023)..... 11

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Introduction

After a multi-week trial in this matter, a jury found Google liable for multiple antitrust violations related to the Google App Store, an essential platform used by developers to market their software and by users to purchase critical applications. Specifically, the jury found that Google willfully acquired or maintained durable monopolies in the markets for Android App Distribution and Android In-App Payment Solutions for digital goods and services transactions. The jury also found that Google entered into a variety of agreements that unreasonably restrained trade in those markets, and unlawfully tied the use of the Google Play Store to the use of Google Play Billing. The issue before this Court is how to remedy Google’s violations of the antitrust laws.

Robust enforcement of the antitrust laws is essential for protecting and preserving economic freedom and the free-enterprise system.¹ When a company engages in business practices that are found to violate the antitrust laws, courts are empowered to remedy those violations by ordering all relief necessary to restore competition in the affected markets.² A district court has wide latitude to provide relief that stops the illegal conduct, prevents its recurrence, and restores competition lost due to the illegal conduct. A court also has the power to

¹ *United States v. Topco Assocs., Inc.*, 405 U.S. 596, 610 (1972) (“Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of free enterprise. They are as important to the preservation of economic freedom and our free-enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms.”).

² *United States v. E.I. du Pont de Nemours & Co.*, 366 U.S. 316, 326 (1961). (“[C]ourts are authorized, indeed required, to decree relief effective to redress the violations, whatever the adverse effect of such a decree on private interests. . . . Those who violate the Act may not reap the benefits of their violations and avoid an undoing of their unlawful project on the plea of hardship or inconvenience.”) (citations omitted).

In monopolization cases, the Court has latitude to restore competition by implementing either structural remedies (e.g., divesting a business line) or behavioral remedies (e.g., enjoining particular conduct). See *United States v. Am. Tel. & Tel. Co.*, 552 F. Supp. 131, 222-27 (D.D.C. 1982) (ordering the reorganization of AT&T), *aff’d sub nom. Maryland v. United States*, 460 U.S. 1001 (1983). The Court’s authority to grant structural remedies extends to cases brought by private plaintiffs. See *California v. Am. Stores*, 495 U.S. 271, 284 (1990); *Steves & Sons, Inc. v. JELD-WEN, Inc.*, 988 F.3d 690, 720 (4th Cir. 2021). Given that Epic has not proposed any structural remedies in the present case, the FTC’s brief is focused on the Court’s authority concerning behavioral remedies.

1 fashion relief based on the record evidence regarding the defendant’s conduct and the
2 competitive dynamics of the industry at issue.³

3 The Federal Trade Commission (FTC or Commission) respectfully submits this *amicus*
4 *curiae* brief to aid the Court’s consideration of the remedy for Google’s antitrust violations. The
5 FTC takes no position on Epic’s specific remedy proposals, or the evidence cited by the parties
6 in support or opposing them.

7 **Interest of the Federal Trade Commission**

8 The FTC’s mission is preventing unfair methods of competition and unfair or deceptive
9 practices in the marketplace.⁴ Through over 100 years of experience enforcing the U.S. antitrust
10 laws, the FTC has developed expertise investigating and litigating cases involving
11 anticompetitive mergers and conduct. In its adjudicative capacity,⁵ the FTC crafts orders to
12 remedy antitrust violations and vindicate the public interest.⁶ The FTC’s enforcement authority
13 covers a wide range of industries, including technology and digital platforms. The agency has
14 significant legal and technical expertise dedicated to addressing competition and consumer
15 protection issues in technology sectors.⁷

18 ³ *Zenith Radio Corp.*, 395 U.S. at 133 (“We see no reason that the federal courts, in exercising
19 the traditional equitable powers extended to them by § 16, should not respond to the ‘salutary
20 principle that when one has been found to have committed acts in violation of a law he may be
21 restrained from committing other related unlawful acts.’”) (quoting *NLRB v. Express Publ’g Co.*,
22 312 U.S. 426, 436 (1941)); *see also United States v. U.S. Gypsum Co.*, 340 U.S. 76, 89 (1950)
23 (“The determination of the scope of the decree to accomplish this purpose is particularly the
24 responsibility of the trial court.”); *In re Data Gen. Corp. Antitrust Litig.*, No. MDL 369 (MHP),
1986 WL 10899, at *4 (N.D. Cal. July 30, 1986) (same).

25 ⁴ *See* 15 U.S.C. §§ 41-58.

26 ⁵ *See* 15 U.S.C. § 45.

27 ⁶ *FTC v. Nat’l Lead Co.*, 352 U.S. 419, 428-29 (1957) (recognizing the FTC is an expert body
28 with wide latitude to design remedies.); *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 613 (1946)
(same).

⁷ *See, e.g.*, Inside the Bureau of Competition (detailing work of the FTC’s Technology
Enforcement Division), <https://www.ftc.gov/about-ftc/bureaus-offices/bureau-competition/inside-bureau-competition>; The FTC’s Office of Technology (describing the FTC’s
in-house technical expertise), <https://www.ftc.gov/about-ftc/bureaus-offices/office-technology>.

1 Not only has the FTC investigated and litigated matters concerning many areas of
 2 technology, but it has also conducted studies and information-gathering inquiries to better
 3 understand dynamics in digital industries and their impact on the competitive landscape. The
 4 agency's broad authority to compel the production of data and other information⁸ gives it a
 5 unique capacity to conduct "systematic, institutional study of real-world industries and activities"
 6 that "modern academic research in industrial organization rarely undertakes."⁹ Of note, the
 7 Commission has done a variety of empirical studies and issued reports on remedies, mergers and
 8 conduct in technology markets, and data practices.¹⁰

9 **I. Effective Relief Must Stop the Illegal Conduct, Prevent its Recurrence, and Restore**
 10 **Competition**

11 Once a violation of the antitrust laws has been established, courts should fashion a
 12 remedy that stops the illegal conduct, prevents its recurrence, and restores competition to the
 13 affected markets.¹¹ The Supreme Court has consistently explained that the relief ordered in an
 14 antitrust case "should 'cure the ill effects of the illegal conduct, and assure the public freedom
 15 from its continuance,' and it necessarily must 'fit the exigencies of the particular case.'"¹²

16 ⁸ 15 U.S.C. § 46(b).

17 ⁹ *Report of the American Bar Ass'n Section of Antitrust Law, Special Committee to Study the*
 18 *Role of the Federal Trade Commission*, 58 Antitrust L.J. 43, 103 (1989).

19 ¹⁰ *See, e.g.,* FTC's Merger Remedies 2006-2012: A Report of the Bureaus of Competition and
 20 Economics, FTC Report (February 2017); Big Data: A Tool for Inclusion or Exclusion?
 21 Understanding the Issues, FTC Report (January 2016); Non-HSR Reported Acquisitions by
 22 Select Technology Platforms, 2010-2019: An FTC Study, (September 2021), available at
 23 [https://www.ftc.gov/system/files/documents/reports/non-hsr-reported-acquisitions-select-
 24 technology-platforms-2010-2019-ftc-study/p201201technologyplatformstudy2021.pdf](https://www.ftc.gov/system/files/documents/reports/non-hsr-reported-acquisitions-select-technology-platforms-2010-2019-ftc-study/p201201technologyplatformstudy2021.pdf); House
 25 Committee on Appropriations Subcommittee on Financial Services and General Government
 26 (May 15, 2024) (testimony of Chair Lina M. Khan), [https:// www.ftc.gov/system/files/ftc_gov/
 27 pdf/testimony-chair-khan.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/testimony-chair-khan.pdf).

28 ¹¹ *Ford Motor Co. v. United States*, 405 U.S. 562, 577 (1972); *United States v. United Shoe
 Mach. Corp.*, 391 U.S. 244, 250 (1968); *United States v. Grinnell Corp.*, 384 U.S. 563, 577
 (1966).

¹² *Ford Motor Co.*, 405 U.S. at 575 (quoting *U.S. Gypsum Co.*, 340 U.S. at 88 and *Int'l Salt Co.
 v. United States*, 332 U.S. 392, 401 (1947)) (The Supreme Court continues, "In an equity suit,
 the end to be served is not punishment of past transgression, nor is it merely to end specific
 illegal practices. A public interest served by such civil suits is that they effectively pry open to

1 Regardless of the particular theory of antitrust harm, adequate relief should serve these remedial
 2 goals and “put an end to the combination and deprive the defendants of any of the benefits of the
 3 illegal conduct and break up or render impotent the monopoly power found to be in violation of
 4 the Act.”¹³ The Ninth Circuit has specifically recognized that these remedial goals apply in
 5 monopolization cases like this one: “If the jury finds that monopolization or attempted
 6 monopolization has occurred, the available injunctive relief is broad, including to terminate the
 7 illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there
 8 remain no practices likely to result in monopolization in the future.”¹⁴

9 **A. District Courts Have Broad Power to Craft Injunctive Relief to Remedy** 10 **Antitrust Violations**

11 District courts enjoy “broad power” to fit the decree to the special needs of the individual
 12 case.¹⁵ There are four important facets to a district court’s remedial power in antitrust actions.

13 First, a court can go further than “a simple proscription against the precise conduct
 14 previously pursued.”¹⁶ Courts have wide leeway not only to enjoin specific practices found to
 15 have violated the antitrust laws, but also “to restrain acts which are of the same type or class as
 16 unlawful acts which the court has found to have been committed or whose commission in the
 17 future, unless enjoined, may fairly be anticipated from the defendant’s conduct in the past.”¹⁷ For
 18 example, the Supreme Court in *Zenith* reinstated a far-reaching injunction that did not merely
 19 prohibit the conduct adjudged to be illegal. Instead the injunction prevented defendants from
 20 conspiring in a patent pool in Canada and *all other foreign pools*, even though the violation and

21
 22 competition a market that has been closed by defendants’ illegal restraints. If this decree
 23 accomplishes less than that, the Government has won a lawsuit and lost a cause.”).

24 ¹³ *Grinnell Corp.*, 384 U.S. at 566 (citing *Schine Chain Theatres v. United States*, 334 U.S. 110, 128-129 (1948)).

25 ¹⁴ *Optronics Techs. Inc. v. Ningbo Sunny Elec. Co.*, 20 F.4th 466, 486 (9th Cir. 2021).

26 ¹⁵ *Zenith Radio Corp.*, 395 U.S. at 132 (citing *NLRB*, 312 U.S. at 435 and *United States v. Nat’l*
 27 *Lead Co.*, 332 U.S. 319, 328-35, 328 n.4 (1947)); *see also Ford Motor Co.*, 405 U.S. at 573
 (quoting *Int’l Salt Co.*, 332 U.S. at 401).

28 ¹⁶ *Nat’l Soc. of Pro. Engineers v. United States*, 435 U.S. 679, 698 (1978).

¹⁷ *Zenith Radio Corp.*, 395 U.S. at 132.

1 harm were established only in relation to a patent pool in Canada.¹⁸ Recognizing courts' power
2 to order fencing-in relief, the Court noted that "when the purpose to restrain trade appears from a
3 clear violation of law, it is not necessary that all of the untraveled roads to that end be left open
4 and that only the worn one be closed."¹⁹

5 Second, injunctive relief is not limited to proscribing specific types of anticompetitive
6 conduct. Instead, a district court may order whatever relief is necessary to restore the competition
7 eliminated by the illegal conduct, including by identifying and requiring actions that the
8 defendant must affirmatively take toward that end.²⁰ For example, in *Massachusetts v. Microsoft*,
9 the D.C. Circuit affirmed a remedy that required Microsoft to disclose proprietary interfaces and
10 protocols that would help competitors design products interoperable with the Windows operating
11 system.²¹ The court acknowledged that "nondisclosure of this proprietary information had played
12 no role in our holding [that] Microsoft violated the antitrust laws."²² But it nonetheless
13 concluded that such relief was a reasonable way of "facilitating the entry of competitors into a
14 market from which Microsoft's unlawful conduct previously excluded them."²³

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18 ¹⁸ *Id.* at 132-33.

19 ¹⁹ *Id.* at 133 (citing *Int'l Salt Co.*, 332 U.S. at 400).

20 ²⁰ *In re Data Gen. Corp. Antitrust Litig.*, 1986 WL 10899, at *4 ("An injunction in an antitrust
21 case need not be limited to the acts described at trial but may extend even to acts that would be
22 entirely legal if considered in a vacuum"); *see also Schine Chain Theaters, Inc.*, 334 U.S. at 128
23 ("In this type of case we start from the premise that an injunction against future violations is not
24 adequate to protect the public interest. If all that was done was to forbid a repetition of the illegal
25 conduct, those who had unlawfully built their empires could preserve them intact. They could
26 retain the full dividends of their monopolistic practices and profit from the unlawful restraints of
trade which they had inflicted on competitors."); *Ford Motor Co.*, 405 U.S. at 573, 573-78
(imposing broad injunctions beyond merely returning the market back to the status quo ante
because "[t]he relief ordered should 'cure the ill effects of the illegal conduct, and assure the
public freedom from its continuance, and it necessarily must 'fit the exigencies of the particular
case.'") (citations omitted).

27 ²¹ *Massachusetts v. Microsoft*, 373 F.3d 1199, 1215-18 (D.C. Cir. 2004).

28 ²² *Id.* at 1215.

²³ *Id.* at 1218.

1 Third, injunctive relief should restore lost competition in a forward-looking way. The
 2 Supreme Court has said that when considering remedial provisions that are “designed to restore
 3 future freedom of trade, courts should give weight to [a jury finding and] the circumstances
 4 under which the illegal acts occur.”²⁴ In other words, the goal is to “effectively pry open to
 5 competition a market that has been closed by defendants’ illegal restraints,” and not merely to
 6 end the specific illegal practices.²⁵ Therefore, fashioning an effective equitable remedy in an
 7 antitrust case requires courts “to see to it that effective competition shall be established . . . not
 8 only for the present but for the foreseeable future as well.”²⁶

9 Fourth and finally, “adequate relief in a monopolization case should . . . deprive the
 10 defendants of any of the benefits of the illegal conduct.”²⁷ If antitrust violators ultimately reap
 11 the advantages secured through unlawful conduct, that will only serve to incentivize similar
 12 behavior by other market participants. In developing an appropriate remedy, a district court
 13 should therefore strive to ensure the monopolist is not continuing to reap the advantages and
 14 benefits obtained through the antitrust violation .

15 **B. Courts Fashioning a Remedy in Private Suits Exercise Broad Equity** 16 **Power Where the Public Interest is Implicated**

17 It is well-established that private antitrust suits can serve the public interest when they
 18 open markets that had been insulated from competition because of a monopolist’s exclusionary
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21 ²⁴ *U.S. Gypsum Co.*, 340 U.S. at 89.

22 ²⁵ *Int’l Salt Co.*, 332 U.S. at 401.

23 ²⁶ *United States v. Aluminum Co. of Am.*, 91 F. Supp. 333, 392 (S.D.N.Y. 1950); *Int’l Salt Co.*,
 24 332 U.S. at 401 n.10; *see also United States v. U.S. Gypsum Co.*, 340 U.S. at 88-89 (“A trial
 25 court upon a finding of . . . a monopoly has the duty to compel action . . . that will, so far as
 practicable, cure the ill effects of the illegal conduct, *and assure the public freedom from its
 continuance.*”) (emphasis added).

26 ²⁷ *Grinnell Corp.*, 384 U.S. at 577; *see also* Epic’s Response to Google’s Proffer Regarding
 27 Epic’s Proposed Injunction, *Epic v. Google*, Case No. 3:21-md-02981-JD (N.D. Cal.), ECF No.
 28 985 at 5 (citing May 23, 2024 Hearing Tr. 64:23-65:1) (noting that “this Court advised Google
 that . . . ‘[t]here is going to be a remedy. . . . that’s the consequence of having violated the
 antitrust laws.’”).

1 conduct.²⁸ Even outside the specific context of private antitrust suits, courts can exercise
2 similarly broad remedial power in other types of private cases that involve the public interest.²⁹

3 Here, the remedy in Epic’s case against Google implicates the public interest. Like in
4 *Zenith Radio*, Epic’s request for injunctive relief seeks to create “an open, competitive Android
5 ecosystem for all users and industry participants.”³⁰ In fact, Epic is not seeking monetary
6 damages in this action or preferential treatment for itself to the exclusion of other developers.³¹
7 As detailed in its complaint, “Epic seeks to end Google’s unfair, monopolistic and
8 anticompetitive actions in each of [the markets alleged], which harm device makers, app
9 developers, app distributors, payment processors, and consumers.”³² To that end, the remedial
10 “goal” of Epic’s injunctive relief proposal is to “open up to competition the two markets found
11 by the jury” for the benefit of developers and users.³³ The public interest in restoring lost
12 competition as a result of Google’s monopolistic conduct confirms that the Court may order

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14 ²⁸ *Zenith Radio Corp.*, 395 U.S. at 133 (quoting *Int’l Salt Co.*, 332 U.S. at 401); see also *Mid-W.*
15 *Paper Prod. Co. v. Cont’l Grp., Inc.*, 596 F.2d 573, 590 (3d Cir. 1979) (“A private action for
16 relief under § 16 is one of the weapons, together with private treble damage actions and
17 government criminal and civil suits, in the arsenal established by Congress for policing the
18 antitrust laws and for vindicating “the important public interest in free competition.” (footnotes
19 omitted) (quoting *Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 502 (1969))); see also
20 *eBay v. MercExchange, LLC*, 547 U.S. 388, 391 (2006) (identifying a four-factor test for private
21 plaintiffs seeking a permanent injunction: (1) that it had suffered an irreparable injury; (2) that
22 remedies available at law, such as monetary damages, were inadequate to compensate for that
23 injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a
24 remedy in equity was warranted; and (4) that the public interest would not be disserved by a
25 permanent injunction.).

26 ²⁹ *Nw. Envtl. Def. Ctr. v. Bonneville Power Admin.*, 477 F.3d 668, 680 (9th Cir. 2007); see, e.g.,
27 *Va. Ry. Co. v. Sys. Fed’n No. 40*, 300 U.S. 515, 552 (1937) (affirming injunction entered by
28 district court regarding a private settlement of labor dispute because the “peaceable settlement of
29 labor controversies . . . is a matter of public concern”).

30 Second Amended Complaint for Injunctive Relief ¶ 4, *Epic v. Google*, No. 3:20-cv-05671-JD
(N.D. Cal. Nov. 17, 2022), ECF No. 341.

31 Epic’s Proposed Permanent Injunction at 1, *Epic v. Google*, 3:21-md-02981-JD (N.D. Cal.
Apr. 11, 2024), ECF No. 952 (“The goal of this injunction is to open up to competition [in] the
two markets . . . [for] the benefit of developers of Android apps [], developers of payment
solutions for use in Android apps[,] and users of Android mobile devices [].”).

32 Second Amended Complaint for Injunctive Relief ¶ 3, *Epic*, No. 3:20-cv-05671-JD.

33 Epic’s Proposed Permanent Injunction at 1, *Epic*, 3:21-md-02981-JD.

1 equitable remedies in this private suit to restore competition for the benefit of the public and not
2 merely the plaintiff.³⁴

3 **II. Crafting Effective Antitrust Remedies in Digital Markets Requires Accounting for**
4 **Network Effects, Data Feedback Loops, and Other Key Features of Digital Markets**

5 In considering what remedy would effectively redress Google’s antitrust violations and
6 restore competition, it is appropriate for the Court to consider the particular characteristics of
7 digital markets, which can allow monopolists that achieved dominance through exclusionary
8 conduct to perpetuate entry barriers and maintain monopoly power long after that conduct has
9 stopped. Understanding the dynamics of these markets—particularly the lock-in advantages of
10 network effects and data incumbency—can help the Court appreciate the need for remedies that
11 go beyond purely prohibitory injunctions in digital markets.

12 **A. Digital Platforms Enjoy Powerful Network Effects and Data Feedback**
13 **Loops That Are Difficult to Dislodge**

14 Digital platforms enable interactions between distinct users of the platform, and as a
15 result benefit from network effects. Some platforms enable interactions between users on the
16 same “side” of the platform. This is the case in mobile messaging and social networking
17 platforms, where users interact and communicate with other users.³⁵ And some platforms enable
18 interactions between stakeholders on different “sides” of the platform, as is the case in computer
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24 ³⁴ *Steves & Sons, Inc.*, 988 F.3d at 720 (quoting *Cal. v. Am. Stores Co.*, 495 U.S. 271, 284 (1990)
25 (cleaned up)).

26 ³⁵ *See, e.g., Klein v. Facebook, Inc.*, 580 F. Supp. 3d 743, 780 (N.D. Cal. 2022) (“A direct
27 network effect is present when a ‘service becomes more valuable to users as additional others
28 use the . . . service.’ Because the goal of a social media service is to provide users with content
created by other users of the service, social media services exhibit strong direct network
effects.”) (citations omitted).

1 operating systems,³⁶ app stores,³⁷ and payment platforms like credit cards.³⁸ In either case,
2 network effects mean that demand for the platform grows exponentially as more users join the
3 platform.

4 Network effects can confer a powerful incumbency advantage to dominant digital
5 platforms, creating barriers to entry and to competition.³⁹ Users are often less likely to switch to
6 competing platforms given the presence of large numbers of developers on the incumbent
7 platform, and developers who may otherwise offer their products on a competing platform are
8 often less likely to do so because the competing platform lacks a viable customer base. The
9 incumbent platform operator—which had been motivated to attract both users and developers by
10 offering innovative, low-cost services before establishing dominance—may become less
11 incentivized to compete after it achieves market power and builds a moat insulating itself from
12 competition. Once users and other stakeholders are locked in, the dominant operator is often less
13 incentivized to invest in the platform by adding features or lowering the costs of using the
14 platform for paying participants like developers. As the D.C. Circuit explained in *United States*
15 *v. Microsoft*, such network effects create a “chicken-and-egg situation” in which dominant digital
16 platforms become difficult to dislodge.⁴⁰

17 In addition to network effects, dominant digital platforms can also insulate their market
18 positions through data feedback loops. When consumers use digital platforms to interact with
19 other users or stakeholders, the platform operator typically retains important data about users and
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21 ³⁶ See generally *United States v. Microsoft Corp.*, 253 F.3d 34, 55 (D.C. Cir. 2001).

22 ³⁷ *In re Google Play Store Antitrust Litig.*, No. 20-CV-05761-JD, 2022 WL 17252587, at *5
23 (N.D. Cal. Nov. 28, 2022) (“Dr. Singer posits, without objection by Google, that the Android
24 App Distribution Market is a two-sided market in that it ‘matches buyers (in this case
25 consumers) and sellers (in this case app developers). Two-sided platforms benefit from ‘indirect
26 network effects,’ meaning that each additional buyer makes the platform more appealing to
27 sellers.”).

28 ³⁸ See generally *Ohio v. Am. Express Co.*, 585 U.S. 529 (2018).

³⁹ See *United States v. Google LLC*, No. 20-cv-3010 (APM), 2024 U.S. Dist. LEXIS 138798, at
*372-73 (D.D.C. Aug. 5, 2024).

⁴⁰ *Microsoft Corp.*, 253 F.3d at 55 (“[D]espite the limited success of its rivals, Microsoft benefits
from the applications barrier to entry.”).

1 how they behave.⁴¹ As the incumbent amasses users it therefore also amasses data, which further
2 raises switching costs for users and advertisers. As with network effects, the collection of user
3 data can form a self-reinforcing feedback loop: users engage with a platform, providing data to
4 that platform, and the platform takes advantage of that data to further draw and lock-in users,
5 advertisers, and other stakeholders to the platform.⁴² This continuous loop creates a barrier to
6 entry.

7 These features of digital markets mean that firms that achieve the necessary scale to take
8 off can experience accelerated growth. And competitive harm, in turn, is often cumulative.
9 Exclusionary conduct by a monopolist can have an amplified effect, further insulating the
10 monopolist from competition and widening the gulf between it and everyone else.

11 Having achieved dominance, a monopolist can face a strong incentive to leverage its
12 network and data-driven monopoly power to exclude competition. It could shift away from open
13 access and interoperability, making it harder for developers or other firms to gain a foothold to
14 compete or work with other emerging competitors of the dominant operator.⁴³ It could degrade
15 the utility or availability of a rival platform, making it harder for the rival to achieve the network
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18 ⁴¹ See, e.g., Nicole Martin, “How Much Does Google Really Know About You? A Lot.” *Forbes*,
19 Mar. 19, 2019, available at <https://www.forbes.com/sites/nicolemartin/2019/03/11/how-much-does-google-really-know-about-you-a-lot/>.

20 ⁴² See Stigler Committee on Digital Platforms, Final Report (2019), available at
21 [https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-](https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf)
22 [report---stigler-center.pdf](https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf) (“Barriers to equivalent data resources, a side effect of not having the
23 history, scale, or scope of the incumbent, can inhibit entry, expansion, and innovation. The same
24 effects that drive the quality of digital services higher as more users join—a positive feedback
25 loop—makes the strong stronger and the weak weaker. Data feeds the development of
26 algorithmic and AI training processes that enables more profitable exploitation of consumer
attention through advertising. A data advantage over rivals can enable a company to achieve a
virtuous circle of critical economies of scale leading to network effects, and a competitive
balance in its favor, leading to the gathering of yet more data. A new entrant is likely to
experience this in reverse—a vicious cycle—as it fails to surmount the entrance barrier.”)
(citations omitted).

27 ⁴³ See, e.g., *Microsoft Corp.*, 253 F.3d at 74-78 (finding that Microsoft unlawfully excluded
28 competition by limiting interoperability between Windows and Java and preventing other firms
from creating cross-platform interfaces).

1 necessary to pose a meaningful competitive threat.⁴⁴

2 The fruits of the platform monopolist’s conduct are not limited to the supracompetitive
3 rents it charges to the users of the platform.⁴⁵ By excluding competition and denying a rival
4 platform the chance to compete, the monopoly platform bolsters its own network and data—
5 deepening the moat that insulates it from competition.⁴⁶

6 Collectively, these features of digital platforms—network effects and data feedback
7 loops—reinforce one another and create unique barriers for effective competition. For example, a
8 startup app store platform has neither the users necessary to attract developers nor the products
9 necessary to attract users. To compete, new platforms must attract users over from a dominant
10 platform with an existing set of users, developers, products *and* a robust and unique set of data
11 collected from users and other stakeholders. These attributes make it more difficult for rivals and
12 would-be rivals to attract and retain a sufficiently large network of users and user data to pose an
13 effective constraint on the dominant platform.

14 **B. Effective Remedies Should Address Cumulative Harm Due to Network 15 Effects and Data Feedback Loops**

16 When a dominant digital platform engages in antitrust violations, the harm can be
17 cumulative due to the advantages conferred by network effects and data feedback loops. For
18 example, network effects and data feedback loops can intensify the harm of conduct that
19 unlawfully deprives rivals of scale, exponentially widening the gulf between firms that can and
20 cannot effectively compete. Accordingly, an effective antitrust remedy may need to go beyond
21 injunctions that target and enjoin specific exclusionary conduct in order to restore competition in
22 digital platform markets.⁴⁷

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24 ⁴⁴ See U.S. Dep’t of Justice & Fed Trade Comm’n, Merger Guidelines 2.6.A. (2023).

25 ⁴⁵ *Google*, 2024 U.S. Dist. LEXIS 138798, at *351.

26 ⁴⁶ *Id.*

27 ⁴⁷ *Ford Motor Co.*, 405 U.S. at 573 n.8 (“The suggestion that antitrust ‘violators may not be
28 required to do more than return the market to the status quo ante’ . . . is not a correct statement of
the law. . . . The relief which can be afforded under these statutes is not limited to the restoration
of the status quo ante. There is no power to turn back the clock. Rather, the relief must be

1 In particular, a remedy may need to ensure that potential competitors can overcome the
 2 lock-in advantages of network effects and data incumbency. This could include remedies that
 3 ensure that a dominant platform is sufficiently interoperable with competitor platforms to give
 4 the rivals a meaningful chance to attract a sufficient network of users, developers, and other
 5 stakeholders to compete effectively in the market. Further, to reduce the barriers associated with
 6 data feedback loops, a remedy may include provisions ensuring data interoperability, so that
 7 users are less “locked in” and can more freely take their data to a competing platform. And to
 8 address unlawfully acquired scale or unlawfully erected entry barriers, be it in the context of a
 9 single product or across lines of business, a remedy may involve structural relief. Forward-
 10 looking provisions like these are necessary to dislodge barriers a monopolist has accrued from
 11 network effects and data feedback loops. A failure to overcome a platform monopolist’s network
 12 and data-driven market power and open the market to competition risks prolonging a market
 13 where defendants continue to enjoy the “fruits of monopolistic practices or restraints of trade.”⁴⁸

14 **III. The Foregoing Remedial Principles Apply to Google’s Objections and Proffer**

15 Applying the principles described above, the FTC offers the following views about
 16 certain aspects of Google’s Proffer Concerning Epic’s Proposed Remedies⁴⁹ (“Proffer”) and
 17 Google’s Objections to Epic’s Proposed Injunction⁵⁰ (“Objections”).

18 First, Google raises several objections concerning how the proposed injunction requires
 19 Google to deal with its rivals. Specifically, Google raises concerns about both the
 20 administrability of injunctions that impose duties to deal with competitors⁵¹ and the implications

21
 22 directed to that which is ‘necessary and appropriate in the public interest to eliminate the effects
 23 of the acquisition offensive to the statute,’ or which will ‘cure the ill effects of the illegal
 conduct, and assure the public freedom from its continuance.’”) (citations omitted).

24 ⁴⁸ *United States v. Paramount Pictures*, 334 U.S. 131, 152-53 (1948).

25 ⁴⁹ Google’s Proffer Regarding Epic’s Proposed Remedies, *Epic v. Google*, No. 3:20-cv-05671-
 JD (N.D. Cal.), ECF No. 671 (hereinafter “Google Proffer”).

26 ⁵⁰ Google’s Objections to Epic’s Proposed Injunction, *Epic*, No. 3:21-md-02981-JD (hereinafter
 “Google Objections”).

27 ⁵¹ Google Objections ¶ 5, *citing linkLine* (“Epic’s “proposed injunction is legally improper
 28 because it would impose duties on Google to deal with its competitors that would be impossible

1 of any requirement that Google provide access to its Application Programming Interfaces (API)
 2 to non-customers for free.⁵² But courts have wide latitude to impose these sorts of requirements
 3 on monopolists when crafting remedies to restore competition. In *Massachusetts v. Microsoft*,
 4 the D.C. Circuit recognized a court’s authority to award this type of relief when it affirmed an
 5 injunction requiring Microsoft to share its proprietary APIs with competitors to “facilitate[e]
 6 the[ir] entry . . . into a market from which Microsoft’s unlawful conduct previously excluded
 7 them.” 373 F.3d 1199, 1215-18 (D.C. Cir. 2004).

8 In its objections, Google relies heavily on *Pacific Bell Telephone Co., dba AT&T*
 9 *California, et al. v. linkLine Communications, Inc., et al.*, 555 U.S. 438 (2009) and *Verizon*
 10 *Commc’ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) to support its positions
 11 concerning the administrability of Epic’s proposed remedy. Here, unlike *Trinko* and *linkLine*, a
 12 jury has already found that Google violated the antitrust laws.⁵³ Neither case says anything about
 13 the scope of the Court’s equitable authority to restore competitive conditions once an antitrust
 14 violation has been found. The Commission routinely orders changes in the terms of existing and
 15 future commercial relationships when the firm has excluded rivals in violation of the antitrust
 16 laws, including by requiring respondents to provide royalty-free licenses.⁵⁴

17 _____
 18 to administer.”).

19 ⁵² Google Proffer ¶ 6 “The proposed injunction would impermissibly require Google to give
 20 away for free its intellectual property, including proprietary Application Programming Interfaces,
 to noncustomers”

21 ⁵³ “The law violator who would oppose a remedy imposed against him as itself a violation of the
 22 law does not stand in the same position as an innocent party; those whom the court has found in
 the wrong may not oppose a remedy on the ground that it would constitute a wrong if leveled at a
 23 non-participant in the litigation” *United States v. Paradise*, 480 U.S. 149, 193 n.3 (1987) (J.
 Stevens, concurring). Antitrust violators “must expect some fencing in,” *Otter Tail Power Co. v.*
 24 *United States*, 410 U.S. 366, 381 (1973), and “the fact that an injunction impinges upon “rights
 that would otherwise be . . . protected” does “not prevent [the court] from remedying the antitrust
 25 violations.” *Nat’l Soc. of Pro. Engineers*, 435 U.S. at 697-98.

26 ⁵⁴ See, e.g., *In re Intel Corp.*, Dkt. No. 9341 (F.T.C. Nov. 2, 2010) (decision and order) Sec. II.A
 27 and II.B (requiring open interfaces and commitments to provide assurances and disclosures to
 support customer switching to rivals), [https://www.ftc.gov/sites/default/files/documents/cases/](https://www.ftc.gov/sites/default/files/documents/cases/2010/08/100804intelanal_0.pdf)
 28 [2010/08/100804intelanal_0.pdf](https://www.ftc.gov/sites/default/files/documents/cases/2010/08/100804intelanal_0.pdf); *In re Silicon Graphics, Inc.*, Dkt. No. C-3626 (F.T.C. Nov. 14,
 1995) (decision and order) (requiring porting agreements to permit customers to use competing

1 Second, throughout its Proffer, Google characterizes the costs associated with complying
 2 with Epic’s proposed remedy as burdensome.⁵⁵ Where an adjudicated antitrust violator has the
 3 ability to comply with a remedy that is necessary to restore competition, complaints about the
 4 burdens of compliance are no excuse. To hold otherwise would disregard Congress’ design for
 5 the antitrust laws to prevent anticompetitive behavior.⁵⁶ In this case, a jury found Google liable
 6 for multiple antitrust violations related to the Google App Store, an essential platform used by
 7 developers to market their software and by users to search for, purchase, and download
 8 sometimes critical applications. This type of monopolistic behavior has significantly harmed
 9 millions of users in the United States. It would undermine deterrence to allow monopolists to
 10 reap the rewards of illegal monopolization while avoiding the costs of restoring the competition
 11 that they unlawfully eliminated.

12 Conclusion

13 The FTC respectfully offers these principles for fashioning effective relief in this case
 14 involving the monopolization of a digital platform market as the Court considers all available
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16 platforms, as well as the publication of application programming interfaces to facilitate
 17 competing developers), (<https://www.govinfo.gov/content/pkg/FR-1995-07-05/pdf/95-16453.pdf>; *In re Robert Bosch GmbH*, Dkt. No. C-4377 (F.T.C. Nov. 26, 2012) (decision and
 18 order) (requiring royalty-free licenses), <https://www.ftc.gov/sites/default/files/documents/cases/2013/04/121126boschanalysis.pdf>). *See also In re Union Oil Co. of Calif.*, Dkt. No. 9305 (F.T.C.
 19 June 10, 2005) (decision and order) Sec. II. (prohibiting assertion of or collection of royalties
 20 from patent rights obtained by deception), <https://www.ftc.gov/sites/default/files/documents/cases/2005/06/050610do9305.pdf>.

21 ⁵⁵ In particular, Google argues that implementing a solution to export metadata to developers
 22 would be “extremely challenging and costly” (Proffer, p. 9); the costs associated with building
 23 and implementing a system for catalog access are so significant they “weigh strongly against an
 order compelling Google to implement this remedy at all” (Proffer, p. 10); Epic’s library porting
 remedy would “impose significant costs and technical work on Google.” (Proffer, p. 13).

24 ⁵⁶ *Steves & Sons, Inc.*, 988 F.3d at 721 (recognizing that “divestiture would cost JELD-WEN a
 25 great deal financially” but that its hardships “while significant, were outweighed by the ‘far more
 26 serious harm’ facing Steves.”). *See Paramount Pictures, Inc.*, 334 U.S. at 171-72 (“Hence the
 27 problem of the District Court does not end with enjoining continuance of the unlawful restraints
 nor with dissolving the combination which launched the conspiracy. Its function includes
 28 undoing what the conspiracy achieved. As we have discussed in *Schine Chain Theatres, Inc. v. United States*, [334 U.S. 110, 128 (1948)], the requirement that the defendants restore what they unlawfully obtained is no more punishment than the familiar remedy of restitution.”).

1 remedies for Google's antitrust violations.

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Respectfully submitted,

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