1	DDIAN M DOVNTON Acting Assistant Attornov Conoral Civil Division		
1	BRIAN M. BOYNTON, Acting Assistant Attorney General, Civil Division ARUN G. RAO, Deputy Assistant Attorney General		
2	GUSTAV W. EYLER, Director, Consumer Protection Branch		
3	LISA K. HSIAO, Assistant Director	A T T T T T T T T T T T T T T T T T T T	
1	ZACHARY A. DIETERT		
4	DAVID G. CROCKETT		
5	Trial Attorneys		
6	Consumer Protection Branch		
7	Civil Division, U.S. Department of Justice		
-	Washington D.C. 20530		
8	Telephone: (202) 616-9027 (Dietert)		
9	(202) 305-7196 (Crockett	t)	
10	Facsimile: (202) 514-8742		
	Zachary.A.Dietert@usdoj.gov		
11	David.G.Crockett@usdoj.gov		
12	Attorneys for Plaintiff		
13	UNITED STATES OF AMERICA		
14			
	IN THE UNITED STA	TES DISTRICT COURT	
15	FOR THE CENTRAL DISTRICT OF CALIFORNIA		
16	WESTER	N DIVISION	
17		٦	
18	UNITED STATES OF AMERICA,		
		Case No. 2:21-cv-09693	
19	Plaintiff,		
20	V	COMPLAINT FOR PERMANENT INJUNCTION, CIVIL	
21	V.	PENALTIES, AND OTHER	
22	OPENX TECHNOLOGIES, INC.,	RELIEF	
	a Delaware Corporation,		
23	D C 1		
24	Defendant.		
25			
26			
27			
<i>L I</i>			
_			
28			

2

5

11

13

14

15

16

17

20

21

22

23

25

26

27

28

#### THE CHILDREN'S ONLINE PRIVACY PROTECTION ACT

- 8. Congress enacted COPPA in 1998 to protect the safety and privacy of children online by prohibiting the unauthorized or unnecessary collection of children's personal information online by operators of Internet Web sites and online services. COPPA directed the Commission to promulgate a rule implementing COPPA. The Commission promulgated the COPPA Rule, 16 C.F.R. Part 312, on November 3, 1999, under Section 1303(b) of COPPA, 15 U.S.C. § 6502(b), and Section 553 of the Administrative Procedure Act, 5 U.S.C. § 553. The Rule went into effect on April 21, 2000. The Commission promulgated revisions to the Rule that went into effect on July 1, 2013. Pursuant to Section 1303(c) of COPPA, 15 U.S.C. § 6502(c), and Section 18(d)(3) of the FTC Act, 15 U.S.C. § 57(a)(d)(3), a violation of the Rule constitutes an unfair or deceptive act or practice in or affecting commerce, in violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a).
- 9. The Rule applies to any operator of a commercial Web site or online service directed to children under 13 years of age (which includes operators of online services with actual knowledge that they are collecting personal information directly from users of another Web site or online service directed to children), or any operator 18 that has actual knowledge that it is collecting or maintaining personal information 19 from a child under 13 years of age. 16 C.F.R. § 312.3. The definition of "personal information" includes, among other things, "geolocation information sufficient to identify street name and name of a city or town," and a "persistent identifier that can be used to recognize a user over time and across different Web sites or online services," such as a "customer number held in a cookie, an Internet Protocol (IP) address, a processor or device serial number, or unique device identifier." 16 C.F.R. § 312.2.
  - 10. Among other things, the Rule requires subject operators to meet specific requirements relating to collecting, using, or disclosing personal information from children, including but not limited to:

6

7 8

10

9

11

13

15

16 17

18

19 20

21 22

23

24

25

26

27

- a. Obtaining verifiable parental consent prior to collecting, using, or disclosing personal information from children (16 C.F.R. § 312.5); and
- b. Posting a prominent and clearly labeled link to an online notice on its Web site or online service providing clear, understandable, and complete notice of its information practices, including what information the operator collects from children online, how it uses such information, its disclosure practices for such information, and other specific disclosures set forth in the Rule (16 C.F.R. § 312.4).
- For purposes of this Complaint, the terms "child," "collects," 11. "collection," "disclose or disclosure," "Internet," "operator," "parent," "personal information," "verifiable parental consent," and "Web site or online service directed to children," are defined as those terms are defined in Section 312.2 of the COPPA 14 Rule, 16 C.F.R. § 312.2.

## **THE OPENX AD EXCHANGE**

- 12. OpenX operates a programmatic advertising exchange that helps publishers of Web sites and mobile applications ("Apps") monetize their properties through advertising.
- 13. Programmatic advertising is the automated method of trading ads online in a mobile environment. OpenX provides a real-time bidding platform where it essentially conducts auctions for ad space.
- 14. OpenX contracts with publishers whose Web sites and Apps send ad requests to OpenX using an OpenX software development kit ("SDK") or another type of technical integration. The OpenX Android SDK and iOS SDK are code components that are integrated with the Apps that allow OpenX to collect data from the consumer's device and facilitate the display of ads within the Apps.
- 15. OpenX also contracts with advertising technology companies ("Networks") that aggregate and sell advertising inventory for publishers and send ad

10

11

12

13

15

16

17

18

19

20

22

23

24

25

- 2 OpenX describes itself as the largest independent advertising exchange, with over 1,200 premium publishers, at least 50,000 mobile Apps, and tens of thousands of demand-side partners (i.e., buyers of ad inventory consisting of 5 advertisers, advertising agencies, and advertising networks) participating in the exchange.
  - 17. Programmatic advertising enables advertisers and their agents to select among criteria to deliver targeted messages to preferred audiences. OpenX manages the competing bids submitted by the bidding entities and facilitates the display of an ad associated with the winning bid.
  - 18. The OpenX Ad Exchange supports a variety of targeting criteria used by publishers and advertisers to identify ad space where buyers want ads to be served.
  - 19. "Targeting" involves the collection of data about consumers and their devices, including mobile phones. OpenX's business relies on collecting data that its partners want to use to learn about consumers and maximize the buyers' advertising dollars.
  - 20. An ad request is a set of data fields that OpenX collects from an App when the App requests an ad to be shown. On a daily basis, OpenX processes nearly 100 billion ad requests.
  - 21. A bid request includes the information from the ad request that OpenX forwards to buyers, in order to trigger an automated real-time auction on the OpenX Ad Exchange among buyers that want to serve an ad to the requesting Web site or App.
- 22. The information received in the ad request and transmitted in a bid request is used by buyers to determine whether they want to bid on the ad space, how 26 much they want to bid, and what kind of ad to display in the App. Buyers, also referred to as OpenX's "demand-side partners," include advertisers and service providers that work on behalf of advertisers, such as advertising agencies and

advertising networks.

2

9

10

11

13

15

17

18

20

21

22

23

25

27

28

OpenX promotes itself as the highest quality programmatic advertising marketplace, and seeks to attract participants with claims that it employs a dual human and technology approach to traffic quality. According to OpenX, it has the only traffic quality team in the industry that conducts a human review of each Web site or App that sends ad requests, to ensure compliance with OpenX's supply policies and to accurately classify the subject matter of all Web sites and Apps for the benefit of its demand-side partners.

#### **ANDROID AND IOS PERMISSION-BASED SYSTEMS**

- 24. The Android and iOS operating systems provide App developers with application programming interfaces ("APIs") that facilitate the collection of data about consumers and their devices.
- 25. In order to access certain data from a device, these operating systems require App developers to obtain a consumer's consent through "permissions," which involve notifying the consumer about the sensitive information (e.g., the consumer's location or contacts) or sensitive device functionality (e.g., the device's camera or microphone) that the App would like to access.
- 26. Through these permission-based systems, consumers can manage privacy settings and exercise control over certain data when using their mobile devices. The setting options are determined by the platforms, and can vary across devices and platform versions.
- 27. Apps request consent to access location data using a permission dialog box (i.e., a pop-up notification) that prompts the user to allow or deny access to his or her location data. In addition to these App notifications, Android and iOS provide consumers with system settings to restrict access to their location data. Through these 26 settings, the consumer can prevent all or specific applications from accessing the location API.
  - 28. OpenX advises publishers to include location permissions when

OpenX Technologies, Inc. is a wholly-owned operating subsidiary of OpenX

5

6

8

11

13

14

15

16

17

18

19

20

21

22

24

25

26

27

- 35. This information has also been shared on a standalone page providing consumers with their choices for opting out of certain collection, use, and transfer of data. OpenX's Web site home page contains a persistent footer link titled "Interest-Based Advertising" that takes consumers directly to the standalone page.
  - 36. Contrary to OpenX's statements, OpenX collected precise location data, i.e., BSSIDs, from consumers who opted out of such collection.
- 37. In 2018, it was discovered that, notwithstanding OpenX's inclusion of location permissions in the OpenX Android SDK code, OpenX used a backdoor method to retrieve the BSSID. Under circumstances where a user had not granted, or had outright denied, the requisite location permissions, OpenX accessed the BSSID 12 from a file that stores the ARP cache, instead of using the sanctioned method of accessing the BSSID using the location API.
  - 38. Soon after the discovery, Google notified OpenX that its Android SDK was acquiring location data using the BSSID in a non-sanctioned manner that violated Google's Device and Network Abuse Policy, and that Apps that included the OpenX Android SDK code had been removed from the Google Play store.
  - 39. OpenX responded by updating the Android SDK code, and informed all of the publishers who had integrated it, or who had received OpenX Android SDK documentation, of the necessity to update their Apps with the new version of the Android SDK.
  - 40. But even if publishers updated their Apps, OpenX could still collect the BSSID from the ARP cache through existing code in Apps that was previously installed on consumer devices that consumers did not update.
  - 41. The command for collecting the BSSID from the ARP cache was included in every version of the OpenX Android SDK available from September 2012 to October 2018.
    - 42. OpenX transmitted the BSSID to numerous third parties, including

- 43. The OpenX Android SDK has been integrated into nearly two hundred Apps, including popular Apps that have been downloaded billions of times by consumers.
- 44. As a result of OpenX's practices, publishers provided incorrect information to consumers regarding their Apps' privacy practices. Indeed, App developers that have integrated the OpenX SDK represented to consumers in their privacy policies that consumers had the ability to control the collection and use of location data through their Apps and through their device location settings, notwithstanding the fact that OpenX collected the BSSID from their devices without consent.
- 45. OpenX did not have a regular practice of examining its data collection practices, assessing whether there was a justification or need for collecting various data, or checking whether it complied with Android or iOS platform policies, despite OpenX personnel raising these issues as privacy concerns.

# OPENX'S BUSINESS PRACTICES REGARDING COLLECTION OF <u>INFORMATION FROM CHILD-DIRECTED PROPERTIES</u>

- 46. COPPA sets forth requirements for any operator of a Web site or online service directed to children and any operator that has actual knowledge that it is collecting or maintaining personal information from a child under 13 years of age. 16 C.F.R. § 312.3. As described in Paragraphs 47 to 56, OpenX has actual knowledge that it collects personal information, including location information and persistent identifiers, from users of Web sites and Apps directed to children under 13 years of age.
- 47. OpenX's traffic quality team is tasked with conducting a human review of every Web site or App that sends ad requests to its Ad Exchange. This review is intended to identify restricted content (e.g., pornography, online gambling, and extreme violence), categorize the property by subject matter or content (e.g.,

5

7

10

11

13

15

17

20

22

23

24

25

26

- To determine whether a property is child-directed, the traffic quality analysts are responsible for thoroughly reviewing the Web sites and Apps, including the App store pages, against numerous criteria, much of which is adopted from the COPPA Rule.
- 49. According to OpenX policy, the traffic quality analysts must flag Apps directed to children to be banned from participating in the Ad Exchange, unless an exception can be verified with management.
- Notwithstanding OpenX's policies and procedures, hundreds of child-50. directed Apps that OpenX reviewed were not flagged as child-directed and have participated in the OpenX Ad Exchange. OpenX had actual knowledge that these Apps were child-directed based on its human review of the Apps. The Apps for 14 which OpenX processed requests include obvious references to children in the App name and developer name. The names of the Apps include terms such as "for toddlers," "for kids," "kids games," "preschool learning," "kindergarten," etc. 16 Moreover, the App store pages included graphics from and descriptions of the Apps 18 that reinforced that they were designed for kids, and listed age ratings of the Apps 19 showing they were appropriate for children under the age of 13.
  - 51. OpenX has received millions, if not billions, of ad requests directly or indirectly from child-directed Apps, and transmitted millions, if not billions, of bid requests containing personal information of children to OpenX's demand-side partners. These requests included location information and persistent identifiers used for online behavioral advertising.
  - 52. OpenX has taken no steps to obtain verified parental consent or provide the requisite notices prescribed by COPPA.
  - Further, OpenX's instructions to its traffic quality analysts narrowly 53. defined child-directed properties to only those "primarily" directed to children,

thereby excluding from the definition of child-directed many Web sites and Apps that target children as one of their audiences. Doing so resulted in OpenX collecting and maintaining personal information from Web sites and Apps that are child-directed, in violation of the COPPA Rule. If the Web site and Apps were not identified as child-directed, the personal information collected from those sites could have been used to facilitate targeted advertising.

54. Notwithstanding OpenX's collection, use, and disclosure of personal information from child-directed properties, OpenX has stated that it does not engage in activities that require parental notice or consent under COPPA. For example, its privacy policy states:

# **Children's Online Privacy Protection Act Notice.**

OpenX does not engage in activities that require parental notice or consent under the Children's Online Privacy Protection Act (COPPA). If you believe that OpenX has inadvertently collected information from a child under 13 that is subject to parental notice and consent under COPPA, please contact OpenX using the contact information below to request deletion of the information.

- 55. In its Data Privacy and Information Security Frequently Asked Questions, OpenX also stated that it has an internal COPPA policy that identifies child-directed properties and places a COPPA flag for inventory from those properties.
- 56. This statement, however, does not accurately characterize OpenX's COPPA practices. OpenX does not identify all child-directed properties nor does it add a COPPA flag to all inventory coming from child-directed properties. Without the COPPA flag to indicate that the inventory is child-directed, OpenX's demand-side partners have served targeted ads to the users of those child-directed Web sites and Apps.

# **OPENX'S VIOLATIONS OF THE FTC ACT**

2

4

# **COUNT I: Deception – OpenX Has Misrepresented Its Data Collection** Practices, and Collected Consumer Location Data When the Consumer Had Not **Provided Consent or Had Expressly Denied Consent**

5

57. As provided in Paragraphs 34 and 35, OpenX represented, directly or indirectly, expressly or by implication, that consumers can opt out of OpenX's collection, use, and transfer of precise location data by using the location services controls in their mobile device settings or by denying consent when prompted by a permission dialog box.

10

11

13

58. In fact, as described in Paragraphs 36 to 45, consumers could not opt out of OpenX's collection, use, and transfer of precise location data by using the location services controls in their mobile device settings or by using the permission dialog box within the App. OpenX collected and transferred the BSSID even if the consumer had not provided consent or had expressly denied permission to collect location data.

15 16

Therefore, the representations referred to in Paragraph 57 were false or 59. misleading, and constitute a deceptive act or practice in violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a).

18 19

17

# **COUNT II: Deception – OpenX Has Misrepresented Its COPPA Activities and Practices**

20

21

23

60. As provided in Paragraph 54, OpenX represented, directly or indirectly, expressly or by implication, that it does not engage in activities that require parental notice or consent under COPPA. As provided in Paragraph 55, OpenX also represented, directly or indirectly, expressly or by implication, that it identifies all child-directed properties and includes a COPPA flag to identify inventory from those 26 properties.

27

25

61. In fact, as provided in Paragraphs 12 to 23 and 46 to 56, OpenX does engage in activities that require parental notice and consent under COPPA.

5

6

7

8

9

10

11

13

15

16

18

19

20

22

23

25

26

27

Therefore, the representations referred to in Paragraph 60 were false or misleading, and constitute a deceptive act or practice in violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a).

#### **OPENX'S VIOLATIONS OF THE COPPA RULE**

#### **COUNT III: COPPA – OpenX Has Collected Personal Information** from Users of Child-Directed Properties Without Consent and Proper Notice

- 63. Pursuant to the COPPA Rule, 16 C.F.R. § 312.3, any operator of a Web site or online service directed to children, or any operator that has actual knowledge that it is collecting or maintaining personal information from a child, is required to collect information from children in a COPPA-compliant manner. Those 14 requirements include providing proper notice and obtaining parental consent before collecting, using, and disclosing personal information from children. As described in Paragraphs 12 to 23 and 46 to 56, OpenX is an operator of an online service directed 17 to children because it is an operator of an online service with actual knowledge that it is collecting personal information directly from users of another Web site or online service directed to children.
  - 64. In connection with operating its Ad Exchange and selling ad inventory, OpenX collected, used, and disclosed personal information from users of Web sites or online services directed to children. OpenX collects personal information, including location information and persistent identifiers, in ad requests from users of child-directed Web sites and Apps participating in its Ad Exchange and transmits that information in bid requests to its demand-side partners for use in online behavioral advertising.
  - 65. In numerous instances, in connection with the acts and practices described above, OpenX collected, used, and/or disclosed personal information from

children in violation of the Rule, including by: a. Failing to provide sufficient notice on its Web site or online service 2 of the information it collects, or is collected on its behalf, online 3 from children, how it uses such information, its disclosure practices, 4 and all other required content, in violation of Section 312.4(d) of the 5 Rule, 16 C.F.R. § 312.4(d); 6 b. Failing to provide direct notice to parents of the information it 7 8 collects, or information collected on its behalf, online from children, how it uses such information, its disclosure practices, and all other 9 required content, in violation of Sections 312.4(b) and (c) of the 10 Rule, 16 C.F.R. § 312.4(b)-(c); and 11 12 c. Failing to obtain verifiable parental consent before any collection or use of personal information from children, in violation of Section 13 312.5 of the Rule, 16 C.F.R. § 312.5. 14 Pursuant to Section 1303(c) of COPPA, 15 U.S.C. § 6502(c), and 15 66. Section 18(d)(3) of the FTC Act, 15 U.S.C. § 57(a)(d)(3), a violation of the Rule 16 constitutes an unfair or deceptive act or practice in or affecting commerce, in 17 violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a). 18 19 67. OpenX violated the COPPA Rule as described above with the knowledge required by Section 5(m)(1)(A) of the FTC Act, 15 U.S.C. § 45(m)(1)(A). 20 Each collection, use, or disclosure of a child's personal information in 68. 21 which OpenX violated the Rule in one or more of the ways described above, 22 constitutes a separate violation for which Plaintiff may seek monetary penalties. 23 24

69. Section 5(m)(1)(A) of the FTC Act, 15 U.S.C. § 45(m)(1)(A), as modified by Section 4 of the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, the Federal Civil Penalties Inflation Adjustment Act 26 Improvements Act of 2015, Public Law 114-74, sec. 701, 129 Stat. 599 (2015), and Section 1.98(d) of the FTC's Rules of Practice, 16 C.F.R. § 1.98(d), authorizes this

25

27

Court to award monetary civil penalties of not more than \$43,280 for each such violation of the Rule on or after January 14, 2020. 3 **CONSUMER INJURY** Consumers are suffering, have suffered, and will continue to suffer 4 70. substantial injury as a result of OpenX's violations of the FTC Act and the COPPA Rule. Absent injunctive relief by this Court, OpenX is likely to continue to injure consumers and harm the public interest. 8 **PRAYER** WHEREFORE, Plaintiff United States of America requests that the Court: 9 Enter a permanent injunction to prevent future violations of the FTC Act 10 by OpenX with respect to the privacy of consumers' personal information; 11 Enter a permanent injunction to prevent future violations of the COPPA B. 12 Rule by OpenX; 13 C. Award Plaintiff monetary civil penalties from OpenX for each violation 14 of the COPPA Rule alleged in this Complaint; and 15 D. Award any additional relief as the Court determines to be just and 16 17 proper. 18 Respectfully Submitted, Dated: December 15, 2021 19 20 FOR THE FEDERAL TRADE FOR THE UNITED STATES OF 21 COMMISSION: AMERICA: 22 ALDEN F. ABBOTT BRIAN M. BOYNTON 23 General Counsel Acting Assistant Attorney General Civil Division 24 KRISTIN COHEN 25 Acting Associate Director ARUN G. RAO Division of Privacy & Identity Deputy Assistant Attorney General 26 Protection 27 GUSTAV W. EYLER Director, Consumer Protection Branch 28

- 15 -

1	MARK EICHORN	LISA K. HSIAO
2	Assistant Director Division of Privacy and Identity	Assistant Director
3	Protection	/s/ Zachary A. Dietert
4		ZACHARY A. DIETERT
5	SARAH CHOI	DAVID G. CROCKETT Trial Attorneys
6	KEVIN MORIARTY	Consumer Protection Branch
	Attorneys	U.S. Department of Justice
7	Division of Privacy & Identity Protection	450 5 <sup>th</sup> Street, NW, Suite 6400-South Washington, D.C. 20530
8		Telephone: (202) 616-9027 (Dietert)
9		(202) 305-7196 (Crockett)
10		Facsimile: (202) 514-8742 Zachary.A.Dietert@usdoj.gov
11		David.G.Crockett@usdoj.gov
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
		- 16 -