UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION

COMMISSIONERS: Joseph J. Simons, Chairman

Noah Joshua Phillips

Rohit Chopra

Rebecca Kelly Slaughter Christine S. Wilson

In the Matter of

ZOOM VIDEO COMMUNICATIONS, INC., a corporation, d/b/a ZOOM.

DOCKET NO.

COMPLAINT

The Federal Trade Commission, having reason to believe that Zoom Video Communications, Inc., a corporation ("Respondent"), has violated the provisions of the Federal Trade Commission Act, and it appearing to the Commission that this proceeding is in the public interest, alleges:

- 1. Respondent Zoom Video Communications, Inc. ("Zoom") is a Delaware corporation with its principal office or place of business at 55 Almaden Boulevard, 6th Floor, San Jose, California, 95113.
- 2. The acts and practices of Respondent Zoom alleged in this complaint have been in or affecting commerce, as "commerce" is defined in Section 4 of the Federal Trade Commission Act.

Respondent's Business Practices

- 3. Founded in 2011, Zoom is a videoconferencing platform provider that provides customers with videoconferencing services and various add-on services, such as cloud storage. Zoom's 2019 annual revenue was \$622.7 million; its Q1 2020 revenue was \$328.2 million. Zoom has over 2,000 employees.
- 4. Zoom's core product is the Zoom "Meeting," which is a platform for one-on-one and group videoconferences. Zoom Meetings also have the capability, among other things, for accompanying chat messages, screen sharing, and the recording of videoconferences. Zoom offers certain customers the option to host Zoom's videoconferencing services on the customer's internal network through its "Connecter" product.

- 5. A Zoom Meeting is comprised of a host who organizes the Meeting and the individual attendees who participate in those video meetings. To schedule and host a Zoom Meeting, a user must create a Zoom account and download Zoom's software application ("Zoom App") for desktop or laptop (e.g., Windows or Mac) or mobile (e.g., iOS or Android).
- 6. By creating a Zoom account, a user can create and host a videoconference and invite others to attend by providing them with a hyperlink, conference identifier, or telephone dial-in instructions. To join a Meeting, individual attendees typically download the Zoom App, but do not need to create a Zoom account. Rather than download the Zoom App, attendees can also join a Meeting through their browser or by telephone. Attendees who join a Meeting through their browser or by telephone do not have access to all of the same features that are available through the Zoom App.
- 7. Zoom offers its videoconferencing services through a number of monthly and annual subscription plans. Zoom offers a free basic videoconferencing plan that includes unlimited one-on-one and group videoconferencing for up to 40 minutes and 100 participants. It also offers three tiers of paid plans based on the number of features and host licenses provided, with minimum monthly subscription fees of \$14.99 (Pro), \$199.90 (Business), and \$999.50 (Enterprise).
- 8. Zoom routinely collects certain information about users, including: first and last name; email address; user name and password; approximate location; date of birth; technical information about users' devices, network, and internet connection; and in the case of a paid subscription, billing address and payment card information of the account holder. Zoom also collects and stores event details for all Zoom Meetings, including the date, time, and length of Meetings; the Meeting participants' user names; and each participant's answers to any polling questions asked during a Meeting. Finally, Zoom also collects and stores information shared while using the service, such as recorded Meetings that users store on Zoom's cloud storage, voice mails, chat and instant messages, files, and whiteboards.
- 9. As of July 2019, Zoom had approximately 600,000 paid customers of its videoconferencing services. Approximately 88% of those customers were small businesses with ten or fewer employees.
- 10. In December 2019, approximately 10 million people worldwide participated in a Zoom Meeting each day. By April 2020, that number had skyrocketed to 300 million daily meeting participants worldwide, in large part due to an increased demand for videoconferencing services as a result of social distancing recommendations and local government stay-at-home orders related to the novel coronavirus pandemic. In addition to Zoom's traditional business customers, individuals, doctors, mental health professionals, schools, and others began to use Zoom's videoconferencing services in greater numbers.

- 11. Users share sensitive information during Zoom meetings. This can include financial information, health information, proprietary business information, and trade secrets. For example, Zoom has been used for therapy sessions, Alcoholics Anonymous meetings, and telehealth appointments.
- 12. As reflected in Zoom's Security Guide, the security of users' Zoom communications relies not only on its Meeting encryption or similar features, but also on its internal network security. Malicious actors who infiltrate Zoom's internal network could gain access to Zoom's administrative controls and compromise Zoom users' personal information. Despite this, Zoom, among other things, has:
 - a. Failed to implement a training program on secure software development principles;
 - b. Failed to test, audit, assess, or review its applications for security vulnerabilities at certain key points, such as prior to releasing software updates, including failing to ensure that its software is free from commonly known or reasonably foreseeable attacks, such as "Structured Query Language" (SQL) injection attacks and "Cross-Site Scripting" (XSS) attacks;
 - c. Failed to monitor service providers or other contractors who have access to Zoom's network;
 - d. Failed to secure remote access to its networks and systems through multi-factor authentication or similar technology;
 - e. Failed to use readily available measures to safeguard against anomalous activity and/or cybersecurity events across all of Zoom's systems, networks, and assets within those networks, including monitoring all of Zoom's networks and systems at discrete intervals, properly configuring firewalls, and segmenting its networks;
 - f. Failed to implement a systematic process for incident response;
 - g. Failed to implement a systematic process for inventorying, classifying, and deleting user data stored on Zoom's network; and
 - h. Been a year or more behind in patching software in its commercial environment.

Respondent's Deceptive and Unfair Privacy and Security Practices

13. Zoom has made numerous, prominent representations touting the strength of the privacy and security measures it employs to protect users' personal information. For example, Zoom has claimed on its website, in Security Guides, and in its privacy policy, that it takes "security seriously," that it "places privacy and security as the highest priority," and that it "is committed to protecting your privacy."

14. The privacy and security of video communications, including the level of encryption used to secure those communications, is important to users and their decisions about which videoconferencing platform to use, the price to pay for such services, and/or how they use those services. In numerous blog posts, Zoom has pointed to its security as a reason for potential customers to use Zoom's videoconferencing services. In a January 2017 blog post, "Zoom: The Fastest Growing App on Okta," Zoom specifically cited, based on customer feedback, its security feature of "end-to-end AES 256 bit encryption" as important to businesses and one of the reasons for Zoom's growth.

Zoom's Deceptive End-to-End Encryption Claims

- 15. End-to-end encryption is a method of securing communications where an encrypted communication can only be deciphered by the communicating parties. No other persons can decrypt the communications because they do not possess the necessary cryptographic keys to do so. End-to-end encryption is intended to prevent communications from being read or modified by anyone other than the true sender and recipient(s).
- 16. Since at least June 2016, Zoom has represented in its App, on its website, in its Security Guides, in its HIPAA Compliance Guide, in blog posts, and in direct communications with customers, that it offered end-to-end encryption to secure videoconference communications between hosts and attendees during Zoom Meetings.
- 17. For example, Zoom has represented that it provided end-to-end encryption in the Zoom App. When a user hovered over a green padlock in the top left corner of a Meeting, the user would see a popup stating, "Zoom is using an end to end encrypted connection."
- 18. Zoom also has represented that it employed end-to-end encryption for Zoom Meetings on the "meetings" and "security" pages of its public website, available at zoom.us/meetings and zoom.us/security. For example, on its "meetings" webpage, Zoom claimed that it offered end-to-end encryption for "all meetings":



19. Zoom has made similar representations in its Security Guides, which are available through its public website at www.zoom.us/security. In its June 2019 Security Guide, Zoom explained that Meeting hosts could "Enable an end-to-end (E2E) encrypted meeting." Zoom likewise claimed in its June 2016 Security Guide that Meeting hosts could "Secure a meeting with end-to-end encryption (E2E)." Zoom also claimed that it used "industry-standard end-to-end" encryption with AES 256-bit encryption as a way

for its healthcare customers to comply with the Health Insurance Portability and Accountability Act (HIPAA)'s Security Rule. The HIPAA Security Rule applies to certain healthcare entities and contains federally mandated standards for protecting individuals' electronic personal health information.

20. For example, on the "healthcare" webpage of Zoom's website, available at zoom.us/healthcare, Zoom claimed that its customers could "Achieve HIPAA (signed BAA) and PIPEDA/PHIPA compliance with complete end-to-end 256-bit AES encryption." Zoom similarly explained in its June 2016 and July 2017 HIPAA Compliance Guides, available through its public website at zoom.us/healthcare, that its end-to-end encryption, among other security features, supported its healthcare customers' compliance with the HIPAA Security Rule:

Security and Encryption

Only members invited by account administrators can host Zoom meetings in accounts with multiple members. The host controls meeting attendance through the use of meeting IDs and passwords. Each meeting can only have one host. The host can screen share or lock screen sharing. The host has complete control of the meeting and meeting attendees, with features such as lock meeting, expel attendees, mute/unmute all, lock screen sharing, and end meeting.

Zoom employs industry-standard end-to-end Advanced Encryption Standard (AES) encryption using 256-bit keys to protect meetings. Zoom encryption fully complies with HIPAA Security Standards to ensure the security and privacy of patient data.

- 21. In a January 2019 white paper entitled "End to End Encryption," Zoom represented that it offered end-to-end encryption for Zoom Meetings as an "added layer of application security for Zoom meetings, webinars, and chat (instant messaging) sessions." Zoom explained that end-to-end encryption meant that Zoom Meetings, webinars, and chat sessions could only be decrypted by "authenticated participant(s) who have the key required for decryption." The white paper also explained that video, audio, and screen sharing were all "protected with the Advanced Encryption Standard (AES) 256-bit algorithm."
- 22. Zoom specifically touted its level of encryption as a reason for customers and potential customers to use Zoom's videoconferencing services in numerous blog posts on its website. For example, in an April 24, 2017 blog post, "Zoom Reporting Live from American Telemedicine Association 2017," Zoom promoted its "End-to-end AES 256-bit encryption of all meeting data and instant messages" as a reason for healthcare providers to use Zoom as their telehealth videoconferencing solution.
- 23. Additionally, in response to inquiries from customers or potential customers who contacted Zoom directly to ask about Zoom's security practices and the level of encryption it employed for Zoom Meetings, Zoom informed them that it offers AES 256-bit, end-to-end encryption and directed them to its Security Guide that, as described above, made similar representations.

24. In fact, Zoom did not provide end-to-end encryption for any Zoom Meeting that was conducted outside of Zoom's "Connecter" product (which are hosted on a customer's own servers), because Zoom's servers—including some located in China—maintain the cryptographic keys that would allow Zoom to access the content of its customers' Zoom Meetings. Zoom has acknowledged that its Meetings were generally incapable of end-to-end encryption in an April 2020 blog post by its Chief Product Officer:

In light of recent interest in our encryption practices, we want to start by apologizing for the confusion we have caused by incorrectly suggesting that Zoom meetings were capable of using end-to-end encryption. Zoom has always strived to use encryption to protect content in as many scenarios as possible, and in that spirit, we used the term end-to-end encryption. While we never intended to deceive any of our customers, we recognize that there is a discrepancy between the commonly accepted definition of end-to-end encryption and how we were using it. This blog is intended to rectify that discrepancy and clarify exactly how we encrypt the content that moves across our network.

https://blog.zoom.us/wordpress/wpcontent/uploads/2020/04/zoom-servers-news.jpg.

Zoom's Deceptive Claims Regarding Level of Encryption

- 25. Encrypting communications with the Advanced Encryption Standard (AES) and a 256-bit encryption key can be an effective way to secure communications and prevent eavesdropping. The 256-bit encryption key refers to the length of the key needed to decrypt the communications. Generally speaking, a longer encryption key provides more confidentiality protection than shorter keys because there are more possible key combinations, thereby making it harder to find the correct key and crack the encryption.
- 26. Since at least June 2015, Zoom has made numerous and prominent claims that it encrypted Zoom Meetings, in part, by using AES, with a 256-bit encryption key ("AES 256-bit Encryption" or "256-bit Encryption").
- 27. For example, in a June 2015 blog post entitled "Why Zoom's Security Features Matter for your Business," available at https://blog.zoom.us/wordpress/2015/06/17/why-zooms-security-matter-for-business/, Zoom explained that encryption was important for video communications because people "discuss sensitive things in unplanned moments," and touted "Zoom's use of AES 256 encryption" as making it "it impossible for a hacker to grab anything outside of a hopelessly garbled transmission..." (emphasis in original).
- 28. On the "security" page of Zoom's website, available at zoom.us/security, Zoom also has claimed that it used 256-bit Encryption to protect user data:



29. Zoom likewise claimed that it uses 256-bit Encryption in its Security Guide and in its online Help Center. For example, Zoom's June 2019 Security Guide stated, "Webinar contents and screen sharing are secured using AES 256 and communicate over secured network using 256-bit encryption standard." In Zoom's online Help Center, available at https://support.zoom.us/hc/en-us/articles/201362723-Encryption-for-Meetings, Zoom answered a "Frequently Asked Question[]" about its Meeting encryption by explaining, in part, that its Meetings were encrypted "by default" with AES 256-bit Encryption:

Encryption for Meetings

Overview

By default, Zoom encrypts in-meeting and in-webinar presentation content at the application layer using TLS 1.2 with Advanced Encryption Standard (AES) 256-bit algorithm for the Desktop Client.

30. In fact, Zoom used a lower level of encryption for securing Zoom Meetings, AES 128-bit encryption in Electronic Code Book ("ECB") mode. AES 128-bit encryption uses a shorter encryption key than AES 256-bit Encryption, and therefore provides less confidentiality protection because there are fewer possible values for the 128-bit key than for a 256-bit key. Reflecting the comparative strength of AES 256-bit Encryption and AES 128-bit Encryption, the National Security Agency has reported that AES 256-bit Encryption may be used for securing "TOP SECRET" materials, whereas AES 128-bit encryption may only be used for securing "SECRET" communications.

Zoom's Deceptive Claims Regarding Secure Storage for Zoom Meeting Recordings

- 31. Zoom offers customers the ability to record their Zoom Meetings and store such recordings on either the host's local device or, for paying customers, in Zoom's secure cloud storage ("Cloud Recordings").
- 32. In Zoom's June 2019 Security Guide, Zoom claims that Cloud Recordings are processed and stored in Zoom's cloud "after the meeting has ended," where they "are stored encrypted as well." Zoom's June 2016 Security Guide similarly claimed that Cloud Recordings "are processed and securely stored in Zoom's cloud once the meeting has ended."
- 33. In fact, recorded Meetings are kept on Zoom's servers for up to 60 days, unencrypted, before Zoom transfers the recordings to its secure cloud storage, where they are then stored encrypted.

Zoom's Unfair Circumvention of a Third-Party Privacy and Security Safeguard

- 34. In July 2018, Zoom updated its App for Mac computers by deploying a web server onto users' computers—without adequate user notice or consent—in order to circumvent a security and privacy safeguard in Apple's Safari browser. Specifically, Apple had updated its Safari browser to help defend its users from malicious actors and popular malware by requiring interaction with a dialogue box when a website or link attempts to launch an outside App.
- 35. As a result of the new browser safeguard, users who clicked on a link to join a Zoom Meeting would receive an additional prompt that read, "Do you want to allow this page to open 'zoom.us'?" If the user selected "Allow," the browser would connect the user to the Meeting, while clicking "Cancel" would end the interaction and prevent the Zoom App from launching.
- 36. To avoid this dialogue box, Zoom issued a manual update in July 2018 for its Zoom App for Mac desktop computers that secretly deployed a web server, called the "ZoomOpener," as a means to bypass the new privacy and security safeguard.
- 37. The ZoomOpener web server was installed on users' Mac computers and operated in the computer's background. When it detected a request to join a Zoom Meeting, the web server bypassed the new Safari browser safeguard to directly launch the Zoom App. It would then automatically join the user to the Zoom Meeting and, if the user had not changed her default video settings, automatically activate the user's webcam. Zoom automatically activated users' webcams immediately upon their joining a Meeting unless users changed their default video settings by logging into their Zoom account, going to their "preferences," clicking on "video," and then finding and clicking on the box, "Turn off my video when joining a meeting."
- 38. The ZoomOpener web server harmed consumers by limiting the intended benefit of a privacy and security safeguard provided by their Safari browser. Zoom did not implement any compensating measures to replace the privacy and security protections that it had circumvented, nor did Zoom take any steps to address the risks that malicious actors could exploit the ZoomOpener web server and harm users. Without the circumvented Safari safeguard, one wrong click could expose consumers to remote video surveillance by strangers through their computers' webcams.
- 39. For example, malicious actors could exploit this vulnerability by using a phishing attack, a common form of cyberattack that typically entails a criminal sending out thousands of emails that pretend to be from a legitimate source in order to direct recipients to a bogus website where the criminal can capture personal information or engage in other malicious activity. Here, the phishing email could trick consumers into clicking on an innocuous-looking link that does not appear to be a Zoom Meeting invite. This link could then direct the consumer to an otherwise benign-looking website that has a Zoom Meeting embedded in it. Zoom Meetings can be embedded in websites through the use of the

- iframe HTML tool, which allows a segment of a website to display content from another source without leaving the original website (such as a YouTube video playing on a host's website).
- 40. Without the consumer taking any additional steps, the ZoomOpener web server would automatically join the consumer to the Zoom Meeting and activate her webcam—without the user's consent and perhaps without even realizing it. Merely leaving the website would not exit the Meeting or disable the webcam. Had Zoom not circumvented the Safari safeguard, users would have been alerted to the Zoom Meeting and would have had to give their permission before being joined to the Meeting.
- 41. In addition to bypassing the Safari browser safeguard, the ZoomOpener web server also harmed users by introducing two additional security vulnerabilities. First, the web server exposed some users to a potential Remote Control Execution (RCE) attack because the ZoomOpener web server would download and install software updates, including potentially malicious code, without properly validating that it was downloading the software from a trusted source. This code could then allow the malicious actor to execute code on the user's computer. On July 9, 2019, Zoom posted information about this vulnerability on its website, available at https://support.zoom.us/hc/en-us/articles/360031245072-Security-CVE-2019-13567, where it characterized the vulnerability as having "High Severity." Second, the ZoomOpener web server exposed users to a local denial of service ("DoS") attack where a hacker could potentially target a Zoom user with an endless loop of invalid Meeting join requests that would effectively cause the targeted machine to lock up.
- 42. As discussed in further detail in Paragraphs 49-52 below, Zoom did not notify users that its manual software update would install the ZoomOpener web server on their Mac computers. Nor did Zoom provide users with any information about the web server's operation, including the fact that it would bypass a Safari privacy and security safeguard.
- 43. In addition to bypassing the Safari privacy and security safeguard to launch Zoom Meetings, the ZoomOpener web server had a second function: to reinstall the Zoom App. Specifically, if a Mac user deleted the Zoom App in accord with Apple's instructions for deleting apps, the ZoomOpener web server would nevertheless remain on users' computers. If the user later clicked on a Zoom Meeting invite or visited a website with an embedded Zoom Meeting, the web server would secretly reinstall the Zoom App—without any user interaction—and automatically join the user to the Meeting.
- 44. Because the ZoomOpener web server remained and continued to function on users' computers even after the Zoom App was deleted, the vulnerabilities described in Paragraphs 39-41 persisted after users deleted the Zoom App.
- 45. Zoom's deployment of the ZoomOpener web server—without adequate notice or consent—to circumvent a browser privacy and security safeguard, while also exposing users to additional security vulnerabilities as described in Paragraph 41, reflects Zoom's poor privacy and security practices. As described more fully in Paragraph 12, Zoom's

- security policies and practices have been inconsistently applied across its systems, and it has lacked an effective training program on secure software development principles.
- 46. The ZoomOpener web server's vulnerabilities impacted over 3.8 million U.S. consumers who had the ZoomOpener web server secretly installed on their Mac computers.
- 47. After a security researcher published information about the web server in early July 2019, Zoom issued a patch to remove the ZoomOpener web server from users' computers. A day later, Apple, Inc. issued a silent operating system update to protect Mac users from the ZoomOpener web server and automatically removed the web server from their computers. Although Zoom still allows customers to embed Meetings on their own websites, Zoom introduced a new video preview screen so that users would be able to see their own webcam stream before joining a Meeting.
- 48. Consumers could not reasonably have avoided the harms resulting from the secret deployment of the ZoomOpener web server. Zoom did not inform users that it was installing the ZoomOpener web server on their computer or otherwise provide any information about its operation, and it did not inform users that the web server would remain on their computers after they uninstalled the Zoom App. Consumers also had no way of independently knowing about the web server's security vulnerabilities. This substantial injury is not offset by countervailing benefits to consumers or competition.

Zoom's Deceptive Deployment of the ZoomOpener Web Server

- 49. The ZoomOpener web server was deployed as part of a manual software update for Zoom's Mac App on July 1, 2018 ("Web Server Update"). Within the Zoom App, Zoom notifies users of software updates in several ways: a pop up window; a blue bar that informs users that new updates are available; and through a "check for updates" feature available through a drop down menu under the user's profile icon.
- 50. The pop-up notification and "check for updates" feature both provide users with "Release Notes" that give information about the update, such as a listing of new and enhanced features included in the update as well as any resolved issues, such as bug fixes. They also include an "Update" button for users to click and manually update their software.
- 51. As reflected in the Release Notes shown below, Zoom told users that the Web Server Update would fix minor bugs. Zoom failed to disclose, or disclose adequately, that the update would install a local hosted web server, that the web server would circumvent a Safari browser privacy and security safeguard, or that it would remain on users' computers even after they had deleted the App:

July 1, 2018 Version 4.1.27695.0702 Download Type: Manual

Resolved issues

Minor bug fixes

- 52. The omitted information was not available to users from any other source, and would have been material to their decision on whether or not to install the update. Indeed, when Zoom announced in early July 2019 that it would update its software to remove the ZoomOpener web server, it reported that it was doing so in response to customer feedback.
- 53. For example, some consumers made the following public comments about Zoom's secret deployment of the ZoomOpener web server:
 - "I think they [Zoom] need to be made aware that this isn t acceptable...I do not believe this is a fair trade-off allowing any arbitrary web site local control of privileged software installed on my machine because Safari offers a security prompt (specifically so that any arbitrary web site does not gain control of privileged software on my machine). I will be switching ~/.zoomus/ZoomOpener.app off, and considering other options until it has been fixed."
 - "I liked Zoom when I used it a couple of times, but the reinstall 'feature' [of the ZoomOpener web server] is a huge violation of my trust. Software from the company behind it will not touch my system anymore."
 - "I cancelled my subscription because of [Zoom's installation of the ZoomOpener web server]... This should not be considered OK."

VIOLATIONS OF THE FTC ACT

Count I Deceptive Representation Regarding End-to-End Encryption

- 54. As alleged in Paragraphs 14-23, Zoom has represented, directly or indirectly, expressly or by implication, that it employed end-to-end encryption to secure the content of communications between participants using Zoom's video conferencing service.
- 55. In fact, as described in Paragraph 24, Zoom did not employ end-to-end encryption to secure the content of communications between participants using Zoom's video conferencing service. Therefore, the representation set forth in Paragraph 54 is false or misleading.

Count II Deceptive Representation Regarding Level of Encryption

56. As alleged in Paragraphs 25-29, Zoom has represented, directly or indirectly, expressly or by implication, that it employed 256-bit Encryption to secure the content of communications between participants using Zoom's video conferencing service.

57. In fact, as described in Paragraph 30, Zoom did not employ 256-bit Encryption to secure the content of communications between participants using Zoom's video conferencing service. Therefore, the representation set forth in Paragraph 56 is false or misleading.

Count III Deceptive Representation Regarding Secured Cloud Storage for Recorded Meetings

- 58. As alleged in Paragraphs 31-32, Zoom has represented, directly or indirectly, expressly or by implication, that recorded Meetings are stored encrypted in Zoom's cloud storage immediately after a Meeting has ended.
- 59. In fact, as set forth in Paragraph 33, recorded Meetings are not stored encrypted in Zoom's cloud storage immediately after a Meeting has ended. Therefore, the representation set forth in Paragraph 58 is false or misleading.

Count IV Unfair Circumvention of Third-Party Privacy and Security Safeguard

- 60. As alleged in Paragraphs 34-48, Zoom installed the ZoomOpener web server, without adequate notice or consent, to circumvent a browser privacy and security safeguard and did not implement measures to replace the circumvented privacy and security protections.
- 61. Respondent's actions caused or are likely to cause substantial injury to consumers that consumers cannot reasonably avoid and that is not outweighed by countervailing benefits to consumers or competition. Therefore, the practice set forth in Paragraph 60 is an unfair act or practice.

Count V Deceptive Failure to Disclose

- 62. As alleged in Paragraph 51, in connection with the advertising, marketing, promotion, offering for sale, or sale of its video conferencing products, Respondent represented, directly or indirectly, expressly or by implication, that Zoom was updating its Mac App in order to resolve minor bug fixes.
- 63. In numerous instances in which Respondent made the representation set forth in Paragraph 62, Respondent failed to disclose or disclose adequately that the update would deploy a local hosted web server, that the web server would circumvent a Safari browser privacy and security safeguard, or that the web server would remain on users' computers even after they had uninstalled the Zoom App.
- 64. In light of the representation described in Paragraph 62, Respondent's failure to disclose or disclose adequately the material information as set forth in Paragraph 63 constitutes a deceptive act or practice in violation of Section 5(a) of the FTC Act, 15 U.S.C. § 45(a).

Violations of the FTC Act

65.	The acts and practices of Zoom as alleged in this complaint constitute unfair or deceptive acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, 15 U.S.C. § 45(a).		
	Trade commission rick, 15 c.s.c. § 15(a).		
issued	THEREFORE, the Federal Trade Commission thisthis Complaint against Respondent.	_ day of	, 2020, has
	By the Commission.		
		April J. Tabor Acting Secretary	7
SEAL:			