Wikimedia Foundation v. NSA
No. 15-cv-0062-TSE (D. Md.)

Plaintiff's Exhibit 3

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND**

WIKIMEDIA FOUNDATION,
 	
    Plaintiff,
 	
    v.
 	
NATIONAL SECURITY AGENCY /
CENTRAL SECURITY SERVICE, *et al.*,
 	
    Defendants.
	No. 1:15-cv-00662-TSE

<u>DECLARATION OF MICHELLE PAULSON</u>

I, Michelle Paulson, declare:

1.   I am a resident of San Francisco, California, over the age of eighteen. I have personal knowledge of the facts stated in this declaration and if called to testify I could and would testify competently thereto. I am providing this declaration in my capacity as a former employee of and current consultant to the Wikimedia Foundation, Inc. ("Wikimedia").

2.   I am currently General Counsel at Redacted, and I serve as a consultant to Wikimedia. From July 2016 to May 2017, I was Interim General Counsel of Wikimedia, and from July 2015 to May 2017, I was a Legal Director for Wikimedia. I served as Senior Legal Counsel from November 2014 to July 2015, and as Legal Counsel from March 2010 to November 2014. I received my B.A. from the University of California, Berkeley and my J.D. from the University of California, Hastings. I am a member of the bars of the states of California and New York.

3.   During my time with the Wikimedia legal team, I helped update and create Wikimedia's policies and guidelines related to user privacy and data retention. I also worked

closely with Wikimedia's engineers who were responsible for operationally implementing Wikimedia's data security protocols.

I.   BACKGROUND

A.   The Wikimedia Foundation

4.   Wikimedia is a 501(c)(3) nonprofit charitable organization based in San Francisco, California, dedicated to encouraging the growth, development, and distribution of multilingual educational content, and to providing the full content of these "wiki"-based projects to the public free of charge.[1] Wikimedia operates twelve free-knowledge projects ("Projects") on the Internet, including Wikipedia, the world's largest and most popular encyclopedia.

5.   Wikimedia provides the technical infrastructure for the Projects, which are primarily hosted on Wikimedia servers in Virginia, Texas, California, and Illinois. In addition, Wikimedia develops software and provides tools for others to build software platforms; develops mobile phone applications and has entered into partnerships with telecommunications companies; administers grants to support activity that benefits the Wikimedia user community and movement; provides administrative support to grantees; works with community members to organize conferences and community-outreach events globally; and engages in advocacy on issues that affect the Wikimedia community—which, at its broadest level, consists of individuals who access or contribute to the body of knowledge comprising the twelve Projects.

B.   Wikipedia and Wikimedia's Other Free Knowledge Projects

6.   The best-known of Wikimedia's Projects is Wikipedia—a free, multilingual Internet encyclopedia that is one of the most-visited websites in the world and one of the largest

---

[1] A "wiki" is a web application that allows collaborative modification, extension, or deletion of its content and structure.

collections of shared knowledge in human history. As of February 2018, the site has grown to contain more than 47 million articles in over 288 languages, and in 2017 it received more than 1 billion unique device visits each month. Wikipedia's content is collaboratively researched and written by millions of volunteers, many of whom choose not to identify themselves, and is in most instances open to editing by anyone with Internet access. Volunteers also use Wikipedia discussion forums and "Talk pages" to debate the editorial policies and decisions required for reliable and neutral content.

7.   Other Projects include Wikimedia Commons, an online repository of free images, sound, and other media files; Wikibooks, a platform for the creation of free textbooks and annotated texts that anyone can edit consistent with the policies of the site; Wikinews, a collaborative journalism platform for volunteers to create and edit original news articles; and Wiktionary, a collaborative project for creating a free lexical database in nearly every language.

C.   The Wikimedia Community

8.   Wikimedia encourages individuals around the world to contribute to the Projects by communicating information to Wikimedia. Wikimedia receives and maintains this information, and subsequently communicates it to the many other individuals who seek to access, engage with, and further add to Wikimedia's archive of knowledge. The principal way in which Wikimedia communicates with its community is via the Internet.

9.   Wikimedia maintains an active and close relationship with the volunteers, contributors, and many other users from around the world who comprise the Wikimedia community. Wikimedia users play a vital role in many of Wikimedia's functions and are active in the Foundation's initiatives, governance, and development of strategy. Wikimedia exists for its user community and depends upon it: users are responsible for the creation of content on the Projects, and users provide the readership base for the Projects. Both the creation of content and

engagement with that content are essential to Wikimedia's mission. In other words, Wikimedia operates interdependently with its user community in pursuit of a shared set of free-knowledge values.

10.   This interdependence is reflected in Wikimedia's Board and decision-making structure. Roughly half of the members of Wikimedia's Board of Directors are selected by community members. The Wikimedia Board relies, in turn, on several user-staffed committees to oversee Board elections and recommend new Wikimedia chapters or community organizations.   Community members serve on committees responsible for important organizational decisions, such as the Funds Dissemination Committee, which considers grant applications and provides substantive input on Wikimedia's annual plan, and the Language Committee, which proposes and coordinates Wikimedia projects in new languages. Moreover, the Wikimedia community is heavily involved in enforcing Wikimedia's community or project policies, which are largely created by the community. Privacy violations can be reported to an Ombudsman Committee, staffed by volunteers, and a volunteer-staffed Arbitration Committee handles escalated cases related to user conduct and abuse of policies. In sum, Wikimedia routinely makes core organizational decisions only after soliciting input and preferences of its users, including on topics such as its public-policy positions, the creation of new features and Projects, corporate strategy, and budgetary matters.

11.   Community members around the world contribute to Wikimedia in other ways as well. The community provides Wikimedia with input on a variety of issues through a number of mailing lists hosted by Wikimedia.   In addition, Wikimedia staff frequently engage in "Community Consultations," in which community members can offer their views on strategy, budget, public policy, and other matters directly. Wikimedia also receives significant financial

support from the community in the form of donations; affiliate organizations work with Wikimedia to help develop projects and allow Wikimedia fulfill its mission; and grantees (i.e., recipients of Wikimedia grants) perform important work to advance the Wikimedia movement. Community members are also deeply involved in the development and review of the computer code that supports the Projects.

12.   Additionally, as stewards of the Wikimedia Projects and as reflected in Wikimedia's privacy policies, Wikimedia strives to protect the rights of users, including their right to express themselves, and to collaborate together globally, without fear of reprisal. As discussed in greater detail below, Wikimedia undertakes protective measures to ensure the security of its communications and the data it retains. It also resists third-party demands for users' information that are overly broad, unclear, or irrelevant; notifies users individually of information requests when legally permitted; and provides legal defense funds for certain community members who are subject to lawsuits or demands for non-public information as a result of their participation in the Wikimedia Projects.

II.   WIKIMEDIA'S INTERNATIONAL INTERNET COMMUNICATIONS

13.   "Upstream" surveillance conducted under Section 702 of the FISA Amendments Act ("Section 702") implicates at least three categories of Wikimedia communications: (i) Wikimedia communications with its community members, who read and contribute to Wikimedia's Projects and webpages, and who use the Projects and webpages to interact with each other; (ii) Wikimedia's internal "log" communications, which help it to monitor, study, and improve the use of the Projects; and (iii) communications of Wikimedia staff.

A.   Communications of Wikimedia with Its Community Members

14.   As the operator of one of the most-visited websites in the world, Wikimedia engages in an extraordinarily high volume of electronic communications with its users, who read

5

and contribute to Wikimedia's Projects and webpages, and who use the Projects and webpages to interact with each other. In 2017, Wikimedia sites received over 237 billion "page views," i.e., 237 billion instances of Wikimedia users visiting a particular page on Wikimedia websites, with approximately 74 billion views originating from users in the United States. Over the lifespan of the Wikimedia Projects, Wikimedia's users have edited its pages approximately 3.4 billion times. *See* Bayer Decl. ¶¶ 12, 21 (Exhibit 5). Each of these activities involves Internet communications between Wikimedia and its users—the majority of whom are located abroad.

15.   Indeed, as explained in more detail in the Declaration of Tilman Bayer, Wikimedia engages in more than one trillion international communications each year, with individuals who are located in virtually every country on earth. For a user to view, search, log in, edit, or contribute to a Project webpage, the user's device must send at least one HTTP or HTTPS "request" to a Wikimedia server.[2] The number of requests required for a user to access a particular webpage depends on the number of graphics, videos, and other specialized components featured on the page. After receiving such a user request, the Wikimedia server transmits an HTTP or HTTPS "response" to the user's device, in which the content of the requested webpage component is rendered and displayed to the user. Between August 1, 2017 and January 31, 2018, Wikimedia's U.S. servers received approximately 381 billion HTTP or HTTPS requests from users outside of the United States. *See* Bayer Decl. ¶ 27. At this rate, Wikimedia engages in more than one trillion international HTTP or HTTPS communications each year.

---

[2] "HTTP" and "HTTPS" are common protocols for transmitting data via the Internet, including the content of many webpages. Unlike HTTP, which is unencrypted, "HTTPS" encrypts the connection between Wikimedia servers and the user's browser. *See* Bradner Decl. ¶¶ 120-23 (Exhibit 1).

16.   Wikimedia also frequently engages in communications that permit its users to interact with one another more directly. For example, Wikimedia engages in communications that allow users to interact in small or limited groups—including over private and semi-private "wikis" that only certain users, such as user community leaders, can read or edit; private deliberations of user community leaders who help administer the Wikimedia websites; and Wikimedia mailing lists with restricted membership. Community members and leaders often debate and deliberate on organizational policies and decisions in the course of these communications. Separately, Wikimedia also enables registered users to send an email via Wikimedia to another registered user, so long as both have enabled email communications on their Wikimedia accounts. All of these interactions involve communications between Wikimedia and its community members.

17.   Wikimedia's communications with its community members are often sensitive and private. Among other things, these Wikimedia communications link each user's page views, searches, and contributions to Wikimedia with his IP address, as well as with other user-specific information. As a rule, Wikimedia maintains as private the IP addresses associated with its community members and their individual interactions with the Projects. The sole exception is when an individual editor reveals his IP address publicly in conjunction with his edits. (Even when editors publicly disclose their IP addresses, many of their exchanges with Wikimedia— such as their page views, searches, and draft contributions—remain private.) *See* Bayer Decl. ¶¶ 12-16.

18.   In other words, these communications contain some of the most sensitive information that Wikimedia possesses: which specific webpages each particular person is visiting or editing. They show who is reading—or writing—what. As a consequence, these

communications reveal a detailed picture of the everyday concerns of Wikimedia's users, and often constitute a record of their political, religious, sexual, medical, and expressive interests.

19.   At times, these communications also contain questions, comments, or complaints that community members submit to Wikimedia about the performance and operation of its websites. And, at other times, they contain the private deliberations of user-community leaders who help administer the Wikimedia websites and, in that role, discuss Wikimedia's organizational policies and decisions.

20.   Finally, Wikimedia's communications with its community members also reveal private information about its operations, including details about its technical infrastructure, its data flows, and its member community writ large.

21.   Wikimedia's communications with its community members are essential to its organizational mission, as is its ability to control and maintain the privacy of these communications. Wikimedia's activities depend on its ability to ensure that readers and editors can explore and contribute to the Projects privately when they choose to do so. If these communications were not private, Wikimedia would have immense difficulty both gathering content and sharing information as widely as possible.

22.   As a result, Wikimedia takes numerous, costly steps to protect the confidentiality of its communications, including through both legal action and technical measures, some of which are discussed in greater detail below. Wikimedia also assures its community via policies, public statements, and guidelines that it will reject third-party requests for non-public user information unless it is legally required to disclose that information. In keeping with these assurances, Wikimedia resists third-party demands for information that are overly broad, unclear, or irrelevant; notifies users individually of information requests when legally permitted; and

provides legal defense funds for certain community members who are subject to lawsuits or demands for non-public information as a result of their participation in the Projects. These steps are vitally necessary to fostering trust with community members and to encouraging the growth, development, and distribution of free educational content.

B.   Wikimedia's Internal "Log" Communications

23.   The second category of Wikimedia communications is its proprietary log communications, which it creates and transmits internally as part of its effort to monitor, study, and improve the Projects.

24.   Every time Wikimedia receives an HTTP or HTTPS request from a person accessing a Project webpage, it creates a corresponding log entry. Among other private information, logs contain the user's IP address and the URL of the webpage sought by the user. Depending on the location of the user and the routing of her request, the log may be generated by Wikimedia's servers abroad, which in turn send the log to Wikimedia in the United States. Between August 1, 2017 and January 31, 2018, Wikimedia's foreign-based servers transmitted approximately 736 billion log communications to Wikimedia servers in the United States. *See* Bayer Decl. ¶ 27 (quantifying log communications). Wikimedia's proprietary log communications also reveal private information about its operations, including details about its technical infrastructure, its data flows, and its member community writ large.

25.   Wikimedia's ability to control and maintain the privacy of its internal log communications is every bit as vital as its ability to ensure the privacy of its communications with community members. The interests described in paragraphs A.17 to A.22 above apply to these internal communications as well. Wikimedia's log communications provide a record of who Wikimedia associates with in the course of its activities, and reveal exactly what information Wikimedia is exchanging with the individuals who contribute to and visit the

Projects. Moreover, Wikimedia creates and transmits these log entries solely for its own internal purposes, as records of its activities, and it does not share them publicly. Because of the sensitivity of this information, Wikimedia seeks to collect and retain as little of it as possible. Indeed, Wikimedia takes steps to protect the confidentiality of these records and the sensitive information they contain—including by keeping them for only a limited amount of time, consistent with the maintenance, understanding, and improvement of the Wikimedia Projects and webpages and with Wikimedia's legal obligations. Still, Wikimedia possesses a large volume of sensitive information about its interactions with its community members, and it transmits a large volume of sensitive information about those interactions every day.

C.   Communications of Wikimedia Staff

26.   Wikimedia also engages in a third category of sensitive communications. Certain members of Wikimedia's staff routinely engage in sensitive, confidential, and privileged Internet communications with non-U.S. persons located abroad in carrying out Wikimedia's work.

27.   Because Wikimedia's activities are global in scope, its staff's international communications are critical to its work. Many members of Wikimedia's U.S.-based staff routinely communicate with individuals abroad using a variety of different modes of electronic communication, including by email (Wikimedia email and Gmail), instant message (Google chat and Internet Relay Chat), video chat (Google Hangout and Skype), public and private "wikis," and an array of electronic third-party work-management tools that facilitate communications (Slack, Google Apps/G Suite, Trello, Sugar, Qualtrics, User Testing, and Salesforce).

28.   Wikimedia's international contacts, many of whom are neither U.S. citizens nor permanent residents, include the following:

- Wikimedia's Board of Trustees, seven of whom are located abroad;

- Wikimedia's international contractors, over 140 of whom worked abroad in approximately 45 different countries, including India, Israel, Turkey, Russia, Poland, and Greece, between January 1, 2015 and December 22, 2017;

- Wikimedia's international outside legal counsel, which includes more than 30 law firms from over 20 countries, such as India, Russia, China, Egypt, and Chile;

- project partners and grantees, which encompass a broad spectrum of private-sector, non-profit, and governmental entities, including telecommunication companies, universities, education departments, libraries, and art galleries;

- foreign government contacts, including government officials and political and business leaders; and

- Wikimedia volunteers and other community members.

29.   Many of Wikimedia staff's international communications are sensitive, confidential, and legally privileged. Because Wikimedia websites are viewed and edited by hundreds of millions of users all over the world, the organization is routinely confronted with a variety of complex legal issues in various countries. Thus, Wikimedia's U.S.-based attorneys frequently communicate electronically with international outside counsel—based in over 20 countries, including Finland, France, Germany, Greece, Hong Kong, India, Italy, Russia, and the United Kingdom—to discuss privileged matters. As a Wikimedia attorney, I regularly engaged in sensitive, confidential, and legally privileged communications with international outside counsel and Wikimedia contractors located abroad. A few examples of my work in these areas include the following:

- Beginning in 2014 and continuing through May 2017, I regularly communicated via email with Swedish counsel and foreign Wikimedia users in connection with a copyright infringement action involving the Swedish chapter of Wikimedia.

- In 2014 and 2015, I, along with other attorneys in the office, routinely corresponded with Wikimedia's counsel in Finland via email concerning Wikimedia's compliance with Finnish fundraising regulations.

- In 2012 and 2013, I communicated via email with counsel in China. In 2013, these discussions were focused on preparation for the annual Wikimedia conference, known as "Wikimania," which was held in Hong Kong.

11

- From 2013 through May 2017, I consulted with London counsel via email in connection with a variety of legal issues, including my work revising Wikimedia's internal privacy policies.

30.   Wikimedia's U.S.-based legal team also communicates confidentially via the Internet with users abroad who have been threatened, harassed, detained, or sued in connection with their participation in Wikimedia activity, and with users who contact Wikimedia about privacy concerns and other personal matters involving the Wikimedia sites. For instance, I regularly retained and worked with foreign counsel in defending defamation actions involving Wikimedia and individual Wikimedia contributors. In 2014, I engaged counsel in Brazil to help defend against a defamation suit and subpoena seeking the identity of certain Wikimedia users who wished to remain anonymous. From 2012 to May 2017, I worked with Greek counsel to assist in the defense of a defamation action involving an individual Wikimedia user. In both cases, I regularly corresponded via email with users and their counsel.

31.   Other members of Wikimedia's U.S.-based staff also engage in sensitive international communications, the confidentiality of which is essential to Wikimedia's work.

32.   For example, Wikimedia's grant-making team communicates internationally on a regular basis concerning funding, organizational development, and support for users and volunteer groups who promote the Projects and Wikimedia's mission internationally. Some of these communications contain sensitive information such as personal bank account numbers, scans of photo identification, and private discussions of misconduct or other governance issues among grantees and potential grantees. The grant-making team's international communications also include discussions of volunteers whose work is considered controversial in their home countries—for example, in Venezuela, Iran, Ethiopia, Russia, Belarus, Saudi Arabia, and Kazakhstan. Because the exposure of this information could put volunteers and others in danger, the confidentiality of these communications is critical.

33.   Likewise, when Wikimedia conference coordinators plan and promote an annual "Wikimania" conference, referenced above, Wikimedia staff communicate internationally about volunteers' and attendees' real names, email addresses, physical addresses, phone numbers, passport numbers, gender, age, and other affiliations. This information is particularly sensitive when it involves community members from countries of interest to the U.S. government.

III.   UPSTREAM SURVEILLANCE OF WIKIMEDIA'S COMMUNICATIONS

34.   The Declaration of Scott Bradner explains why it is a virtual certainty that the NSA is copying and reviewing Wikimedia's international communications—i.e., those with Wikimedia's community members, Wikimedia's internal log communications, and communications by Wikimedia staff—in the course of Upstream surveillance.

35.   For the following reasons, I believe that it is very likely that Wikimedia is communicating with and about some of the thousands of people and organizations the government has targeted under Upstream surveillance—resulting in the retention of Wikimedia's communications.[3] Wikimedia's communications contain information that plainly falls within the scope of the U.S. government's foreign intelligence interests and its Section 702 collection, specifically.

36.   First, Wikimedia routinely communicates with its users and other contacts in geographic areas that are a special focus of the U.S. government's counterterrorism or foreign policy efforts, such as Russia, India, and China. These international contacts have included

---

[3] At the time the Amended Complaint was filed in June 2015, the NSA used Upstream surveillance to collect communications to, from, and *about* its targets. The NSA reportedly suspended the collection of communications that are merely "about" its targets in April 2017 after violating court-imposed restrictions on Upstream surveillance. *See* Exhibit 45 (Press Release, NSA, *NSA Stops Certain Section 702 "Upstream" Activities*, Apr. 28, 2017, https://www.nsa.gov/news-features/press-room/Article/1618699/nsa-stops-certain-section-702-upstream-activities).

foreign telecommunication companies, such as Orange, Digicel, Airtel, and Beeline; foreign government officials; and hundreds of millions of Wikimedia users located abroad. Since 2011, Wikimedia staff have communicated with, among others, high-ranking leaders of Kuwait and Saudi Arabia; Wikimedia users in conflict zones such as Ukraine; and members of opposition movements throughout the world. Given the nature of Wikimedia's international contacts, and the fact that Wikimedia has hundreds of millions of international contacts, there is a substantial likelihood that at least some of these contacts are targets of Upstream surveillance.

37.   Second, many of Wikimedia's international communications contain the kinds of "selectors"—communications accounts, addresses, and identifiers—that the NSA monitors. Hundreds of billions of Wikimedia's international communications (both its HTTP and HTTPS requests and responses, as well as its internal logs of user activity) include details such as website addresses and IP addresses. Furthermore, because Wikipedia is so comprehensive, it has encyclopedic entries for nearly any foreign company, government entity, or terrorist organization that the U.S. government would seek to target. Many of these webpages contain the kinds of selectors that the NSA monitors. For example, website addresses or domain names associated with organizations on the U.S. State Department's Foreign Terrorist Organization List are included on approximately 700 Wikimedia Project webpages—including webpages describing organizations, like Uzbekistan's Islamic Jihad Union, that have been the subject of investigations and prosecutions involving Section 702 surveillance.[4] Additionally, many staff communications contain email addresses, phone numbers, and website addresses of foreign individuals and organizations relevant to Wikimedia's work.

---

[4] *See United States v. Muhtorov*, 187 F. Supp. 3d 1240 (D. Colo. 2015).

38.   Third, many of Wikimedia's international communications fall within the Section 702's broad definition of "foreign intelligence information." *See* 50 U.S.C. 1801(e). In addition to the numerous Wikimedia Project pages concerning foreign affairs, Wikimedia staff communicate about issues related to foreign affairs, as the following examples illustrate:

- Wikimedia launched a project called Wikipedia Zero, which was designed to offer Wikipedia free-of-charge on mobile phones in parts of the world where mobile is the primary (or only) means of access to the Internet, and mobile data costs pose a significant barrier to access. To form partnerships with telecommunications companies and to promote Wikipedia Zero, Wikimedia has communicated via email with foreign mobile-phone operators, foreign government officials, and others abroad. These communications include discussions of international law and the policies of foreign companies. Wikimedia has established Wikipedia Zero partnerships with telecommunications companies in more than 70 countries, including Bangladesh, Jordan, Kazakhstan, Pakistan, India, Russia, Saudi Arabia, Tajikistan, and Tunisia.

- Wikimedia is also routinely contacted by, and has been involved in legal action with, foreign government officials and political groups who have expressed dissatisfaction with certain content on Wikipedia pages. For example, in 2015 alone, Wikimedia staff communicated with, among others, government officials and high-ranking leaders of Turkey, Azerbaijan, and Saudi Arabia.

- Wikimedia employees regularly communicate with Wikimedia users from all around the world who are engaged in politically sensitive work or are involved in political opposition movements, including in locations such as Iran, Russia, Egypt, Ukraine, India, China, and Azerbaijan.

- Finally, members of Wikimedia staff also communicate internally about issues of national security and government compliance. For instance, Wikimedia's U.S.-based staff and foreign contractors correspond with one another, and with outside counsel, about the Office of Foreign Asset Control's Specially Designated Nationals List to ensure that Wikimedia's fundraising activities are in compliance with those restrictions.

IV.   THE IMPACT OF UPSTREAM SURVEILLANCE ON WIKIMEDIA

39.   Upstream surveillance has had a significant and long-lasting impact on Wikimedia's activities and operations.

40.   Beginning in June 2013, there were numerous disclosures in the press and by the government concerning Upstream surveillance. The Washington Post and The Guardian were

the first to reveal Upstream surveillance to the public, and the government confirmed the existence of the program shortly thereafter.   Over the course of the following year, the government provided additional information about this surveillance to the public.[5]   Among the disclosures in the press, the Guardian and others published multiple NSA slides showing that the NSA was surveilling Wikimedia's communications to obtain intelligence information.   One of these slides described analysts' ability to learn "nearly everything a typical user does on the Internet" by surveilling HTTP communications—and it identified Wikipedia as a prime example of the HTTP communications collected through NSA surveillance.[6]   Another NSA slide published in July 2015 similarly showed that the NSA was intercepting Wikimedia's communications.   In particular, it showed that the NSA had designed its search software to allow analysts to identify intercepted Wikimedia communications.[7]

41.   These disclosures about Upstream surveillance and the NSA's surveillance of Wikimedia's communications, in particular, caused grave concern and alarm within the Wikimedia community and among Wikimedia staff.

---

[5] *See, e.g.*, Exhibit 15 (Privacy & Civil Liberties Oversight Board, *Report on the Surveillance Program Operated Pursuant to Section 702 of FISA* (July 2014)) (citing numerous official disclosures); Exhibit 17 (Office of the Director of National Intelligence, *DNI Declassifies Intelligence Community Documents Regarding Collection Under Section 702* (Aug. 21, 2013), http://icontherecord.tumblr.com/post/58944252298/dni-declassifies-intelligence-community-documents).

[6] *See* Exhibits 27 & 28 (Glenn Greenwald, *XKeyscore: NSA Tool Collects "Nearly Everything a User Does on the Internet"*, Guardian, July 31, 2013, https://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data).

[7] *See* Exhibit 30 (*XKEYSCORE for Counter-CNE*, published in The Intercept on July 1, 2015, https://theintercept.com/document/2015/07/01/xks-counter-cne/ (Slide 9)) (describing computer code that identifies "wikimedia" and "wikipedia" HTTP communications); Exhibit 29 (Morgan Marquis-Boire, *et al.*, *XKEYSCORE: NSA's Google for the World's Private Communications*, Intercept, July 1, 2015, https://theintercept.com/2015/07/01/nsas-google-worlds-private-communications) (publishing the *XKEYSCORE for Counter-CNE* slide deck).

42.   As explained below, this surveillance has damaged Wikimedia's ability to carry out its mission by undermining the privacy and anonymity that both Wikimedia and its users depend on. In response, Wikimedia has undertaken a series of protective measures designed to mitigate the threat to its mission and better protect its communications against surveillance.

A.   The Impact of Upstream Surveillance on Wikimedia's Users and Consequences for Wikimedia's Work

43.   Confidentiality is essential to the work of Wikimedia staff and the organization as a whole. Wikimedia's work depends on the ability to ensure anonymity for individuals who view, edit, or use the Project pages and other Wikimedia websites. The ability to read, research, and write anonymously is essential to free expression and critical to Wikimedia's organizational mission.

44.   The "ability of almost anyone to edit (most) articles without registration" is also considered a Founding Principle of Wikipedia. *See* Exhibit 31 (WIKI0008114). This Founding Principle has repeatedly been endorsed in Wikimedia's and the Wikimedia community's public statements. *See, e.g.*, Exhibit 32 (WIKI0006942) ("Privacy on the Internet is closely connected to our mission to disseminate free knowledge. We strive to provide a platform for users from all over the world to exercise their free expression right to share and study educational content. There are circumstances when contributors need to remain anonymous when working on the Wikimedia projects. To that end, the projects allow people to edit under a pseudonym, without providing any personal information, and without even creating an account. We want community members to feel comfortable when working on the projects. And we strongly oppose mass surveillance by any government or entity."); Exhibit 33 (WIKI0008108) ("The Wikimedia projects serve as a platform for people from all over the world to share and study knowledge. Sometimes, people may need to remain anonymous for personal or political reasons when

17

contributing to the Wikimedia projects. Wikimedia allows people to edit under a pseudonym, without providing any personal information, or without even creating an account. Anonymity and pseudonymity can protect people from retaliation for contributing to the Wikimedia projects."); Exhibit 34 (WIKI0008116) (community policies allow the creation of a second pseudonymous account for privacy purposes, given the importance of anonymity).   The importance of anonymity to the Wikimedia community is also articulated in Wikimedia's official policy documents. For example, Wikimedia's Privacy Policy does not require users to create an account to read or contribute to a Wikimedia site, and users are not required to provide a "real name" to verify their identity during account creation. *See* Exhibit 35 (WIKI0006674).

45.   Upstream surveillance undermines Wikimedia's ability to conduct its work. Notwithstanding Wikimedia's efforts to protect its information, NSA surveillance, including Upstream surveillance, has resulted and will result in some Wikimedia community members being less willing to engage with the Projects or with Wikimedia staff, because they fear that their communications will be intercepted by the U.S. government and also shared with other governments, intelligence services, and organizations with which the U.S. cooperates.[8]

---

[8] Users can face government scrutiny, coercion, and other forms of reprisal based on their association with Wikimedia. *See, e.g.*, Joe Sutherland, *2015 Wikipedians of the Year Unveiled in Mexico*, Wikimedia Blog (July 31, 2015), https://blog.wikimedia.org/2015/07/31/wikipedians-of-the-year-2015 (describing the Venezuelan government's revocation of the passport of a Wikimedia user for publishing photos of anti-government protests to Wikimedia). As another example, in March 2013, the Direction Centrale du Renseignement Intérieur ("DCRI"), a French intelligence agency, contacted Wikimedia and demanded removal of an entire Wikipedia article on the ground that it contained classified military information. After Wikimedia was unable to determine what information the DCRI considered classified or high-risk, the DCRI contacted a French Wikipedia volunteer with administrative rights. This volunteer had no role in the creation of the article; however, the DCRI insisted that he use his administrative rights to remove the article immediately, or face serious and immediate reprisals. In the face of these threats, the volunteer removed the article as authorities demanded.

46.   For example, following disclosures about the nature and scope of NSA surveillance in the press in the summer of 2013, members of Wikimedia's community expressed fear and concern about Section 702 surveillance, prompting Wikimedia to hold an open "consultation" through an online forum. During this consultation, Wikimedia sought community feedback about the steps it should take to protect the privacy of Wikimedia's activities and its users from Section 702 surveillance. In response, Wikimedia's users from the U.S. and other countries discussed concerns about NSA surveillance activities, including Upstream surveillance. *See* Exhibit 13 (WIKI0008128, -8139) (one user commented on June 15, 2013: "[T]he NSA is also watching all strategic point[s] of internet across the world . . . . certain under sea cable landing have optical splittering [sic] circuits . . . ."). Users expressed their fears not only that their own activities were being surveilled, but also that the community as a whole would see a global drop in participation due to such fears. *See* Alexander Decl. ¶¶ 6, 11 (Exhibit 4).

47.   The negative effects of Upstream surveillance on foreign users, described in more detail in the Declaration of James Alexander, are a direct detriment to Wikimedia, its ability to receive and distribute information, its organizational goal of increasing global access to knowledge, and its ability to associate privately with its community for all these purposes. Upstream surveillance also harms Wikimedia's domestic users, whose communications with Wikimedia's foreign servers are subject to this surveillance, and whose ability to exchange information and opinions with Wikimedia's foreign readers and contributors is impaired.

B.   Wikimedia's Protective Measures in Response to Upstream Surveillance

48.   Due in part to Wikimedia's and Wikimedia users' concerns about U.S. government surveillance, including Upstream surveillance, Wikimedia has undertaken a series of measures to protect its users, communications, and data, including adopting more secure methods of electronic communications, and in some instances self-censoring communications or

19

forgoing electronic communications altogether. These measures divert Wikimedia's time and monetary resources as a nonprofit entity from other important organizational work.

49.   Due in substantial part to Upstream surveillance, Wikimedia transitioned from HTTP to HTTPS as the default protocol for all Wikimedia Project webpages. Historically, the Project websites used HTTP, not HTTPS, by default. However, revelations about Upstream surveillance in the summer of 2013 were a substantial factor in Wikimedia's decision to transition to HTTPS-by-default. As Wikimedia explained on its blog in August 2013, the release of the first NSA PowerPoint slide identifying Wikimedia as subject to U.S. surveillance "prompted our community members to push for the use of HTTPS by default for the Wikimedia projects."[9] On July 31, 2013, Wikipedia founder and Wikimedia Foundation Board of Trustees member Jimmy Wales cited this slide in a post on Twitter, stating that "NSA snooping on what YOU are reading at Wikipedia means I want us to go to SSL [the encryption protocol for HTTPS] sooner." Additionally, in his "State of the Wiki" address in Hong Kong in August 2013, Wales announced that Wikimedia would be transitioning to HTTPS-by-default due to revelations about NSA surveillance in June 2013. I was present for the "State of the Wiki" address and the video recording available at <https://www.youtube.com/watch?v=_w4oCslodDU> appears to be an accurate recording of the speech. Specifically, I recall Wales announcing that Wikimedia would be transitioning to HTTPS-by-default due to the revelations about NSA surveillance.

---

[9] *See* Exhibit 36 (WIKI0006700) (Ryan Lane, *The future of HTTPS on Wikimedia Projects*, Wikimedia Blog (Aug. 1, 2013), http://blog.wikimedia.org/2013/08/01/future-https-wikimedia-projects/); *see also* Exhibit 37 (WIKI0007108) (Yana Welinder, *et al.*, *Securing access to Wikimedia sites with HTTPS*, Wikimedia Blog (June 12, 2015), http://blog.wikimedia.org/2015/06/12/securing-wikimedia-sites-with-https/).

50.   In order to effectively execute its transition to HTTPS-by-default for all Project pages, Wikimedia has devoted four years of full-time employee work allocated across different members of Wikimedia's staff. This transition to HTTPS-by-default has also created additional burdens on specific Wikimedia projects or initiatives. For example, the HTTPS transition necessitated approximately six months of full-time employee work to (1) coordinate with Wikimedia's partners regarding the manner in which the transition would affect the "Wikipedia Zero" project; and (2) provide related technical support.

51.   Wikimedia initially had significant reservations regarding how the transition would affect users in large restricted corporate networks or users in countries such as China and Iran, for whom Wikimedia project webpages might or would become inaccessible if they were transitioned to HTTPS. Had it not been for revelations about the NSA's Upstream surveillance, it is likely that Wikimedia would not have transitioned all of its Project webpages to HTTPS-by-default, and instead would have relied on a less burdensome approach through which users could "opt-in" to using HTTPS. Revelations related to Upstream surveillance also contributed to Wikimedia's execution of the transition process on an accelerated basis. *See* Exhibit 38 (WIKI0002298) (statement on May 23, 2014 from Erik Möller, VP of Wikimedia Engineering and Produce Development: "Given increased concern about surveillance/monitoring, and our general commitment to protect user privacy, I expect we'll want to renew our emphasis on encryption and security, including: at least shifting search engine traffic to HTTPS via rel=canonical[;] . . . enabling IPSEC[;] investigating techniques to defeat traffic detection[;] making a definitive decision on whether to force HTTPS for all users.").

52.   Due largely to Upstream surveillance, Wikimedia also implemented Internet Protocol Security ("IPsec"). IPsec is a secure network protocol suite that authenticates and

encrypts the packets of data sent over a network. To effectively execute IPsec implementation

and maintenance, Wikimedia allocated approximately two years of full-time employee work.

53.   Revelations about Upstream surveillance in the summer of 2013 prompted and

was the decisive factor in Wikimedia's decision to implement IPsec. Wikimedia had considered

implementing IPsec before the revelations, but only acted once it learned the extent of the NSA's

surveillance practices as disclosed in June 2013.   Knowledge that the NSA's Upstream

surveillance involved tapping the Internet backbone made IPsec implementation necessary to

protect the confidentiality and security of Wikimedia's communications. Revelations related to

Upstream surveillance also contributed to Wikimedia's execution of the transition process on an

expedited basis. *See* Exhibit 39 (WIKI0006564, -6566) (statement on July 8, 2013 from Tim

Starling, Wikimedia Engineer: "For users geolocated in Europe, HTTPS connections are

terminated in esams [Wikimedia's Netherlands server] and then the requests are forwarded

unencrypted to eqiad [Wikimedia's U.S. server]. This compromises the security of the system.

Recent news articles indicate that the physical security of the internet backbone may not be as

good as previously assumed. I propose buying dedicated IPsec hardware for each DC, sufficient

to encrypt cache-to-cache traffic and thus protect the privacy of our users.").

54.   The transition to HTTPS-by-default and IPsec implementation required a capital

expenditure on technical infrastructure:

    (i)   Wikimedia spent approximately €214,148.46 on Cache/TLS-termination

    servers located in Amsterdam, Netherlands.

    (ii)   Wikimedia spent approximately $40,384.56 on Cache/TLS-termination

    servers located in Virginia, U.S.A.

55.   Wikimedia has also hired a full-time Traffic Security Engineer at a base salary of approximately €76,000, who will be responsible for implementing and maintaining technical efforts to protect Wikimedia users' reading and editing habits from mass surveillance—including, specifically, from the NSA's Upstream surveillance. *See* Exhibit 40 (WIKI0002344) (listing engineer's job responsibilities, the first of which is to "[p]rotect our users' reading and editing habits from mass surveillance").

56.   Wikimedia's primary motivation in hiring a Traffic Security engineer is to maintain ongoing efforts to protect the confidentiality and security of its Internet communications in response to NSA surveillance practices, including Upstream surveillance. If it were not for Wikimedia's extensive efforts to combat the threat of NSA surveillance, Wikimedia would not have expended the additional resources to hire a new employee for this position.

57.   In addition, as discussed in the Declaration of James Alexander, revelations about NSA surveillance, including Upstream surveillance, in the summer of 2013 led to a reluctance on the part of international community members to interact with U.S.-based Wikimedia staff. Fears over NSA surveillance of international Internet communications meant that Wikimedia was required to increasingly rely on in-person communications and encrypted messaging systems when interacting with community members. Due to NSA surveillance, including Upstream surveillance, Wikimedia staff have self-censored their speech and in some instances have forgone electronic communications altogether. *See* Alexander Decl. ¶¶ 13-14.

58.   After the summer 2013 revelations about Upstream surveillance, Wikimedia also held internal discussions and community consultations specifically related to NSA surveillance. *See* Exhibit 13 (WIKI0008128) (Wikimedia community consultation on NSA surveillance

disclosures). Due in part to user concerns about Upstream surveillance, Wikimedia expedited the negotiation, drafting, and approval of a new Privacy Policy. *See* Exhibit 41 (WIKI0006602) (Wikimedia blogpost summarizing consultation process).   Wikimedia staff responded to community concerns over surveillance—including concerns specifically about the NSA's Upstream surveillance—when drafting these policy changes. I assumed a lead role in developing these new privacy policies, which required extensive consultations and several months' worth of work.

59.   Wikimedia is a non-profit organization with limited staff and financial resources. The aforementioned resources that Wikimedia devoted to protect the confidentiality of its communications were made at the expense of other organization initiatives and activities that Wikimedia could have undertaken to further advance its mission.

V.   CONCLUSION

60.   Freedom of speech, freedom of association, and access to information are core values for Wikimedia. As stewards of the Wikimedia Projects, Wikimedia strives to protect the rights of users, including their right to express themselves, and to collaborate together globally, without fear of reprisal. Many of the topics discussed on Wikimedia pages are controversial or politically sensitive.   When Wikimedia's users are afraid to read about or contribute to the collective understanding of those topics, the organization's mission of providing free access to knowledge to all, including Americans, is threatened.

61.   The intrinsic value of the Wikimedia Projects lies in both what they are and how they are built. They are an ever-expanding resource of information and ideas, created through open collaboration and dialogue. Upstream surveillance threatens that global collaboration and dialogue, and it does so without deference to the freedoms that ensure free and open access to knowledge for all.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on December 18, 2018 in San Francisco, California.

Michelle Paulson