

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

WIKIMEDIA FOUNDATION,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 1:15-cv-00662-TSE
)	
NATIONAL SECURITY AGENCY, <i>et al.</i> ,)	
)	
Defendants.)	

Attachment E

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)	
Defendants.)	

EXHIBIT 3

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

WIKIMEDIA FOUNDATION, INC.

Plaintiff,

v.

NATIONAL SECURITY AGENCY, et al.,

Defendants.

Civil Action No. 1:15-cv-00662-TSE

Hon. T.S. Ellis, III

**WIKIMEDIA FOUNDATION, INC.'S AMENDED AND SUPPLEMENTAL
RESPONSES AND OBJECTIONS TO
NATIONAL SECURITY AGENCY'S FIRST SET OF INTERROGATORIES**

PROPOUNDING PARTY: NATIONAL SECURITY AGENCY

RESPONDING PARTY: WIKIMEDIA FOUNDATION, INC.

SET NUMBER: ONE

Pursuant to Federal Rule of Civil Procedure 33, Plaintiff Wikimedia Foundation, Inc. ("Plaintiff" or "Wikimedia") amends and supplements its responses as follows to Defendant National Security Agency's ("Defendant" or "NSA") (collectively with Plaintiff, the "Parties") First Set of Interrogatories (the "Interrogatories"):

I. GENERAL RESPONSES.

1. Plaintiff's response to Defendant's Interrogatories is made to the best of Plaintiff's present knowledge, information, and belief. Discovery in this action is ongoing, and Plaintiff's responses may be substantially altered by further investigation, including further review of Plaintiff's own documents, as well as the review of documents produced by Defendant. Said response is at all times subject to such additional or different information that discovery or

further investigation may disclose and, while based on the present state of Plaintiff's recollection, is subject to such refreshing of recollection, and such additional knowledge of facts, as may result from Plaintiff's further discovery or investigation.

2. Plaintiff reserves the right to make any use of, or to introduce at any hearing and at trial, information and/or documents responsive to Defendant's Interrogatories but discovered subsequent to the date of this response, including, but not limited to, any such information or documents obtained in discovery herein.

3. To the extent that Plaintiff responds to Defendant's Interrogatories by stating that Plaintiff will provide information and/or documents that Plaintiff deems to embody material that is private, business confidential, proprietary, trade secret, or otherwise protected from disclosure pursuant to Federal Rule of Civil Procedure 26(c)(7), Federal Rule of Evidence 501, or other applicable law, Plaintiff will do so only pursuant to the Parties' Stipulated Protective Order (ECF No. 120).

4. Plaintiff reserves all objections or other questions as to the competency, relevance, materiality, privilege, or admissibility as evidence in any subsequent proceeding in or trial of this or any other action for any purpose whatsoever of Plaintiff's responses herein and any document or thing identified or provided in response to Defendant's Interrogatories.

5. Plaintiff's responses will be subject to and limited by any agreements the Parties reach concerning the scope of discovery.

6. Plaintiff reserves the right to object on any ground at any time to such other or supplemental interrogatories as Defendant may at any time propound involving or relating to the subject matter of these Interrogatories.

II. GENERAL OBJECTIONS.

Plaintiff makes the following general objections, whether or not separately set forth in response to each Interrogatory, to each instruction, definition, and Interrogatory made in Defendant's Interrogatories:

1. Plaintiff objects to the Interrogatories in their entirety insofar as any such instruction, definition, or Interrogatory seeks information or production of documents protected by the attorney-client privilege or the work product doctrine. Fed. R. Civ. Proc. 26(b)(1). Such information or documents shall not be provided in response to Defendant's Interrogatories and any inadvertent disclosure or production thereof shall not be deemed a waiver of any privilege with respect to such information or documents or of any work product immunity which may attach thereto. Fed. R. Civ. Proc. 26(b)(5)(B).

2. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory seeks identification of documents, witnesses, or information that Defendant has withheld from Plaintiff. Fed. R. Civ. Proc. 26(b)(1), (2).

3. Plaintiff objects to the Interrogatories in their entirety to the extent any such Interrogatory requires Plaintiff to identify potentially thousands of pages of documents, not all of which have been or can be located and reviewed by counsel within the time period allowed for this response or within a reasonable time. Accordingly, said Interrogatories would subject Plaintiff to unreasonable and undue annoyance, oppression, burden and expense.

4. Plaintiff objects to any Interrogatories that exceed the scope of jurisdictional discovery as defined by Defendants, *see* ECF No. 116 at 4, and ordered by the Court.

5. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory seeks information that is available through or from public

sources or records, or that are otherwise equally available to Defendant, on the ground that such instructions, definitions, and/or Interrogatories unreasonably subject Plaintiff to undue annoyance, oppression, burden, and expense. Fed. R. Civ. Proc. 26(b)(1), (2).

6. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory purport to impose obligations that are greater or more burdensome than or contradict those imposed by the applicable Federal and local rules. *See* Fed. R. Civ. Proc. 26, 33.

7. Plaintiff objects to the Interrogatories in their entirety as the Interrogatories contain more than the “25 written interrogatories, including all discrete subparts.” permitted by the Federal Rules of Civil Procedure, Rule 33(a)(1), and Defendant has not sought leave to serve additional interrogatories.

8. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory seeks documents or information no longer in existence or not currently in Plaintiff’s possession, custody, or control, or to the extent they refer to persons, entities, or events not known to Plaintiff or controlled by Plaintiff, on the grounds that such definitions or Interrogatories are overly broad, seek to require more of Plaintiff than any obligation imposed by law, would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense, and would seek to impose upon Plaintiff an obligation to investigate, discover, or produce information or materials from third parties or otherwise that are accessible to Defendant or readily obtainable from public or other sources. Fed. R. Civ. Proc. 26(b)(1), (2).

9. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory seeks information or production of documents protected

from disclosure by any right to privacy or any other applicable privilege or protection, including the right to confidentiality or privacy of third parties, any right of confidentiality provided for by Plaintiff's contracts or agreements with such third parties, or by Plaintiff's obligations under applicable law or contract to protect such confidential information. Plaintiff reserves the right to withhold any responsive information or documents governed by a third-party confidentiality agreement until such time as the appropriate notice can be given or the appropriate permissions can be obtained. Plaintiff also objects generally to all instructions, definitions, or Interrogatories to the extent they seek disclosure of trade secrets and other confidential research or analyses, development, or commercial information of Plaintiff or any third party.

10. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory is overbroad and unduly burdensome, particularly to the extent they seek "all," "each," or "any" documents, witnesses or facts relating to various subject matters. Fed. R. Civ. Proc. 26(b)(1), (2). To the extent Plaintiff responds to such Interrogatories, Plaintiff will use reasonable diligence to identify responsive documents, witnesses or facts in its possession, custody, or control, based on its present knowledge, information, and belief.

11. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory seeks expert discovery prematurely.

12. Plaintiff objects to any contention Interrogatories in their entirety as premature. Plaintiff will provide its response prior to the close of fact discovery.

13. Plaintiff objects to the Interrogatories in their entirety to the extent any such instruction, definition, or Interrogatory purports to require Plaintiff to restore and/or search data sources that are not reasonably accessible on the grounds that such definitions and Interrogatories would subject Plaintiff to undue burden and expense. Fed. R. Civ. Proc. 26(b)(1), (2).

III. DEFINITIONAL OBJECTIONS.

1. Plaintiff objects to definition number one (1) to the extent it defines "Plaintiff" and "Wikimedia" to include Plaintiff's "parent, subsidiary, and affiliated organizations, and all persons acting on their behalf, including officials, agents, employees, attorneys, and consultants." Said definition is overly broad, seeks irrelevant information not calculated to lead to the discovery of admissible evidence, seeks information outside of Plaintiff's possession, custody, or control, and would subject Plaintiff to unreasonable and undue annoyance, oppression, burden and expense. Said definition is also vague and ambiguous in that it cannot be determined what is meant by the terms "affiliated organizations" and "all persons acting on their behalf." Plaintiff shall construe "Plaintiff" and "Wikimedia" to mean Wikimedia, and its present officers, directors, agents, and employees.

2. Plaintiff objects to definition number four (4) and to each Interrogatory that purports to require Plaintiff to "state the basis of," "stating the basis of," "state on what basis," or otherwise "state with particularity" or "identify" "all" facts, documents, or persons whose testimony support or dispute any given factual assertion, on the ground that any response thereto would require subjective judgment on the part of Plaintiff and its attorneys, and would further require disclosure of a conclusion or opinion of counsel in violation of the attorney work product doctrine and/or attorney-client privilege. Plaintiff further objects that this definition and all requests to identify documents in the Interrogatories are premature at this early stage of the litigation, would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense, and would impose an obligation to provide information greater than that required by the Federal Rules of Civil Procedure.

3. Plaintiff objects to definition number five (5) as unduly burdensome in that it

purports to require Plaintiff to “identify” each “natural person” by providing information including “her most current home and business addresses, telephone numbers, and e-mail addresses, the name of her current employer, and her title.”

4. Plaintiff objects to definition number six (6) as unduly burdensome in that it purports to require Plaintiff to “identify” an “entity that is not a natural person” by providing information including “its telephone number and e-mail address, and the full names, business addresses, telephone numbers, and e-mail addresses of both its chief executive officer and an agent designated by it to receive service of process.”

5. Plaintiff objects to definition number seven (7) as unduly burdensome in that it purports to require Plaintiff to “identify” documents by providing “(a) the nature of the document (*i.e.*, letter, memorandum, spreadsheet, database, etc.); (b) its date; (c) its author(s) (including title(s) or position(s)); (d) its recipient(s) (including title(s) or position(s)); (e) its number of pages or size; and (f) its subject matter.” or by providing information in accordance with Defendant’s “Specifications for Production of ESI and Digitized (‘Scanned’) Images attached to Defendant National Security Agency’s First Set of Requests for Production.” Plaintiff further objects that this definition and all requests to identify documents in the Interrogatories are premature at this early stage of the litigation, would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense, and would impose an obligation to provide information greater than that required by the Federal Rules of Civil Procedure.

IV. INSTRUCTIONAL OBJECTIONS

1. Plaintiff objects to instruction number one (1) to the extent it purports to request “knowledge or information” from Wikimedia’s “parent, subsidiary, or affiliated organizations, and their officials, agents, employees, attorneys, consultants, and any other person acting on their

behalf.” Said request is overly broad, seeks irrelevant information not calculated to lead to the discovery of admissible evidence, seeks information outside Plaintiff’s possession, custody, or control, and would subject Plaintiff to unreasonable and undue annoyance, oppression, burden and expense. Moreover, said request is vague and ambiguous in that it cannot be determined what is meant by the term “affiliated organizations” and “any other person acting on their behalf.” Where an Interrogatory requests knowledge or information of Plaintiff, Plaintiff shall construe such request to mean knowledge or information from Wikimedia, and its present officers, directors, agents, and employees.

2. Plaintiff objects to instruction number three (3) as unduly burdensome and imposing an obligation to provide information greater than that required by the Federal Rules of Civil Procedure to the extent it purports to require Plaintiff to “identify each person known by Plaintiff to have such knowledge, and in each instance where Plaintiff avers insufficient knowledge or information as a grounds for not providing information or for providing only a portion of the information requested, set forth a description of the efforts made to locate information needed to answer the interrogatory.”

3. Plaintiff objects to instruction number four (4) to the extent it seeks to require it to identify anything other than the specific claim of privilege or work product being made and the basis for such claim, and to the extent it seeks to require any information not specified in Discovery Guideline 10, on the grounds that the additional information sought by Defendant would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense, and constitutes information protected from discovery by privilege and as work product. Plaintiff is willing to discuss acceptable reciprocal obligations for disclosure of information withheld on the basis of attorney-client privilege or attorney work-product.

4. Plaintiff objects to instruction number five (5) to the extent it defines “the time period for which each interrogatory seeks a response” as “the period from July 10, 2008 (the date of enactment of the FISA Amendments Act of 2008, Pub. L. 110-261, 121 Stat. 522) until the date of Plaintiff’s response.” This definition is overly broad, seeks irrelevant information not calculated to lead to the discovery of admissible evidence, and would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense. Where appropriate, Plaintiff has defined the specific time period encompassed by specific responses.

5. Plaintiff objects to instruction number six (6) that the Interrogatories are continuing, to the extent said instruction seeks unilaterally to impose an obligation to provide supplemental information greater than that required by Federal Rule of Civil Procedure 26(e) and would subject Plaintiff to unreasonable and undue annoyance, oppression, burden, and expense. Plaintiff will comply with the requirements of the Federal Rules of Civil Procedure and is willing to discuss mutually acceptable reciprocal obligations for continuing discovery.

V. SPECIFIC OBJECTIONS AND RESPONSES TO INTERROGATORIES.

Without waiving or limiting in any manner any of the foregoing General Objections, Definitional Objections, or Instructional Objections, but rather incorporating them into each of the following responses to the extent applicable, Plaintiff responds to the specific Interrogatories in Defendant’s Interrogatories as follows:

INTERROGATORY NO. 2:

Unless Plaintiff’s response to Interrogatory No. 1, above, is an unequivocal “no,” then please state the basis of Plaintiff’s contention that NSA Upstream surveillance involves the interception, copying, and review of all or substantially all international Internet text-based communications, including, but not limited to, the contentions that “Upstream surveillance is

intended to enable the comprehensive monitoring of international internet traffic.” see Amended Complaint ¶ 48; that “the NSA is temporarily copying and then sifting through the contents of what is apparently most e mails and other text-based communications that cross the border,” see *id.* ¶ 69; that “it would be difficult to systematically search the contents of the communications without first gathering nearly all cross-border text-based data,” see Pl.’s Opp. to Defs.’ MTD at 18-19; and that the U.S. Government “has acknowledged ... that the NSA ... examines the full contents of essentially everyone’s communications to determine whether they include references to the NSA’s search terms,” *see id.* at 10.

RESPONSE TO INTERROGATORY NO. 2:

In addition to the General Objections above which are incorporated herein, Plaintiff further objects that this Interrogatory is a contention Interrogatory that is premature at this stage in the litigation. Plaintiff further submits that these matters may be the subject of expert testimony, as to which Plaintiff will provide discovery at the appropriate time.

Plaintiff therefore specifically reserves the right to supplement and amend its response based on further investigation and discovery. Plaintiff additionally objects that this Interrogatory is improperly compound in that it contains multiple subparts.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

The bases for Plaintiff’s contention include the following:

- Basic principles underlying how Internet communications are transmitted and how surveillance on a packet-switched network operates.
- Privacy & Civil Liberties Oversight Board, *Report on the Surveillance Program Operated Pursuant to Section 702 of FISA* (2014) (“PCLOB Report”), including pages 7–10, 12–

13, 22, 30–41 & n.157, 79, 111 n.476, 120–22, 125, 143, and official government sources concerning Upstream surveillance cited therein.

- [Redacted], No. [Redacted], 2011 WL 10945618 (FISC Oct. 3, 2011)
- 50 U.S.C. §§ 1801, 1881a.
- David S. Kris & J. Douglas Wilson, *National Security Investigations and Prosecutions* § 17.5 (July 2015)
- Julia Angwin & Jeff Larson, *New Snowden Documents Reveal Secret Memos Expanding Spying*, ProPublica (June 4, 2015)(and associated documents)
- Julia Angwin et al., *AT&T Helped U.S. Spy on Internet on Vast Scale*, N.Y. Times, Aug. 15, 2015 (and associated documents)
- Julia Angwin et al., *NSA Spying Relies on AT&T's 'Extreme Willingness to Help'*, ProPublica, Aug. 15, 2015 (and associated documents)
- Jeff Larson et al., *A Trail of Evidence Leading to AT&T's Partnership with the NSA*, ProPublica, Aug. 15, 2015 (and associated documents)
- PCLOB, Public Hearing Regarding the Surveillance Program Operated Pursuant to Section 702 of the Foreign Intelligence Surveillance Act 26:15–18 (Mar. 19, 2014) (statement of Robert Litt, General Counsel, ODNI)
- Charlie Savage, *Power Wars* (2015)

Additionally, Plaintiff's contention is based on the principles of Internet communication and the technical necessities of the inspection of Internet communications in transit.

For example, Internet communications in transit are split into packets. Where an eavesdropper is attempting to determine whether the contents of a particular communication in transit on the Internet contain a particular piece of information, the eavesdropper generally must

reassemble the packets constituting the communication and then scan the reassembled communication. Reassembling Internet packets requires the temporary copying (or “caching”) of those packets until all packets needed for the reassembly have arrived.

Additionally, Upstream surveillance involves the retention of communications that contain targeted selectors. To retain a communication in transit, an eavesdropper must copy and reassemble the packets constituting the communication. But because an eavesdropper cannot know in advance which packets in transit are part of a communication containing a targeted selector, the eavesdropper must create a temporary copy of all packets that might be a part of such a communication.

The fact that all or substantially all international Internet text-based communications are subject to Upstream surveillance follows necessarily from the information the government has officially disclosed, and it is corroborated by independent news reports. For Upstream surveillance to serve the purposes the government has said it serves, the NSA must be comprehensively monitoring text-based communications originating or terminating in the United States. This is the only way for the NSA to reliably obtain communications to, from, and about its thousands of targets around the world, because those communications travel along paths in and out of the country that are unpredictable and change over time. Moreover, the structure of the Internet backbone facilitates such comprehensive surveillance. Because international communications are channeled through a small number of Internet chokepoints—and because the NSA’s own documents show that it is conducting Upstream surveillance at many of those chokepoints—it is straightforward for the government to conduct the comprehensive surveillance necessary for Upstream to function as described.

The government’s descriptions of Upstream surveillance make clear that the government

is interested in obtaining, with a high degree of confidence, all international communications to, from, and about its targets. For example, the Privacy and Civil Liberties Oversight Board has described the use of Upstream surveillance to collect “about” communications as “an inevitable byproduct of the government’s efforts to *comprehensively* acquire communications that are sent to or from its targets.” PCLOB Report 10 (emphasis added). And it has said about Upstream surveillance more generally that this method’s “success . . . depends on collection devices that can reliably acquire data packets associated with the proper communications.” *Id.* at 143 (emphasis added).

Because the routing of Internet traffic is unpredictable, however, the government can only “comprehensively” and “reliably” obtain communications to, from, and about its thousands of targets by conducting its surveillance on the different routes by which Internet communications enter and leave the country, and by examining substantially all international communications that travel those various routes.

The path that an Internet communication takes is inherently unpredictable. Internet communications are routed around the globe based on a complex set of rules and relationships that are applied dynamically, based on network conditions at any given moment. These network conditions change frequently, and so one cannot know in advance which path a particular communication will travel. Indeed, even the communications between two individuals in a single conversation (such as an Internet chat or email exchange) may take entirely different routes across the Internet backbone, even though the end-points are the same. For example, if an NSA target is having an Internet chat conversation with someone in the United States, the communications *from* the target will frequently follow a different path than those *to* the target. And, of course, a target’s location may vary over time. For all these reasons, a target’s

communications may traverse one Internet circuit at one moment, but a different one later.

The fact that the NSA had, at last public count, 106,469 surveillance targets (some of which are groups with perhaps hundreds or even thousands of members) only reinforces the conclusion that Upstream surveillance of international text-based communications must be comprehensive. See ODNI, Statistical Transparency Report Regarding the Use of National Security Authorities for Calendar Year 2016 (Apr. 2017), https://icontherecord.tumblr.com/transparency/odni_transparencyreport_cy2016. The communications of so many targets scattered around the world will travel many different routes across the Internet backbone, based on the locations of those various targets, their individual movements over time, and changes in network conditions. These communications will be intermingled with those of the general population in the flow of Internet traffic. An intelligence agency that seeks to reliably intercept communications to, from, or about its targets, could do so only by searching substantially all text-based communications entering or leaving the country.

This allegation is based on the government's official disclosures and on necessary inferences from those disclosures, but it is also corroborated by news accounts. A *New York Times* report from August 2013 states, based on a review of NSA documents and interviews with senior intelligence officials, that "the N.S.A. is temporarily copying and then sifting through the contents of what is apparently most e-mails and other text-based communications that cross the border." Charlie Savage, *N.S.A. Said to Search Content of Messages to and from U.S.*, N.Y. Times, Aug. 8, 2013, <http://nyti.ms/1E1nlsi>. The same *New York Times* report also explains why the NSA's Upstream surveillance is so far-reaching:

"Computer scientists said that it would be difficult to systematically search the contents of the communications without first gathering nearly all cross-border text-based data;

fiber-optic networks work by breaking messages into tiny packets that flow at the speed of light over different pathways to their shared destination, so they would need to be captured and reassembled.”

Id.; see also Charlie Savage, *Power Wars* 207–11 (2015).

Not only does the NSA have an overriding incentive to copy and review substantially all international Internet communications, but the Internet backbone is structured in a way that enables it to do so.

The Internet backbone funnels almost all Internet communications entering and leaving the country through a limited number of chokepoints. The Internet backbone includes a relatively small number of international submarine cables (and a limited number of terrestrial cables) that transport Internet traffic into and out of the United States. Because there are relatively few high-capacity cables carrying international Internet communications, there are correspondingly few chokepoints—*i.e.*, junctions through which all international Internet communications must pass en route to their destinations. By installing its surveillance equipment at the small number of backbone chokepoints, the NSA is able to monitor substantially all text-based communications entering or leaving the United States. And the government has acknowledged that it conducts Upstream surveillance at international links and on the Internet backbone. [*Redacted*], 2011 WL 10945618, at *15; PCLOB Report 36–37.

NSA documents published in the press show that the NSA has installed surveillance equipment at many major chokepoints on the Internet backbone. One of these NSA documents states that the NSA has established interception capabilities on “many of the chokepoints operated by U.S. providers through which international communications enter and leave the United States.” See Plaintiff’s First Amended Complaint ¶ 69. Another shows that just one of

those participating providers has facilitated Upstream surveillance at seven major international chokepoints in the United States. *Id.* ¶ 68. Additional reporting states that the NSA has installed surveillance equipment in at least 17 “internet hubs” operated by another major U.S. telecommunications provider. Julia Angwin et al., *NSA Spying Relies on AT&T’s ‘Extreme Willingness to Help’*, ProPublica, Aug. 15, 2015 (and associated documents).

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows:

The bases for Plaintiff’s contention also include the following: Glenn Greenwald, *No Place to Hide* (2014).

The fact that the NSA had, at last public count, 106,469 surveillance targets (some of which are groups with perhaps hundreds or even thousands of members) only reinforces the conclusion that Upstream surveillance of international text-based communications must be comprehensive. *See* ODNI, Statistical Transparency Report Regarding the Use of National Security Authorities for Calendar Year 2016 (Apr. 2017), https://icontherecord.tumblr.com/transparency/odni_transparencyreport_cy2016; *see generally* ODNI Statistical Transparency Reports Regarding the Use of National Security Authorities.

INTERROGATORY NO. 3:

Please identify each category of Wikimedia international, text-based, Internet communications that Plaintiff contends, for purposes of establishing jurisdiction, is intercepted, copied, and reviewed by the NSA in the course of Upstream surveillance, including but not limited to, user visits to Wikimedia sites; contributions and edits to Wikimedia websites;

Wikimedia discussion forums; Wikimedia discussion pages; e mail sent via Wikimedia among registered users; communications “over wikis” among small or limited groups of users; mailing lists with restricted membership; other use of Wikimedia Projects, websites, and webpages by “community members” to interact with one another; internal log communications; “Community Consultations;” solicitations of user input and preferences; and other communications sent and received by Wikimedia staff in carrying out Wikimedia’s work. *See* Amended Complaint ¶¶ 79, 84, 86, 92, 93, 102.

RESPONSE TO INTERROGATORY NO. 3:

In addition to the General Objections above which are incorporated herein, Plaintiff further objects that this Interrogatory seeks information that exceeds the scope of jurisdictional discovery as defined by Defendants, *see* ECF No. 116 at 4, and as ordered by the Court.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows. As explained in Wikimedia’s First Amended Complaint, Wikimedia contends that Upstream surveillance implicates at least three categories of communications (Am. Compl. ¶ 86): (1) 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. Examples of these communications include, but are not limited to, page views to Wikimedia websites, edits and contributions to Wikimedia websites, emails between registered Wikimedia users and emails on Wikimedia’s mailing lists.

(2) Wikimedia’s internal log communications.

(3) Electronic communications of Wikimedia staff. Examples of these communications include, but are not limited to, Gmail, Google chat, Internet Relay Chat, and Slack. Additionally, Wikimedia staff members use a variety of third-party tools to conduct their work, including, but

not limited to, Google Apps/G Suite, Trello, Sugar, Qualtrics, User Testing and Salesforce.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows:

As stated above, Wikimedia contends that Upstream surveillance implicates at least three categories of communications (Am. Compl. ¶ 86). The first category involves 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. Examples of these communications include, but are not limited to, page views to Wikimedia websites, edits and contributions to Wikimedia websites, private and semi-private "wikis" that only certain users can read or edit, questions, comments, or complaints that community members submit to Wikimedia about the performance and operation of its websites, private deliberations of user-community leaders who help administer the Wikimedia websites, emails between registered Wikimedia users, and emails on Wikimedia's mailing lists.

INTERROGATORY NO. 5:

For each category of Wikimedia international, text-based, Internet communications identified in response to Interrogatory No. 3, above, that Plaintiff contends is intercepted, copied, and reviewed by the NSA in the course of Upstream surveillance, please identify the Internet circuits entering or exiting the United States that have carried that category of communication in the past 24 months. To identify a circuit means to state its location of entry to or exit from the United States, to state its country (or, if unknown, global region(s)) of origin or termination abroad, and to identify the person(s) owning or controlling it.

RESPONSE TO INTERROGATORY NO. 5:

In addition to the General Objections above which are incorporated herein, Plaintiff also objects that this Interrogatory is overbroad and unduly burdensome. Plaintiff further objects that this Interrogatory seeks information that is not reasonably calculated to lead to the discovery of admissible evidence. Plaintiff further objects that this Interrogatory seeks information that is within Defendants' control.

Plaintiff also objects that this Interrogatory is improperly compound in that it contains multiple subparts. Plaintiff additionally objects that these matters may be the subject of expert reports and testimony, as to which Plaintiff will provide discovery at the appropriate time.

Plaintiff therefore specifically reserves the right to supplement and amend its response based on further investigation and discovery.

On the basis of these General and Specific Objections, Plaintiff will not provide a response to this Interrogatory.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows: As Wikimedia exchanges more than one trillion communications each year with users scattered across the global network, its communications are routed across virtually every major circuit carrying public Internet traffic between the United States and the rest of the world.

INTERROGATORY NO. 6:

For each category of Wikimedia international, text-based, Internet communications identified in response to Interrogatory No. 3, above, that Plaintiff contends is intercepted, copied,

and reviewed by the NSA in the course of Upstream surveillance, please identify each foreign country to or from which such Wikimedia communications were sent in the past 24 months.

RESPONSE TO INTERROGATORY NO. 6:

In addition to the General Objections above which are incorporated herein, Plaintiff further objects that this Interrogatory is overbroad, unduly burdensome and seeks information that is not reasonably calculated to lead to the discovery of admissible evidence. Plaintiff also objects that this Interrogatory is improperly compound in that it contains multiple subparts. Plaintiff further objects that this Interrogatory seeks information that exceeds the scope of jurisdictional discovery as defined by Defendants, see ECF No. 116 at 4, and as ordered by the Court.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

(1) Wikimedia communications with its community members. Between April 23, 2017 and December 31, 2017, Wikimedia's U.S. servers received HTTPS requests from, and transmitted HTTPS responses to, users in at least 242 non-U.S. countries, territories and regions. This figure is an estimate that was derived using MaxMind geolocation data to determine the country associated with the client IP of each HTTPS request transmitted to Wikimedia's servers in the United States.

(2) Wikimedia's internal log communications. Every time Wikimedia receives an HTTPS request from a person accessing a Wikimedia Project webpage, it creates a corresponding log entry. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between January 1, 2015 and

December 12, 2017, Wikimedia's office network router located in the United States sent Internet communications to at least approximately 221 non-U.S. countries, territories and regions.

This figure represents Internet outbound communications sent via the following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

This figure includes communications sent through Wikimedia's Virtual Private Network (VPN).

This figure does not account for the significant number of Internet communications by Wikimedia staff and contractors located internationally, who did not communicate using Wikimedia's Virtual Private Network, but who routinely communicate with Wikimedia staff located at the U.S. headquarters. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 80 contractors, located across more than 30 different countries.

The results of these analyses will be produced to Defendants. An anonymized list of Plaintiff's contractors located abroad will also be produced to Defendants.

AMENDED RESPONSE TO INTERROGATORY NO. 6:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement or amend its response as discovery in this case continues, Plaintiff amends its response as follows:

(1) Wikimedia communications with its community members. Between April 23, 2017 and December 31, 2017, Wikimedia's U.S. servers received HTTP/S requests from, and transmitted HTTP/S responses to, users in at least 242 non-U.S. countries, territories and regions. This figure is an estimate that was derived using MaxMind geolocation data to determine the country associated with the client IP of each HTTPS request transmitted to Wikimedia's servers

in the United States.

(2) Wikimedia's internal log communications. Every time Wikimedia receives an HTTP/S request from a person accessing a Wikimedia Project webpage, it creates a corresponding log entry. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted approximately over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between January 1, 2015 and December 12, 2017, Wikimedia's office network router located in the United States logged open Internet connections with at least approximately 221 non-U.S. countries, territories and regions.

This figure represents Internet outbound communications sent via the following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

This figure includes, but is not limited to, certain communications sent through Wikimedia's Virtual Private Network (VPN).

This figure does not account for a significant number of Internet communications by Wikimedia staff and contractors located internationally who routinely communicate with Wikimedia staff and others located in the United States without using Wikimedia's Virtual Private Network. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 140 contractors, located across approximately 45 different countries.

The results of these analyses have been produced to Defendants. *See* WIKI0006146, WIKI0006147, WIKI0006148, WIKI0006149, WIKI0006282, WIKI0006368. An anonymized list of Plaintiff's contractors located abroad has also been produced to Defendants. *See* WIKI0006367.

INTERROGATORY NO. 7:

For each category of Wikimedia international, text-based, Internet communications identified in response to Interrogatory No. 3, above, that Plaintiff contends is intercepted, copied, and reviewed by the NSA in the course of Upstream surveillance, please state the total number of such Wikimedia communications made to and from the United States each year for the years 2008-2017, specifying in each case the manner in which Wikimedia counts the communications in that category (e.g., by site visit, page view, HTTP or HTTPS transmissions, e-mails, other forms of messaging, etc.).

RESPONSE TO INTERROGATORY NO. 7:

In addition to the General Objections above which are incorporated herein, Plaintiff further objects that this Interrogatory is vastly overbroad, unduly burdensome and seeks information that is not reasonably calculated to lead to the discovery of admissible evidence. Plaintiff also objects that this Interrogatory is improperly compound in that it contains multiple subparts. Plaintiff further objects that this Interrogatory seeks information that exceeds the scope of jurisdictional discovery as defined by Defendants, see ECF No. 116 at 4, and as ordered by the Court.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

(1) Wikimedia communications with its community members. Between April 23, 2017 and December 31, 2017, Wikimedia's U.S. servers received over 500 billion HTTPS requests from users outside of the United States. Each HTTPS request generates a corresponding response: thus Wikimedia exchanged over 1 trillion HTTPS requests and responses with its users between April 23, 2017 and December 31, 2017. These figures are estimates that were derived

using MaxMind geolocation data to determine the country associated with the client IP of each HTTPS request transmitted to Wikimedia's servers in the United States.

(2) Wikimedia's internal log communications. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted approximately over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between June 4, 2014 and December 12, 2017, Wikimedia's office network router located in the United States made at least approximately 22,934,372 Internet connections to 223 non-U.S. countries, territories and regions.

This figure is an estimate and was derived using a geolocation database that catalogues the IP addresses associated with each country, territory and region for each log entry obtained from the Wikimedia Foundation's office router.

This figure represents the total number of Internet outbound connections sent via the following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

This figure includes connections sent through Wikimedia's Virtual Private Network (VPN).

This figure does not account for the significant number of Internet communications by Wikimedia staff and contractors located internationally who did not communicate using Wikimedia's Virtual Private Network, but who routinely communicate with Wikimedia staff located at the U.S. headquarters. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 80 contractors, located across more than 30 different countries.

The results of these analyses will be produced to Defendants. An anonymized list of Plaintiff's contractors located abroad will also be produced to Defendants.

AMENDED RESPONSE TO INTERROGATORY NO. 7:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement or amend its response as discovery in this case continues, Plaintiff amends its response as follows:

(1) Wikimedia communications with its community members. Between April 23, 2017 and December 31, 2017, Wikimedia's U.S. servers received approximately over 511 billion HTTP/S requests from users outside of the United States. Each HTTP/S request generates a corresponding response; thus Wikimedia exchanged over 1 trillion HTTP/S requests and responses with its users between April 23, 2017 and December 31, 2017.

These figures are estimates that were derived using MaxMind geolocation data to determine the country associated with the client IP of each HTTP/S request transmitted to Wikimedia's servers in the United States.

(2) Wikimedia's internal log communications. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted approximately over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between June 4, 2014 and December 12, 2017, Wikimedia's office network router located in the United States logged open Internet connections at least approximately 22,934,372 times, with 223 non-U.S. countries, territories and regions.

This figure is an estimate and was derived using a geolocation database that catalogues the IP addresses associated with each country, territory and region for each log entry obtained from the Wikimedia Foundation's office router.

This figure represents the total number of Internet outbound connections sent via the

following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

This figure includes, but is not limited to, connections sent through Wikimedia's Virtual Private Network (VPN).

This figure does not account for a significant number of Internet communications by Wikimedia staff and contractors located internationally who routinely communicate with Wikimedia staff and others located in the United States without using Wikimedia's Virtual Private Network. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 140 contractors, located across approximately 45 different countries.

The results of these analyses have been produced to Defendants. *See* WIKI0006146, WIKI0006147, WIKI0006148, WIKI0006149, WIKI0006282, WIKI0006368. An anonymized list of Plaintiff's contractors located abroad has also been produced to Defendants. *See* WIKI0006367.

INTERROGATORY NO. 8:

For each category of Wikimedia international, text-based, Internet communications identified in response to Interrogatory No. 3, above, that Plaintiff contends is intercepted, copied, and reviewed by the NSA in the course of Upstream surveillance, please state by foreign country the number of such Wikimedia communications made to or from the United States each year for the years 2008-2017, specifying in each case the manner in which Wikimedia counts the communications in that category (e.g., by site visit, page view, HTTP or HTTPS transmissions, e-mails, other forms of messaging, etc.).

RESPONSE TO INTERROGATORY NO. 8:

In addition to the General Objections above which are incorporated herein, Plaintiff

further objects that this Interrogatory is vastly overbroad, unduly burdensome and seeks information that is not reasonably calculated to lead to the discovery of admissible evidence. Plaintiff also objects that this Interrogatory is improperly compound in that it contains multiple subparts. Plaintiff further objects that this Interrogatory seeks information that exceeds the scope of jurisdictional discovery as defined by Defendants. *see* ECF No. 116 at 4, and as ordered by the Court. Plaintiff additionally objects to this Interrogatory as duplicative of other written discovery propounded by Defendants.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

(1) Wikimedia communications with its community members. The number of HTTPS requests that Wikimedia's U.S. servers received from users in each country, territory, or region between April 23, 2017 and December 31, 2017 is attached as Exhibit B and will be included in a forthcoming production to Defendants. Each HTTPS request generates a corresponding response that is not reflected in the figures included in this analysis. These figures are estimates that were derived using MaxMind geolocation data to determine the country associated with the client IP of each HTTPS request transmitted to Wikimedia's servers in the United States.

(2) Wikimedia's internal log communications. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between June 4, 2014 and December 12, 2017, Wikimedia's office network router located in the United States sent at least approximately 22,934,372 Internet connections to at least 223 non-U.S. countries, territories and

regions. A list of the numbers of these communications broken down by country, territory, or region will be produced to Defendants.

These figures are estimates and were derived using a geolocation database that catalogues the IP addresses associated with each country, territory and region for each log entry obtained from the Wikimedia Foundation's office router.

These figures represent the total number of Internet outbound connections sent via the following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

These figures include connections sent through Wikimedia's Virtual Private Network (VPN).

These figures do not account for the significant number of Internet communications by Wikimedia staff and contractors located internationally who did not communicate using Wikimedia's Virtual Private Network, but who routinely communicate with Wikimedia staff located at the U.S. headquarters. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 80 contractors, located across more than 30 different countries.

The results of these analyses will be produced to Defendants. An anonymized list of Plaintiff's staff and contractors located abroad will also be produced to Defendants.

AMENDED RESPONSE TO INTERROGATORY NO. 8:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement or amend its response as discovery in this case continues, Plaintiff amends its response as follows:

(1) Wikimedia communications with its community members. The number of HTTP/S requests that Wikimedia's U.S. servers received from users in each country, territory, or

region between April 23, 2017 and December 31, 2017 is attached as Amended Exhibit B. Each HTTP/S request generates a corresponding response that is not reflected in the figures included in this analysis. These figures are estimates that were derived using MaxMind geolocation data to determine the country associated with the client IP of each HTTP/S request transmitted to Wikimedia's servers in the United States.

(2) Wikimedia's internal log communications. Between April 23, 2017 and December 31, 2017, Wikimedia's servers in Amsterdam transmitted approximately over 970 billion logs to Wikimedia's servers in the United States.

(3) Electronic communications of Wikimedia staff. Between June 4, 2014 and December 12, 2017, Wikimedia's office network router located in the United States logged open Internet connections at least approximately 22,934,372 times with 223 non-U.S. countries, territories and regions. A list of the numbers of these communications broken down by country, territory, or region will be produced to Defendants.

This figure is an estimate and was derived using a geolocation database that catalogues the IP addresses associated with each country, territory and region for each log entry obtained from the Wikimedia Foundation's office router.

This figure represents the total number of Internet outbound connections sent via the following Internet protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), and Internet Control Message Protocol (ICMP).

This figure includes, but is not limited to, connections sent through Wikimedia's Virtual Private Network (VPN).

This figure does not account for a significant number of Internet communications by Wikimedia staff and contractors located internationally who routinely communicate with

Wikimedia staff and others located in the United States without using Wikimedia's Virtual Private Network. Between January 1, 2015 and December 22, 2017, Wikimedia engaged over 140 contractors, located across approximately 45 different countries.

The results of these analyses have been produced to Defendants. *See* WIKI0006146, WIKI0006147, WIKI0006148, WIKI0006149, WIKI0006282, WIKI0006368. An anonymized list of Plaintiff's staff and contractors located abroad has also been produced to Defendants. *See* WIKI0006367.

INTERROGATORY NO. 11:

Please state the basis of Plaintiff's allegations, in paragraphs 61, 85, and 88 of the Amended Complaint, that Wikimedia's alleged "community of volunteers, contributors, and readers consists of individuals in virtually every country on earth" and that Wikimedia "communicate[s] with individuals in virtually every country on earth."

RESPONSE TO INTERROGATORY NO. 11:

In addition to the General Objections above which are incorporated herein, Plaintiff objects that this Interrogatory is overbroad and duplicative of other written discovery propounded by Defendants. Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

Numerous facts support Wikimedia's allegations that its "community of volunteers, contributors, and readers consists of individuals in virtually every country on earth" and that Wikimedia engages in "communications . . . with individuals in virtually every country on earth." As explained in Wikimedia's responses to NSA Interrogatory Nos. 6-8, Wikimedia users from all over the world read and contribute to Wikimedia's Project pages. This analysis is further supported by statistics showing that Wikimedia's Project pages are viewed by millions of

users around the world. Wikimedia publishes current monthly page view statistics by country (*available* at <https://stats.wikimedia.org/wikimedia/squids/SquidReportPageViewsPerCountryOverview.htm>), and maintains an archive with analogous data for past months (*available* at https://stats.wikimedia.org/archive/squid_reports/).

Wikimedia also has dozens of foreign independent but associated entities, including user groups, chapters and thematic organizations. *See* https://meta.wikimedia.org/wiki/Wikimedia_movement_affiliates#chapters.

In the last two years alone, Wikimedia has awarded grants and scholarships to users and programs in dozens of countries. Additionally, Wikimedia projects are currently active in 288 languages, further underscoring Wikimedia's global presence. *See* https://en.wikipedia.org/wiki/List_of_Wikipedias.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 11:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement its response as discovery in this case continues, Plaintiff supplements its response as follows:

Wikimedia also maintains a publicly available repository of data that allows for various analyses of Wikimedia project page views by country (*available* at <https://wikitech.wikimedia.org/wiki/Analytics/AQS/Pageviews>).

Numerous documents in Plaintiff's production support its allegations that its "community of volunteers, contributors, and readers consists of individuals in virtually every country on earth" and that Wikimedia engages in "communications . . . with individuals in virtually every country on earth," including, *inter alia*, Amended Exhibit B: WIKI0006367 (listing international

Wikimedia contractors): WIKI0002407 (listing 288 Wikipedia language editions); WIKI0002416 (listing Wikimedia movement affiliates); WIKI0006369 (listing page views for virtually every country on earth); WIKI0002360, WIKI0002365, WIKI0002367, WIKI0002389, WIKI0002396 (noting countries involved in user grants and scholarships); WIKI0006295 (listing funded grants by country).

ALLEGATIONS REGARDING NSA INTERCEPTION OF WIKIMEDIA'S INTERNATIONAL, TEXT-BASED, INTERNET COMMUNICATIONS

INTERROGATORY NO. 13:

Please identify each of the international Internet “backbone chokepoints,” whether cables, circuits, or other communications facilities, at which Plaintiff contends, in paragraph 66 of the Amended Complaint, the NSA must be conducting Upstream surveillance, stating for each such “backbone chokepoint” the basis of Plaintiff’s contention.

RESPONSE TO INTERROGATORY NO. 13:

In addition to the General Objections above which are incorporated herein, Plaintiff objects that this Interrogatory is improperly compound in that it contains multiple subparts. Plaintiff also objects that this Interrogatory seeks information that is within Defendants’ control. Plaintiff further objects that this Interrogatory is a contention Interrogatory that is premature at this stage in the litigation. Plaintiff therefore specifically reserves the right to supplement and amend its response based on further investigation and discovery.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

An NSA document states that the NSA has established interception capabilities on “many of the chokepoints operated by U.S. providers through which international communications enter and leave the United States.” *See* NSA Staff Processing Form, Subject: SSO’s Support to the

FBI for Implementation of their Cyber FISA Orders.

The “chokepoints” at which the NSA conducts Upstream surveillance have included the “seven access sites” identified in an NSA document, reproduced at paragraph 68 of Plaintiff’s First Amended Complaint (ECF No. 70-1).

Additional reporting after the filing of the Amended Complaint states that the NSA has installed surveillance equipment in at least 17 “internet hubs” operated by another major U.S. telecommunications provider. See Julia Angwin et al., *NSA Spying Relies on AT&T’s ‘Extreme Willingness to Help’*, ProPublica, Aug. 15, 2015 (and associated documents, one of which describes the surveillance of hundreds of circuits at a specific AT&T trans-Pacific cable site); Julia Angwin & Jeff Larson, *New Snowden Documents Reveal Secret Memos Expanding Spying*, ProPublica, June 4, 2015 (and associated documents); Jeff Larson et al., *A Trail of Evidence Leading to AT&T’s Partnership with the NSA*, ProPublica, Aug. 15, 2015 (and associated documents) (describing surveillance on AT&T’s network, including on “OC-192 and 10GE peering circuits”; describing surveillance on Verizon’s network, including at a cable-landing site called BRECKENRIDGE).

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 13:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows:

The bases for Plaintiff’s contention also include the following: Glenn Greenwald, *No Place to Hide* (2014).

INTERROGATORY NO. 15:

Please state the basis of Plaintiff’s contentions regarding the manner in which the alleged

copying, filtering, and content-review processes referred to in paragraph 49 of the Amended Complaint are carried out.

RESPONSE TO INTERROGATORY NO. 15:

In addition to the General Objections above which are incorporated herein, Plaintiff objects that this Interrogatory is a contention Interrogatory that is premature at this stage in the litigation. Plaintiff additionally objects that these matters may be the subject of expert reports and testimony, as to which Plaintiff will provide discovery at the appropriate time.

Plaintiff therefore specifically reserves the right to supplement and amend its response based on further investigation and discovery. Plaintiff also objects that this Interrogatory is overbroad and duplicative of other written discovery propounded by Defendants.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

The bases of Plaintiff's contentions are the principles of Internet communication and the technical necessities of the inspection of Internet communications in transit.

For example, Internet communications in transit are split into packets. Where an eavesdropper is attempting to determine whether the contents of a particular communication in transit on the Internet contain a particular piece of information, the eavesdropper generally must reassemble the packets constituting the communication and then scan the reassembled communication. Reassembling Internet packets requires the temporary copying (or "caching") of those packets until all packets needed for the reassembly have arrived.

Additionally, Upstream surveillance involves the retention of communications that contain targeted selectors. To retain a communication in transit, an eavesdropper must copy and reassemble the packets constituting the communication. But because an eavesdropper cannot

know in advance which packets in transit are part of a communication containing a targeted selector, the eavesdropper must create a temporary copy of all packets that might be a part of such a communication.

In addition, a *New York Times* report from August 2013 states, based on a review of NSA documents and interviews with senior intelligence officials, that “the N.S.A. is temporarily copying and then sifting through the contents of what is apparently most e-mails and other text-based communications that cross the border.” Charlie Savage, *N.S.A Said to Search Content of Messages to and from U.S.*, N.Y. Times, Aug. 8, 2013; see also Charlie Savage, *Power Wars* 207–11 (2015).

Other bases of Plaintiff’s contentions include:

- The PCLOB Report, including pages 7–10, 12–13, 22, 30–41 & n.157, 79, 111 n.476, 120–22, 125, 143, and official government sources concerning Upstream surveillance cited therein.
 - [Redacted], No. [Redacted], 2011 WL 10945618 (FISC Oct. 3, 2011)
 - 50 U.S.C. §§ 1801, 1881a.
 - David S. Kris & J. Douglas Wilson, *National Security Investigations and Prosecutions* § 17.5 (July 2015)
 - Julia Angwin et al., *NSA Spying Relies on AT&T’s ‘Extreme Willingness to Help’*, ProPublica, Aug. 15, 2015 (and associated documents)
 - Julia Angwin & Jeff Larson, *New Snowden Documents Reveal Secret Memos Expanding Spying*, ProPublica, June 4, 2015 (and associated documents)
 - Jeff Larson et al., *A Trail of Evidence Leading to AT&T’s Partnership with the NSA*, ProPublica, Aug. 15, 2015 (and associated documents)

- PCLOB, Public Hearing Regarding the Surveillance Program Operated Pursuant to Section 702 of the Foreign Intelligence Surveillance Act 26:15–18 (Mar. 19, 2014) (statement of Robert Litt, General Counsel, ODNI)

- Charlie Savage, *Power Wars* (2015)

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 15:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows:

The bases for Plaintiff's contention also include the following: Glenn Greenwald, *No Place to Hide* (2014).

INTERROGATORY NO. 21:

To the extent not already stated or identified in response to Interrogatory Nos. 13-20, above, or in response to Defendant United States Department of Justice's First Set of Interrogatories, Interrogatory Nos. 1-6, please state the basis of Plaintiff's contention that the NSA is intercepting, copying, and reviewing at least some of its communications.

RESPONSE TO INTERROGATORY NO. 21:

In addition to the General Objections above which are incorporated herein, Plaintiff objects that this Interrogatory is a contention Interrogatory that is premature at this stage in the litigation. Plaintiff also objects that this Interrogatory seeks information that is the subject of expert reports and testimony, as to which Plaintiff will provide discovery at the appropriate time. Plaintiff therefore specifically reserves the right to supplement and amend its response based on further investigation and discovery. Plaintiff also objects that this Interrogatory is overbroad and duplicative of other written discovery propounded by Defendants.

Subject to and without waiving any of these General or Specific Objections, Plaintiff responds as follows.

Plaintiff's contention is based on the volume and distribution of its communications, basic principles governing the routing and transmission of Internet communications, and basic principles governing how surveillance on a packet-switched network operates.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 21:

Subject to and without waiving any of these General or Specific Objections and reserving the right to further supplement as discovery in this case continues, Plaintiff supplements its response as follows:

The bases for Plaintiff's contention also include the following:

- Exhibits A–F to Plaintiff's First Set of Requests for Admission
- WIKI0008024 (slide deck from which Exhibit B to Plaintiff's First Set of Requests for Admission was excerpted, entitled "XKEYSCORE for Counter-CNE")
- Glenn Greenwald, *Xkeyscore: NSA Tool Collects 'Nearly Everything a User Does on the Internet'*, *The Guardian*, July 31, 2013 (and associated documents).
- Barton Gellman, Julie Tate, & Ashkan Soltani, *In NSA-intercepted Data, Those Not Targeted Far Outnumber the Foreigners Who Are*, *Wash. Post*, July 5, 2014.

Dated: March 23, 2018

/s/Ashley Gorski

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