



March 24, 2017

Dimple Shah
Acting Assistant Secretary for International Affairs
U.S. Department of Homeland Security
3801 Nebraska Ave. NW
Washington, D.C. 20016

Mary B. McCord
Acting Assistant Attorney General for National Security
U.S. Department of Justice
950 Pennsylvania Ave. NW
Washington, DC 20530

Daniel Wunderli
Supervisory Special Agent
Federal Bureau of Investigation
J. Edgar Hoover Building
Foreign Investment Unit
935 Pennsylvania Ave., NW
Room 4947
Washington, DC 20535

Mitchell Komaroff
Director Implementation & Acquisition Integration
6000 Defense Pentagon, Room 3D1048
Washington, DC 20301-6000

James DeBose,
Associate General Counsel
Defense Information Systems Agency
6910 Cooper Avenue
Fort Meade, MD 20755

Re: Quintillion Submarine Cable System

This Letter of Assurances (“LOA”) outlines the commitments made by Quintillion Subsea Operations, LLC (“Quintillion”) to “the Agencies,” meaning the U.S. Department of Homeland Security (“DHS”) and the U.S. Department of Justice, including the National Security Division (“NSD”) and the Federal Bureau of Investigation (“FBI”), and the U.S. Department of Defense (DOD) in order to address national security, law enforcement, and public safety concerns of the

Agencies with regard to Quintillion’s March 24, 2016, application to the Federal Communications Commission (“FCC”) requesting authority to construct, land, and operate a fiber optic submarine cable system linking points within Alaska (“Quintillion Cable System”).¹ The Quintillion Cable System currently lands only in points within the United States. The Quintillion Cable System may be augmented and become part of a larger submarine cable system that the Company may build and land, in later stages, in foreign points.

Quintillion has agreed to provide this LOA to the Agencies to address the concerns the Agencies represent they have with the Quintillion Cable System, and Quintillion understands that the Agencies will petition the FCC to condition the requested authorization on compliance with this LOA. For purposes of this LOA:

- A. “Domestic Communications” means: (a) Wire Communications or Electronic Communications (whether stored or not) from one U.S. location to another U.S. location; and (b) the U.S. portion of a Wire Communication or Electronic Communication (whether stored or not) that originates or terminates in the United States.
- B. “Domestic Communications Infrastructure” (“DCI”) means: (a) any portion of the Quintillion Cable System that physically is located in the United States, up to the submarine line terminating equipment, including (if any) transmission, switching, bridging, and routing equipment, and any associated software (with the exception of commercial-off-the-shelf (“COTS”) software used for common business functions, *e.g.*, MS Office) used by or on behalf of Quintillion for the Quintillion Cable System to provide, process, direct, control, supervise, or manage Domestic Communications, and (b) Network Operations Center (“NOC”) facilities that may be used to control the Quintillion Cable System.
- C. “Electronic Communication” has the meaning given to it in 18 U.S.C. § 2510(12).
- D. “Managed Network Service Provider” means any third party using an end-to-end or managed-services platform to provide any of the following functions for DCI: operations and management support; corrective and preventative maintenance, including intrusive testing, network and service monitoring, network performance, optimization, and reporting; network audits, provisioning, and development; and the implementation of changes and upgrades.
- E. “Offshore” or “Offshoring” means using entities or personnel outside the territorial limits of the United States, regardless of whether those entities or personnel are employees of Quintillion or third parties.
- F. “Outsource” or “Outsourcing” means supporting the services and operational needs of Quintillion through the use of contractors or third parties.

¹ SCL-LIC-20160325-00009 (Application for a License to Construct, Land and Operate a Private Fiber Optic Cable System Linking Points Within Alaska, and Request for Streamlined Treatment); (TT # 16-25).

- G. “Principal Equipment” means the primary electronic components of the Quintillion Cable System, which includes the DCI and Wet Infrastructure. Principal Equipment includes: network element servers; routers; switches; repeaters; submarine line terminal equipment (“SLTE”); system supervisory equipment (“SSE”); signal modulators and amplifiers; power feed equipment (“PFE”); tilt and shape equalizer units (“TEQ/SEQ”); optical distribution frames (“ODF”); branching units (“BU”); synchronous optical network (“SONET”), synchronous digital hierarchy (“SDH”), wave division multiplexing (“WDM”), dense wave division multiplexing (“DWDM”), coarse wave division multiplexing (“CWDM”), or optical carrier network (“OCx”) equipment, as applicable; and any non-embedded software necessary for the proper monitoring, administration, and provisioning of the Quintillion Cable System (with the exception of COTS software used for common business functions, *e.g.*, MS Office).
- H. “Wet Infrastructure” means hardware components installed and residing on the undersea portion of the Quintillion Cable System, including fiber optic cables, repeaters, branching units, and routers (if any). Wet Infrastructure includes all the components used to define the topology of the undersea portion of the Quintillion Cable System.
- I. “Wire Communication” has the meaning given it in 18 U.S.C. § 2510(1).

Upon grant of the requested FCC authority, Quintillion undertakes to comply with the following commitments:

1. Security Point of Contact

Within sixty (60) calendar days of the execution of this LOA, Quintillion shall nominate a Security Point of Contact (“POC”) for purposes of this LOA, as well as at least one alternate POC in the event the primary POC cannot be reached. The nominated POCs shall be U.S. citizens and shall reside in the United States. The nominated POCs shall be subject to the Agencies’ review and non-objection, and they may be subject to a background check at the sole discretion of the Agencies. The POC, or an alternate, shall be available twenty-four (24) hours per day, seven (7) days per week regarding any national security, law enforcement, or public safety concerns that may be raised by the Agencies with respect to the Quintillion Cable System. The POCs shall be responsible for receiving and promptly effectuating any inquiries or requests for information from the Agencies and for otherwise ensuring compliance with obligations set forth in this LOA. Quintillion shall notify the Agencies of any proposed change to a POC at least fourteen (14) calendar days in advance of such change. Any subsequently proposed POC shall be subject to the Agencies’ review and non-objection and may be subject to a background check at the sole discretion of the Agencies.

2. Initial Principal Equipment and Managed Network Service Providers List

Within sixty (60) calendar days of the execution of this LOA, Quintillion shall provide to the Agencies an updated list of all Principal Equipment and Managed Network Service Providers, including entities that perform any maintenance, repair, or replacement of the

DCI that could result in any material modification to the Principal Equipment. For Managed Network Service Provider(s), this list will identify the manner/type of service offered, and, for Principal Equipment, this list will include available information identifying: each item's manufacturer and the model and/or version number of any hardware; any vendors, contractors, or subcontractors involved in providing, installing, operating, managing, or maintaining the Principal Equipment; and a description of each Principal Equipment item and the functions supported.

3. Material Modifications to Existing Principal Equipment

Quintillion shall provide the Agencies at least fourteen (14) calendar days' advance notice prior to performing any maintenance, repair, or replacement that would result in any material modification to existing Principal Equipment for the Quintillion Cable System. Quintillion need not comply with the advance notice requirement for any maintenance, repair, or replacement that is undertaken in response to an unforeseen or uncontrollable event and that is necessary to ensure the continued operability of the Quintillion Cable System; however, in such circumstances, Quintillion shall provide advance notice to the Agencies of the material modification, if practicable, and, if impracticable, shall notify the Agencies within fourteen (14) calendar days after the material modification of the Principal Equipment. Upon request by the Agencies, Quintillion agrees to meet and confer with the Agencies and to consider any concerns the Agencies may raise about materials submitted pursuant to this provision.

4. Changes to Vendors, Contractors, or Subcontractors for Principal Equipment, or Managed Network Service Providers

Quintillion shall notify the Agencies at least forty-five (45) calendar days: (a) before using any Managed Network Service Provider or any vendor, contractor, or subcontractor involved in providing, installing, operating, managing, or maintaining the Principal Equipment not identified on the Principal Equipment and Managed Network Service Providers list most recently provided to the Agencies or (b) before changing the service offerings/support from a previously-listed vendor, contractor, subcontractor, or Managed Network Service Provider (*i.e.*, where a previously-listed provider will be offering support in a previously unidentified way). In response to an unforeseen or uncontrollable event, the need for prompt action to ensure the continued operability of the Quintillion Cable System may necessitate the use of a provider, vendor, contractor, or subcontractor not previously noticed by Quintillion and reviewed by the Agencies ("Emergency Provider"). In that event, Quintillion need not comply with the advance notice requirement above for the use of such Emergency Provider before engaging maintenance, repair, or replacement to respond to the event, but Quintillion shall notify the Agencies within fourteen (14) calendar days after commencing use of the Emergency Provider. Upon request by the Agencies, Quintillion agrees to meet and confer with the Agencies and to consider any concerns the Agencies may raise about any notification submitted pursuant to this provision. If the Agencies object to an action for which Quintillion provides notice under this provision within thirty (30) calendar days after such notice is given, Quintillion shall not implement or, in the case of the use of an Emergency

Provider, shall not continue (subject to a reasonable transition period) that notified action. Where there is no Agency objection within the thirty (30) calendar day period, the notified action shall be deemed approved.

5. Outsourcing and Offshoring

Quintillion agrees to provide the Agencies with forty-five (45) calendar days' advance notice of any proposal to outsource and/or offshore any Quintillion Cable System operations or services. Upon request by the Agencies, Quintillion agrees to meet and confer with the Agencies and to consider any concerns the Agencies may raise about any notification submitted pursuant to this provision. If the Agencies object to an action proposed under this provision within thirty (30) calendar days after such notice is given, Quintillion shall not implement the proposed action. Where there is no Agency objection within such thirty (30) calendar day period, the notified action shall be deemed approved.

6. Visitation

Quintillion shall take appropriate measures to develop visitation policies regarding visits to the DCI by foreign persons, other than employees of Quintillion, and shall provide the Agencies copies of the policies developed.

7. Annual Report

On or before each anniversary of the date of execution of this LOA, Quintillion shall submit to the Agencies a report assessing Quintillion's compliance with the terms of this LOA for the preceding year. The report shall include the following information:

- (a) An updated Principal Equipment and Managed Network Service Providers list, containing all information described in paragraph 2 of this LOA and identifying any material modifications since the list was most recently provided to the Agencies;
- (b) The names and contact information of the then-current POCs;
- (c) A copy of the then-current policies, plans, and procedures adopted to comply with this LOA, and a summary of any changes adopted or implemented during the reporting period and the reasons for any such change;
- (d) A summary of any known acts of noncompliance with the terms of this LOA that occurred during the reporting period, whether inadvertent or intentional, with a discussion of what steps have been or will be taken to prevent such acts from occurring in the future;
- (e) A summary of any events that occurred during the reporting period that will or reasonably could be expected to impact the effectiveness of or compliance with this LOA;

- (f) A detailed network description and map reporting any changes to the Quintillion Cable System's physical and logical topology during the reporting period, including the addition of new NOCs or cable landing stations; and
- (g) Copies of Quintillion's ownership, equity, and voting interests charts as of the report date.

8. Change in Control

If Quintillion learns of any information that reasonably indicates that any single foreign entity or individual, other than those already identified in connection with the pending FCC application(s), has or likely will obtain an ownership interest, whether direct or indirect, in Quintillion or the Quintillion Cable System above ten (10) percent, or if any foreign entity or individual, singly or in combination with other foreign entities or individuals, has or likely otherwise will gain either: (i) control, as determined in accordance with 47 C.F.R. § 63.09(b); or (ii) *de facto* or *de jure* control of Quintillion, then Quintillion shall provide notice in writing to the Agencies within fourteen (14) calendar days of learning such information. Notice under this Section shall, at a minimum:

- (a) Identify the entity or individual(s) acquiring control (specifying the name, addresses, and telephone numbers of the entity or individual(s));
- (b) Identify the beneficial owners of the increased or prospective increased interest in Quintillion or the Quintillion Cable System by the entity or individual(s) (specifying the name, addresses, and telephone numbers of each beneficial owner); and
- (c) Quantify the amount of ownership interest that the entity or individual(s) has or likely will obtain in Quintillion or the Quintillion Cable System and, if applicable, the basis for their prospective control of Quintillion or the Quintillion Cable System.

9. Joint Ventures

Quintillion shall provide the Agencies thirty (30) calendar days' advance notice before entering into a joint venture related to the provisioning or offering of Domestic Communications or that relies upon DCI, and, with respect thereto, shall ensure that any joint venture partner entity will fully comply with the terms of this LOA.

10. Change in Services or Cable Operations

Quintillion agrees that it will notify the Agencies in writing at least thirty (30) calendar days prior to implementing any significant changes to its provision of communications services or the operations of the Quintillion Cable System such that the material

representations made in the pending FCC Application(s) and associated materials are no longer materially accurate, true, and complete.

11. The Agencies' Consultation and Visitation

Quintillion agrees to meet and confer with the Agencies and to address any concerns the Agencies may raise about materials submitted pursuant to this LOA.

Quintillion agrees to negotiate in good faith to resolve any national security, law enforcement, or public safety concerns the Agencies may raise with respect to any matters set forth in this LOA.

Quintillion agrees that the Agencies, and such other U.S. Government agency representatives as the Agencies may designate, may conduct on-site visits regarding the implementation of this LOA's terms, may access cable landing stations, NOC(s), or other facilities under Quintillion's control, and may inspect relevant books, records, equipment, servers, and facilities. During such visits, Quintillion shall cooperate with the Agencies' requests to make information, facilities, and personnel available, and Quintillion will permit the Agencies to conduct confidential interviews of relevant employees or contractors. The Agencies will provide Quintillion with at least fourteen (14) calendar days' advance notice, but, notwithstanding the foregoing, in extraordinary circumstances, Quintillion shall afford the Agencies access during normal business hours with or without advance notice.

12. Notices

All communications or other notices relating to this LOA may be made in any manner and form discussed herein, and shall be deemed given:

- (a) if by e-mail, as of the electronic time stamp in the Agencies' e-mail account(s);
- (b) if by documented overnight courier service, on the date delivered; and
- (c) if by mail, ten (10) business days after being mailed by registered or certified U.S. mail, postage prepaid.

Notices in relation to this LOA shall be sent to the following, or to individuals notified in the future as appropriate points of contact pursuant to the requirements of this LOA:

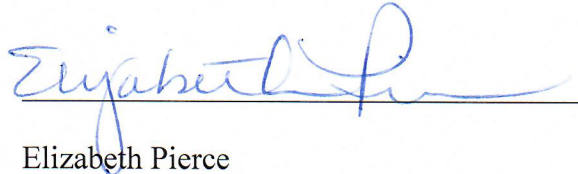
- (d) for DHS:
 - (1) Assistant Secretary for Policy, U.S. Department of Homeland Security, 3801 Nebraska Avenue NW, Washington, D.C. 20016
 - (2) By e-mail to IP-FCC@hq.dhs.gov;
- (e) for NSD:

- (1) Assistant Attorney General for National Security, United States Department of Justice, Attn: Director, Foreign Investment Review Staff, 600 E St. NW, 10th Floor, Washington, DC 20004; telecom@usdoj.gov; and
 - (2) Richard Sofield (at Richard.sofield2@usdoj.gov) and Kristin Taylor (Kristin.taylor@usdoj.gov);
- (f) For FBI:
- (1) Supervisory Special Agent Daniel Wunderli, J. Edgar Hoover Building, Foreign Investment Unit, 935 Pennsylvania Avenue, NW, Room 4047, Washington, DC 20535; Daniel.wunderli@ic.fbi.gov; and
- (g) For DOD:
- Mitchell Komaroff, Director Implementation & Acquisition Integration, 6000 Defense Pentagon, Room 3D1048, Washington, DC 20301-6000
mitchell.komaroff.civ@mail.mil
- James DeBose, Associate General Counsel, Defense Information Systems Agency 6910 Cooper Avenue, Fort Meade, MD 20755, Debose, James W CIV DISA GC (US); james.w.debose.civ@mail.mil; and
- (h) For Quintillion:
- (1) Elizabeth Pierce
Chief Executive Officer
Quintillion Subsea Operations, LLC
201 East 56th Avenue
Suite 300
Anchorage, AK 99518
(907) 440-4511

This LOA shall inure to the benefit of, and shall be binding upon, Quintillion and its successors, assigns, subsidiaries, and affiliates. Quintillion agrees that, in the event the commitments set forth in this letter are breached, in addition to any other remedy available at law or equity, DHS may request that the FCC modify, condition, revoke, cancel, terminate, or render null and void any relevant license, permit, or other authorization granted by the FCC to Quintillion or any successors-in-interest.

Quintillion understands that, promptly upon execution of this letter by an authorized representative or attorney for Quintillion, the Agencies shall notify the FCC that they have no objection to the FCC's grant of the pending application.

For and on behalf of Quintillion Subsea Operations,
LLC



Elizabeth Pierce
Chief Executive Officer
Quintillion Subsea Operations, LLC

1-800-673-4394
201 East 56th Avenue, Suite 300
Anchorage, Alaska 99518
www.Qexpressnet.com