April 22, 2020

Docket No. BIS 2020-0001; RIN 0694-ZA02

PUBLIC VERSION

SUBMITTED VIA REGULATIONS.GOV

Mr. Richard E. Ashooh
Assistant Secretary for Export Administration
Bureau of Industry and Security
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Subject: Comments of Hughes Network Systems, LLC Regarding Future Extensions of Temporary General License ("TGL"), 85 Fed. Reg. 14428, March 12, 2020

Dear Director:

Hughes Network Systems, LLC ("Hughes" or the "Company") appreciates the opportunity to provide input on the questions posed by the Bureau of Industry and Security ("BIS") in the above-referenced docket and hereby submits its comments regarding future extensions of the Temporary General License ("TGL") as applicable to Huawei Technologies Co., Ltd. and 114 of its non-U.S. affiliates (collectively, "Huawei") on the Entity List, Supplement No. 4 to Part 744 of the Export Administration Regulations ("EAR"), 15 C.F.R. Part 744.

I. Introduction

Hughes, a subsidiary of EchoStar Corporation (NASDAQ: SATS), is the global leader in broadband satellite networks and services. Hughes provides the HughesNet® internet service to approximately 1.4 million customers across the Americas. Hughes also designs, provides and installs gateway and terminal equipment to customers for other satellite systems, using Hughes' JUPITER™ System, the world's most widely deployed High-Throughput Satellite (HTS) platform. Leading service providers operate JUPITER System networks over more than 40 satellites, delivering a wide range of broadband enterprise, mobility and cellular backhaul applications. In addition, Hughes designs, develops, constructs and provides telecommunication networks comprising satellite ground segment systems and terminals to mobile system operators and enterprise customers. To date, Hughes has shipped more than 7 million terminals of all types to customers in over 100 countries, representing approximately 50 percent market share, and its technology is powering broadband services to aircraft around the world.

II. Hughes' General Comments

Hughes has an interest in this proceeding because it and the telecommunications industry could be negatively affected by a decision to decline future extensions of the TGL. Specifically, in the absence of the TGL, Hughes may be prevented from providing ongoing technical support to existing customers that use Hughes-supplied satellite ground network equipment and Huawei-

supplied equipment in their non-U.S. telecommunications networks. In addition, Hughes' ability to compete for future business outside of the United States may be adversely impacted if Hughes is restricted in interacting with Huawei in connection with architecting, supplying, installing, commissioning, testing, maintaining, repairing and providing warranty or technical support for Hughes satellite ground network systems that will be connected to Huawei-supplied equipment. The current state of the TGL also creates significant uncertainty which is exacerbated by the unprecedented global crisis surrounding the COVID-19 pandemic. During this time, there is much need for predictability in regulatory frameworks impacting U.S. companies and their ability to continue supporting existing customers and the provision of connectivity.

For the reasons set forth in this Section II and below, Hughes makes the following recommendations ("Recommendations") to BIS in respect of the TGL and the Entity List as applicable to Huawei:

1) continue to extend the current TGL, as amended, through at least December 31, 2022, including authorizing "engagement in transactions . . . necessary to maintain and support existing and currently fully operational networks and equipment, including software updates and patches . . . ." *See* Section (c)(1) of Supplement No. 7 to Part 744 of the EAR ("EAR Part 744 Supplement No. 7");

2) allow such maintenance and support for existing and fully operational networks and equipment to continue pursuant to contract amendments, renewals or extensions entered into after May 16, 2019 by adding the following new text to section (c)(1) of EAR Part 744 Supplement No. 7 after "May 16, 2019" (and making other necessary conforming amendments throughout the TGL for consistency): "and amendments to or extensions or renewals of contracts entered into on or before May 16, 2019, for purposes of continuing warranty, maintenance or technical support";

3) create a new authorized transaction (4) under section (c) of EAR Part 744 Supplement No. 7 as follows:

> "(4) *Releases of certain technology in connection with non-U.S. telecommunications networks*: BIS authorizes engagement in transactions, subject to other provisions of the EAR, involving the release of Software classified under ECCNs 5D991, 5D992 and EAR99 and Technology classified under ECCNs 5E991, 5E992 and EAR99 as necessary for the supply, installation, commissioning, testing, operation, repair, maintenance and warranty or technical support, including software updates and patches, of non-U.S. telecommunications networks being procured or operated by 'third parties' for use outside of the United States, which may incorporate items subject to control under the EAR that are connected to Huawei equipment.";

4) create a new authorized transaction (5) under section (c) of EAR Part 744 Supplement No. 7 as follows: "(5) The authority of NLR and the use of License Exception TSU may be used for transactions with Huawei after May 16, 2019."; and

5) or as an alternative to recommendation #4, amend the License Requirement applicable to each of the Huawei entities listed on the Entity List as follows: "Notwithstanding the licensing requirement, the authority of NLR and the use of License Exception TSU may be used."

III. Hughes' Specific Responses to BIS's Questions

1. What would be the impact on your company or organization if the temporary general license is not extended?

Given the breadth of the prohibitions associated with companies on the Entity List, Hughes would expect to incur significant administrative burden and cost in a variety of situations if the TGL is not extended. In addition, the economic and operational impacts of Hughes' inability to continue providing warranty support may adversely impact Hughes' ability to retain business with its customers because Hughes' customers would likely need to either replace the Hughes-supplied network equipment or the Huawei-supplied equipment (the impact of which is discussed in the response to Question #2).

Hughes currently provides warranty and technical support to two non-U.S. customers utilizing Huawei-supplied core network equipment in their existing, operational ground-based communications systems, one located in [redacted] and the other in [redacted]. Hughes is under contract to provide warranty support for these communications systems through at least the end of [redacted] and [redacted], respectively. Hughes' warranty support obligations include ongoing technical support, maintenance, repair, and software updates and support for continued nominal operation of the system (including Huawei equipment) plus troubleshooting and fault resolution.

In the event of a system issue, Hughes is responsible for troubleshooting, identifying, and resolving anomalies, defects, or problems that may relate to its and Huawei's equipment. To resolve an issue, Hughes would need to engage one or more of Huawei's regional affiliates for support associated with the Huawei-supplied core network. It is reasonably possible that in this connection, Hughes may need to release EAR-controlled Technology (as limited in scope as reasonable under the circumstances) in order to isolate the root cause of the anomaly and enable Hughes or Huawei to resolve it, as appropriate.

If the TGL is not extended and Huawei remains on the Entity List, Hughes may be unable to provide warranty support, thereby compromising the integrity of both of its customers' systems. In the best case, the warranty support work would become much more costly and administratively burdensome because Hughes would be required to conduct an export licensing analysis prior to any discussions or information exchanges with Huawei. Compliance personnel may also need to be assigned to monitor each and every interaction with Huawei, including regular status meetings, to ensure there are no unauthorized releases of controlled Technology. Emergency meetings would

be virtually impossible because compliance personnel would need to be readily accessible and able to monitor and oversee each and every meeting.

In the worst case, if release of controlled Technology was required to resolve a system issue, the inability to provide such Technology could lead to a scenario where a single critical fault results in communications services not being available to governmental users, first responders, or communities already suffering from limited or no telecommunications services. Such a result would be even more disastrous where the users are government and essential workforce personnel responding to the ongoing COVID-19 crisis.

2. **Given the TGL was implemented to prevent the interruption of existing network communication systems and equipment, and allow time for companies and persons to shift to other sources of equipment, software and technology (i.e., those not produced by Huawei or one of its listed affiliates), what would be required for your organization or industry to achieve such an end-state?**

To achieve such an end-state, an alternative core network supplier would need to be identified and sourced and design changes would need to be developed, deployed and tested. The design modifications would need to support interoperability and functionality with Hughes-supplied satellite communications network equipment, meet delivery schedules, budgetary, quality and integration requirements, and personnel would need to be trained on the new system accordingly. These efforts would result in potential network disruption for Hughes' customers and millions of dollars in added costs to Hughes and its customers.

For your industry or organization, how long would it take until the authorization(s) in the temporary general license would no longer be required?

Replacement of Huawei-supplied core network equipment would require a minimum of [redacted] (and possibly longer).

What are costs associated with this shift and are there issues where the prohibited equipment, software and technology are prevalent and alternative solutions may not be available?

Depending on complexity, maturity, scope and scale of the particular project, Hughes currently estimates cost impacts to be upwards of [redacted]. However, based on market trends, current availability of comparable core network technology, and potential impact of COVID-19, costs exceeding [redacted] would not be unexpected.

Are there specific use cases where cessation of use is not feasible?

Existing, fully operational non-U.S.-based telecommunications networks using Huawei-supplied equipment currently support a wide range of users, including government personnel, first responders, and communities that have limited or non-existent communications capabilities.

Cessation of use could lead to significant disruptions of network operations and service outages for critical users of these networks, including essential workers that require continued network access to effectively perform services during a time of global crisis. Cessation of use could also create liability and unnecessarily expose Hughes to significant adverse financial, legal, and reputational consequences.

3. If the TGL is extended, what potential revisions should BIS consider to enhance effectiveness for both covered transactions and transactions outside of the scope of the temporary general license?

BIS should consider revising the TGL and the Entity List by adopting the Recommendations in Section II, incorporated herein by reference. These Recommendations would be applicable primarily to transactions involving releases of technology that are not critical to U.S. national security or in connection with the provision of U.S.-based technical support to non-U.S. telecommunications networks using Huawei-supplied equipment that interoperates with U.S.-origin equipment.

In respect of Recommendations #4 and #5, BIS should make available the authority of NLR and License Exception Technology and Software Unrestricted ("TSU"), 15 C.F.R. § 740.13, for transactions involving Huawei.[1] License Exception TSU authorizes the export and reexport of certain types of technology, including operation technology and software; sales technology and software; software updates (bug fixes); and "mass market" software subject to the General Software Note. "Operation technology and software" is defined as the "minimum technology necessary for the installation, operation, maintenance (checking), or repair of those commodities or software that are lawfully exported or reexported under a license, a License Exception, or NLR." 15 C.F.R. § 740.13(a). License Exception TSU includes the release of "use technology only to the extent required to ensure safe and efficient use of the commodity or software," and does not include development or production technology. *Id*.

License Exception TSU is directly relevant to the continued operation of Hughes' existing networks and would help define the types of activities that are authorized. For example, Hughes would be able to rely on TSU to release operation technology and software to Huawei to identify and resolve system anomalies, defects, or problems relating to the core network. The release of such technology would be limited in scope and purpose, and only to the extent needed to identify the root cause of the anomaly and/or allow Huawei to resolve the anomaly with the Huawei core network.

Moreover, the Recommendations are consistent with U.S. national security and foreign policy interests. Huawei was added to the Entity List following the determination there is reasonable cause to believe that Huawei has been involved in activities contrary to the national security or

[1] License Exception TSU is contemplated, at least in part, in section (c)(1) of the EAR Part 744 Supplement No. 7 through the authorization of the release of software to address bug fixes, security vulnerability patches, and other changes to existing versions of the software.

foreign policy interests of the United States. *Addition of Entities to the Entity List*, 84 Fed. Reg. 22961 (May 21, 2019). However, risks to U.S. national security and foreign policy interests in connection with transactions involving non-U.S. networks using Huawei-supplied technology are greatly mitigated because they do not: 1) implicate information and communications technology and services ("ICTS") in the United States; 2) involve critical infrastructure or the digital economy in the United States; or 3) cause an unacceptable risk to national security or to the security and safety of U.S. persons. See Executive Order 13873, *Securing the Information and Communications Technology and Services Supply Chain*, 84 Fed. Reg. 22689 (May 15, 2019). Further, to the extent U.S. national security interests are implicated because such networks may contain U.S.-origin technology, there is little to no harm that would result if the Recommendations are adopted given their limited scope and purpose.

Accordingly, the Recommendations would provide much needed clarity on the intended scope of transactions covered by the Entity List restrictions, and reduce the unintended application of those restrictions to other types of low-risk transactions without jeopardizing U.S. national security or foreign policy interests.

4. What potential alternatives to either extending the TGL or allowing it to expire will facilitate compliance with the supplemental requirements of the Entity List entries for Huawei and its listed affiliates while reducing complexity for implementation purposes?

The Recommendations and our response to Question #3 are equally applicable to Question #4. For transactions outside the scope of the Recommendations, an export license would still be required prior to releasing U.S.-origin Technology to Huawei. The Recommendations would also provide clarity to U.S. companies, particularly in the case of the continued operation of non-U.S. based networks using Huawei-supplied technology, and reduce complexity of implementation as BIS would not be overburdened with unnecessary license applications for transactions that may otherwise be authorized.

5. There may be further costs associated with the current extension or non-extension of the current TGL (e.g., lost business opportunities)—what are they and what additional guidance should BIS consider?

U.S. companies' ability to navigate technical discussions and exchanges with Huawei regarding fully operational networks remains unclear. As a result, Hughes, and other U.S. companies, are potentially overburdening BIS with requests for export licenses and/or guidance for transactions that involve low-level technology (*i.e.*, EAR99), sales technology, or in the case of existing networks, are limited to operation technology and software. Reservations as to whether the TGL will continue to be extended creates cost uncertainty and complexity for Hughes and other U.S. companies that are contractually bound to continue supporting existing networks or must consider whether to renew warranty support contracts.

The alternatives confronting Hughes and many U.S. companies—replacing entire networks and systems that use Huawei-supplied technology, or taking a limited approach to new opportunities—

are financially and logistically impracticable and potentially unsustainable. These alternatives are likewise contrary to Commerce Secretary Wilber Ross' remarks at the BIS Annual Conference, clarifying that transactions that do not pose a threat to U.S. national security will be licensed, which will help to minimize the transfer of revenue streams from U.S. companies to foreign firms. *Remarks by U.S. Commerce Secretary Wilber L. Ross at the Bureau of Industry and Security Annual Conference on Export Controls and Security*, prepared July 9, 2019, https://www.commerce.gov/news/speeches/2019/07/remarks-us-commerce-secretary-wilbur-l-ross-bureau-industry-and-security.

Further, as other commenters have noted,[2] the potential impacts caused by the COVID-19 pandemic have demonstrated a clear need for essential services, including the operation of and access to telecommunications networks. Government and private users around the world require uninterrupted access to carry out COVID-19 response efforts. As such, stability and predictability in continuing to support existing networks is vital to U.S. companies now more so than ever. In that regard, additional guidance or clarity from BIS as to the continuation of the TGL, or published guidance on the subject, consistent with our Recommendations and our response to Question #3, would greatly enhance industry understanding regarding the appropriate approach for dealings with Huawei now and in the future.

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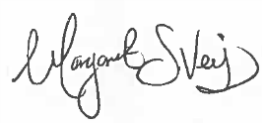
[2] *See* Docket No. BIS-2020-0001, Public Comment 7 on TGL NOI, CCA and NCTA, A Maltas et al. 3-25-20.

The TGL supports important objectives with respect to existing U.S.-based telecommunications networks and U.S. national security and foreign policy concerns, but, as currently drafted, creates significant uncertainty for U.S. companies. Revising the TGL and the Entity List and/or publishing additional guidance consistent with our Recommendations and these comments can greatly reduce those burdens, while promoting the overall objectives of restricting the release of U.S.-origin Technology to Huawei and its non-U.S. affiliates on the Entity List. For these reasons, Hughes urges the Department to modify the TGL and/or publish additional guidance consistent with our Recommendations and as described in these comments.

Hughes would welcome the opportunity to discuss its Recommendations and these comments if BIS wishes to do so.

Respectfully submitted,



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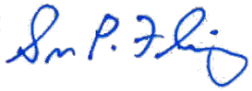

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