

SUPPORTING STATEMENT

A. Justification:

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.

The Federal Communications Commission (FCC or Commission) is requesting Office of Management and Budget (OMB) renewal of an approved information collection. This information collection pertains to a *Report and Order* adopted by the Commission in 2016,¹ and modified in part by an *Order on Reconsideration* adopted by the Commission in 2019.² The *Report and Order* adopted final rules requiring submarine cable³ licensees to report service outages through the FCC's Network Outage Reporting System (NORS). The *Order on Reconsideration* modified the *Report and Order* by reexamining and amending certain aspects of the required reporting to better conform the requirements to how the Commission expects to use the outage information. In doing so, the Commission preserved the benefits of the new rules while minimizing the costs and administrative burdens of reporting by refocusing the submarine cable outage rules on significant disruptions to submarine cable communications and those outages that have national security implications. OMB previously approved the information collection associated with these obligations on March 25, 2021.⁴

Submarine cables provide the conduit for the vast majority of voice, data and Internet connectivity between the mainland United States and Alaska, Hawaii, Guam, American Samoa, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands, as well as the connectivity between the United States and the rest of the world.⁵ "Industry experts estimate that the undersea telecommunication cable network carries about 95% of intercontinental global internet traffic, and 99% of transoceanic digital communications (e.g., voice, data, internet), including trillions in international financial transactions daily."⁶ Accordingly, the operation and maintenance of the approximately 85 undersea cables licensed and either operating or planning to enter service in the United States as of May 2023 are essential to the nation's economic stability, national security and other vital public interests.⁷ These cables are vital to U.S. communications (e.g., voice, data, internet), and financial transactions. Increased data use by consumers, businesses, and government agencies, has increased everyday reliance on undersea cables.⁸

¹ *Improving Outage Reporting for Submarine Cables and Enhanced Submarine Cable Outage Data*, GN Docket No. 15-206, Report and Order, 31 FCC Rcd 7947 (2016) (*Report and Order*).

² *Improving Outage Reporting for Submarine Cables and Enhanced Submarine Cable Outage Data*, GN Docket No. 15-206, Order on Reconsideration, 34 FCC Rcd 13054 (2019) (*Order on Reconsideration*).

³ This document uses submarine cable and undersea cable interchangeably.

⁴ https://www.reginfo.gov/public/do/PRAViewICR?ref_nbr=202012-3060-007#

⁵ *Improving Outage Reporting for Submarine Cables and Enhancing Submarine Cable Outage Data*, GN Docket 15-206, Notice of Proposed Rulemaking, 30 FCC Rcd 10492, 10492-92, para. 1 (2015) (*Submarine Cable Outage Notice or Notice*).

⁶ Jill C. Gallagher, Congressional Research Service, Undersea Telecommunication Cables: Technology Overview and Issues for Congress at 1 (2022), <https://crsreports.congress.gov/product/pdf/R/R47237>, (internal citations omitted) (2022 *CRS Undersea Cable Overview*).

⁷ See FCC, *Submarine Cable Landing Licenses*, <https://www.fcc.gov/research-reports/guides/submarine-cable-landing-licenses> (last visited October 16, 2023).

⁸ *Submarine Cable Outage Notice*, 30 FCC Rcd at 10493, para. 1 & n.2; 2022 *CRS Undersea Cable Overview*, p. 35.

The Communications Act of 1934, as amended, charges the Commission with promoting “the safety of life and property through the use of wire and radio communication.”⁹ This foundational mission underlies our efforts to promote resilient, reliable, and secure communications across the mainland United States and its territories, and informs how we interpret our duties under the Cable Landing License Act,¹⁰ and Executive Order 10530,¹¹ which provide the Commission with authority to grant, withhold, condition and revoke submarine cable landing licenses and, in particular, for such grants to occur “upon such terms as shall be necessary to assure just and reasonable . . . service in the operation and use of cables so licensed.”¹²

Prior to October 28, 2021, submarine cable licensees were not required to report on their cables’ operational status. Rather, licensees provided such operational information to the Commission on a voluntary, ad hoc basis through the Commission’s Undersea Cable Information System (UCIS).¹³ This ad hoc approach contrasted significantly with the Commission’s part 4 outage reporting requirements for other communication services.¹⁴ In the *Report and Order*, the Commission concluded that mandatory outage reporting would better assist it in monitoring the reliability of submarine cables. The Network Outage Reporting System (NORS) established for part 4 data reporting had not previously provided the Commission with the necessary information to analyze undersea cable disruptions, as the system was not designed for submarine cable reporting.¹⁵ The purpose of NORS is to collect information on “service disruptions that could affect homeland security, public health or safety, and the economic well-being of our Nation.”¹⁶ As the Commission stated, “[t]he need for such reporting is only heightened for submarine cable infrastructure, where only few facilities exist, and these are vital to U.S. economic activity and national security, have unique vulnerabilities in their environment, and are exceptionally challenging to repair.”¹⁷ The Commission found “that a mandatory outage reporting regime is necessary to provide the Commission with greater visibility into the availability and health of these networks to allow it to better track and analyze submarine cable resiliency, and suggest or take appropriate actions when the data so indicate, i.e., before there is a significant problem.”¹⁸ The Commission then modified

⁹ 47 U.S.C. § 151.

¹⁰ Cable Landing License Act of 1921, 47 U.S.C. §§ 34-39 (*Cable Landing License Act*).

¹¹ Exec. Order No. 10530, 19 Fed. Reg. 2709 (May 10, 1954) (*Exec. Order No. 10530*).

¹² *Cable Landing License Act* 47 U.S.C. §§ 34-35; *Submarine Cable Outage Notice*, 30 FCC Rcd at 10509-10510, para. 48. In acting upon applications for such licenses, the Commission seeks the approval of the U.S. Department of State. Exec. Order No. 10530, § 5(a). Pursuant to its authority, the Commission has adopted rules governing submarine cable service at Sections 1.767 and 1.768 of the Commission’s rules. 47 CFR §§ 1.767, 1.768.

¹³ *Report and Order*, 31 FCC Rcd at 7950-51, para. 8 and n.23.

¹⁴ *Submarine Cable Outage Notice*, 30 FCC Rcd at 10494, para. 5; *See* 47 CFR pt. 4. Part 4 outage reporting requires more targeted information on the causes and effects of communications outages, establishes specific reporting triggers and thresholds, and provides specific deadlines for those reports to be made.

¹⁵ *Submarine Cable Outage Notice*, 30 FCC Rcd at 10499, para. 19. Because NORS was not designed for submarine cable reporting, it lacks many of the data fields that are needed to report on submarine cable infrastructure.

¹⁶ Federal Communications Commission, Network Outage Reporting System, <https://www.fcc.gov/network-outage-reporting-system-nors> (last visited Oct. 24, 2023).

¹⁷ *Report and Order*, 31 FCC Rcd at 7952, para 12.

¹⁸ *Id.*

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aspects of the mandatory reporting requirements for submarine cable outages, in an *Order on Reconsideration* in 2019.¹⁹

On December 4, 2023, OMB approved the discontinuance of UCIS, the voluntary submarine cable outage information collection, OMB Control No. 3060-1116.

Statutory authority for this collection is contained in 47 U.S.C. §§ 34–39, 151, 154, 155, 157, 201, 251, 254, 301, 303(b), 303(g), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a–1, 615c, 1302(a), and 1302(b); 5 U.S.C. 301, and Executive Order No. 10530.

This information does not affect individuals or households, thus there are no impacts under the Privacy Act.

2. Indicate how, by whom and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The rules mandating submarine cable outage reporting in NORS became effective on October 28, 2021.²⁰ Since then, this collection has facilitated improved FCC monitoring, analysis, and investigation of the reliability and security of submarine cable networks, and enhanced its ability to identify and take action on potential threats to our Nation’s telecommunications infrastructure. The Commission will continue its ongoing dialogue with submarine cable licensees, as well as with the industry at large, regarding lessons learned from this information collection. These efforts will help the Commission develop a better understanding of the root causes of significant outages, and to explore preventive measures in the future to mitigate the potential impact of such outages on the Nation and the American public.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

The FCC’s Public Safety and Homeland Security Bureau (PSHSB) maintains an Internet portal for the electronic submission of NORS reports.²¹ Submarine cable licensees submit their filings through the existing NORS portal using templates created for reporting submarine cable outages. The Commission may then electronically retrieve the submarine cable outage filings in real time in the NORS portal. In the event of technical impediments that prevent the filing of outage reports in NORS, then written notification to the Commission in the form of an email, is permitted.²²

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in item 2 above.

¹⁹ See *Order on Reconsideration*, 34 FCC Rcd 13054 (2019).

²⁰ See, *Public Safety and Homeland Security Bureau Announces October 28, 2021 Compliance Date for Submarine Cable Outage Reporting Obligations*, GN Docket No. 15-206, Public Notice 21-488, 36 FCC Rcd 7589 (2021).

²¹ See 47 CFR § 4.11.

²² See 47 CFR § 4.15(b)(2)(v).

The *Report and Order*, as modified by the *Order on Reconsideration*, established a new, mandatory information collection for submarine cable outages and OMB discontinued the voluntary information collection, UCIS, at PSHSB's request on December 4, 2023. As a result, this collection does not duplicate any information that the Commission already receives.

5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.

In accordance with the Paperwork Reduction Act of 1995, the Commission seeks to minimize the burden on all respondents, regardless of size. The reporting requirements limit the information collection requirements to those absolutely necessary to promote the safety of life and property. We believe that all submarine cable licensees, including any small businesses or entities, already collect the requested information, and therefore, the only burden on licensees is to submit the data via the existing NORS portal. For ease of reporting, the NORS portal contains templates for each type of filing required.

6. Describe the consequences to a Federal program or policy activity, if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reduce burden.

The FCC has a statutory mandate to “promot[e] the safety of life and property through the use of wire and radio communications.”²³ Additionally, the Cable Landing License Act²⁴ and Executive Order 10530²⁵ provide the Commission with authority to grant, withhold, condition and revoke submarine cable landing licenses.²⁶ The Cable Landing License Act and Executive Order provide that the Commission may place conditions on the grant of a submarine cable landing license in order to “assure just and reasonable rates and service in the operation and use of cables so licensed.”²⁷ “Just and reasonable service,” entails assurance that the cable infrastructure will be reasonably available.²⁸ Availability of submarine cables is also critically important for national security and the economy, as industry experts estimate that the undersea telecommunication cable networks carry about 95% of intercontinental global internet traffic, and 99% of transoceanic digital communications (e.g., voice, data, internet), including trillions in international financial transactions daily.²⁹

In the absence of outage reporting, the Commission's ability to carry out its dual obligations of ensuring just and reasonable submarine cable service, and promoting the safety of life and property,

²³ 47 U.S.C. § 151.

²⁴ Cable Landing License Act, 47 U.S.C. §§ 34-39.

²⁵ Executive Order No. 10530.

²⁶ See *Submarine Cable Outage Notice*, 30 FCC Rcd at 10509-10510, para. 48. In acting upon applications for such licenses, the Commission seeks the approval of the U.S. Department of State. Executive Order 10530, § 5(a). Pursuant to its authority, the Commission has adopted rules governing submarine cable service at Sections 1.767 and 1.768 of the Commission's rules. 47 CFR §§ 1.767; 1.768. The Cable Landing License Act does not apply to cables that lie wholly within the continental United States. See 47 U.S.C. § 34.

²⁷ See *Submarine Cable Outage Notice*, 30 FCC Rcd at 10509-10510, para. 48. See also 47 U.S.C. § 35. For example, the Commission has used its authority under the Cable Landing License Act to adopt international circuit data reporting requirements for submarine cable landing licensees. *Part 43 Second Report and Order*, 28 FCC Rcd at 606, para. 104.

²⁸ See *Submarine Cable Outage Notice*, 30 FCC Rcd at 10509-10510, para. 48.

²⁹ See 2022 CRS Undersea Cable Overview at 1.

would be hampered by the lack of situational awareness regarding the functionality of submarine cables. To fulfill the aforementioned statutory obligations, the FCC needs all submarine cable licensees to file outage reports in a common place and in a uniform fashion.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with the criteria listed in the supporting statement.

This information collection is consistent with the requirements of 5 CFR § 1320.5(d)(2) and the criteria listed in this Supporting Statement. We do not anticipate circumstances that would result in a collection of information in an inconsistent manner.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information prior to submission to OMB. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

On December 5, 2023 pursuant to 5 C.F.R. Section 1320.8(d), a 60-Day Notice was published in the Federal Register (See 88 FR 84323) for the information collection requirements contained in this collection with comments due on or before February 5, 2024. The Commission did not receive any comments following publication of the Notice.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

No payment or gift to respondents has been, or will be, made in connection to this information collection.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

Outage reports filed with the Commission pursuant to part 4 are presumed confidential.³⁰ The information in those filings may be shared with the Department of Homeland Security only under appropriate confidential disclosure protections. Other persons seeking disclosure must follow the procedures delineated in 47 CFR §§ 0.457 and 0.459 of the Commission's rules for requests for and disclosure of information. The information collection discussed here does not affect the Commission's presumption of confidentiality for the other filings submitted in NORS.

11. Provide additional justification for any questions of a sensitive nature.

This collection of information does not address any matters of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should: indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance.

³⁰ See 47 CFR. § 4.2.

Number of Respondents:

The Commission estimates that there will be 85 respondents. There are currently 85 licensed submarine cable systems either operating or planning to enter service.³¹ The Commission determined that since multiple licensees often operate on a single submarine cable system as a consortium or other business organization, and licensees sharing cables are encouraged to designate a Responsible Licensee for the purpose of filing a single report for each outage with the Commission,³² the number of respondents should not exceed 85. These submarine cable licensees are not included in the Commission's NORS collection, nor are their responses, treated below.

Frequency of Response:

In the two years since the Commission's mandatory NORS outage reporting rules for submarine cable operators became effective, there have been a total of 308 responses filed. NORS submarine cable outage reports include three components: 1) a Notification that an outage has occurred; 2) an Interim Report containing more detailed information on the outage; and 3) a Final Report containing detailed information on the outage including how it was resolved. For purposes of this calculation, the Commission treats each element of an outage report (i.e., Notification, Interim Report, and Final Report) as an individual response.³³ This amounts to an average of 154 annual responses in each of the two years that this reporting requirement has been effective.³⁴

Annual Hour Burden:

The Commission estimates that respondents will take up to 2 hours to complete and file each response. Moreover, respondents' burdens in compiling data for submission is mitigated by allowing data to include "approximate" information, "best estimates" and information "if known."³⁵

To estimate that total annual burden, we calculate the number of responses and multiply this by the 2 hours to complete each response.

154 total responses x 2 hours per response = 308 total annual hours per year.

Method of Calculating Burden:

We explain the methods used to calculate the burden above. The Commission estimates that the hourly wage of a full-time employee who will be submitting this information as \$54.73.³⁶ This annual in-

³¹ See FCC, Submarine Cable Landing Licenses, <https://www.fcc.gov/research-reports/guides/submarine-cable-landing-licenses> (last visited October 16, 2023).

³² *Report and Order*, 31 FCC Rcd at 7962, para. 38.

³³ The 308 responses consisted of 104 Notifications, 131 Interim Reports, and 73 Final Reports. In our 2021 Supporting Statement for this collection, submitted before the NORS reporting rules were effective, we considered each set of three responses (Notification, Interim Report, and Final Report) to be a single outage report. Based on our actual experience with the rules, we have modified that approach here so that each of the Notification, Interim Report, and Final Report will be considered a single response.

³⁴ 308 responses / 2 years = 154 responses per year.

³⁵ See 47 CFR § 4.15(b)(2)(ii)-(iv).

³⁶ See Bureau of Labor Statistics, "Occupational Employment and Wages, May 2022, Miscellaneous Media and Communications Worker," (May 2022). <https://www.bls.gov/oes/current/oes273099.htm>.

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house cost estimate of \$16,857 represents a reduction of \$206,919 from the original estimated annual in-house cost of \$223,776.

Variance in Burden:

We do not expect variance in burden amongst entities affected by this information collection.

Summary of Respondents and Burden:

Total Number of Respondents: 85

Total Number of Annual Responses: 154

Total Annual Burden Hours: 308 hours.

Total Annual In-House Costs: \$16,857.00.

**308 hours x \$ 54.73 per hour for
a media and communications worker = \$16,856.84, rounded to \$16,857.**

13. Provide estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden shown in items 12 and 14).

The costs for collecting and filing the information collection are reflected in the responses to questions 12 and 14. The Commission believes that submarine cable licensees have existing network monitoring capabilities that ensure its situational awareness of outages.³⁷ Submarine cable licenses may use this information provided by these monitoring capabilities to complete the responses required in this collection. Therefore, in addition to the costs already accounted for in the responses to questions 12 and 14, the Commission does not anticipate that submarine cable licensees will have start-up costs nor recordkeeping burdens, as a result of this information collection.

14. Provide estimates of annualized costs to the Federal government. Also provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expenses that would not have been incurred without this collection of information.

We estimate that the total cost to the Federal government will be \$26,358.00 based on the salaries of two engineers (GS-14 step 5), an attorney (GS-15 step 5), and an IT Developer (GS-15 step 5):³⁸

³⁷ See *Report and Order*, 31 FCC Rcd at 7966, n. 160 (citing Akamai, State of the Internet Report Q415 at 51-54 (2016), <https://www.stateoftheinternet.com/resources-connectivity-2015-Q4-state-of-the-internet-report.html>) (showing that Akamai can very quickly detect changes in Internet traffic levels that result from a submarine cable outage). The Commission believes that licensees, or at least their customers, would have at least the same visibility into network performance and should be able to rapidly determine when an outage has occurred.

³⁸ Hourly rates are based on the OPM 2024 Washington-Baltimore-Arlington, DC-MD-VA-WV-PA Locality Pay Area. Office of Personnel and Management, 2024 General Schedule (GS) Locality Pay Table, Salary Table 2024-DCB, https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2023/DCB_h.pdf (last accessed Jan. 29, 2024).

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Each will spend approximately 80 hours of their work time each year on the information collected as follows:

(Two) Engineers	GS-14 step 5 at \$75.70/hr wage	\$75.70 x 80 x 2	\$12,112
(One) Attorney	GS-15 step 5 at \$89.04/hr wage	\$89.04 x 80 x 1	\$7,123.20
(One) IT Developer	GS-15 step 5 at \$89.04/hr wage	\$89.04 x 80 x 1	\$7,123.20
Total \$26,358.40, rounded down to \$26,358.00			

15. Explain the reasons for any program changes or adjustments for this information collection.

Recognizing an increase in the number of undersea cable licensees, this renewal reports an adjustment increasing the total number of respondents to 85 from 74 (+11).

The 2021 Supporting Statement and current OMB inventory contemplates 336 total responses. We report that we are receiving an annual average of 154 responses (- 182), and a reduction in total burden hours from 2,016³⁹ to 308, (-1,708) after a review of two years of actual data with the new rules adopted in FCC 16-81 and FCC 19-138.

No program changes are being reported for this information collection.

16. For collections of information whose results will be published, outline plans for tabulation and publication.

The Commission does not plan to publish this information.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

The Commission does not intend to seek approval to not display the expiration date of this information collection.

18. Explain any exceptions to the Certification Statement identified in Item 19, “Certification of Paperwork Reduction Act Submissions.”

There are no exceptions to the Certification Statement.

B. Collections of Information Employing Statistical Methods:

³⁹ The total hour calculation was based on 336 outages, with each complete outage report consisting of three responses (Notification, Interim, and Final Report) and each response requiring two hours to complete. (336 x 3 responses x 2 hours per response = 2,016 total hours.)

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This information collection does not employ any statistical methods.