

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of

Improving Outage Reporting for Submarine
Cables and Enhancing Submarine Cable Outage
Data

GN Docket No. 15-206

SUPPLEMENT TO PETITION FOR RECONSIDERATION

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The North American Submarine Cable Association (“NASCA”)¹ supplements its petition for reconsideration² to urge the Commission to rescind the prospective submarine cable outage reporting rules adopted in the *Outage Reporting R&O*³ based on a number of intervening developments. NASCA previously petitioned the Commission to reconsider these rules as fundamentally flawed for attempting to solve an underreporting problem that does not exist by imposing an elaborate new reporting mechanism to track at most four to five incidents each year.

¹ NASCA is the principal non-profit trade association for submarine-cable owners, submarine-cable maintenance authorities, and prime contractors for submarine-cable systems operating in North America. NASCA’s members include: Alaska Communications System; Alaska United Fiber System Partnership, a subsidiary of General Communication, Inc.; Alcatel-Lucent Submarine Networks; Apollo Submarine Cable Ltd.; AT&T Corp.; C&W Networks; Global Cloud Xchange (f/k/a Reliance GlobalCom); Global Marine Systems Ltd.; GlobeNet; Hibernia Atlantic; Level 3 Communications, LLC; Office of Posts and Telecommunications French Polynesia; PC Landing Corp.; Southern Cross Cable Network; Sprint Corporation; Tata Communications (America) Inc.; Tyco Electronics Subsea Communications LLC; and Verizon Business.

² Petition for Reconsideration of the North American Submarine Cable Association, GN Docket No. 15-206 (filed Sept. 7, 2016) (“NASCA Petition” or “Petition”).

³ *Improving Outage Reporting for Submarine Cables and Enhanced Submarine Cable Outage Data*, Report and Order, 31 FCC Rcd. 7947 (2016) (“*Outage Reporting R&O*”).

In this supplement, NASCA makes four key points. *First*, the further passage of time confirms the absence of outages or underreporting of any such outages and a misplaced focus on paperwork rather than expedient licensing of new infrastructure. *Second*, NASCA has determined based on member implementation efforts to date that an outage definition based on customer impact is unworkable, as submarine cable operators lack access to information about end-to-end communications that would enable them to make such a customer impact determination. NASCA therefore withdraws its proposal for a customer-impact threshold for submarine cable reporting. *Third*, NASCA notes that the prospective rules duplicate existing Commission and DHS regulatory mechanisms. In particular, NASCA notes that network events affecting end-user connectivity are already captured through reporting by other providers in the Commission’s Network Outage Reporting System (“NORS”). *Fourth*, the Commission should re-analyze the costs and benefits of the prospective rules consistent with the Commission’s current approach to such analyses and the Executive Branch’s current policy with respect to burdensome new regulations.

I. The Further Passage of Time Confirms the Absence of Outages and Underreporting and a Misplaced Focus on Reporting Rather than Infrastructure Deployment

The further passage of time confirms the absence of outages or underreporting of any such outages—and that the rules remain a solution in search of a problem. The prospective rules would impose an elaborate new reporting mechanism to track at most four to five incidents each year. Compliance with these rules would inappropriately divert operator efforts away from restoration of service and repair activities—costs ignored in the *Outage Reporting R&O*’s cost-benefit analysis.

Data from NASCA’s members confirms that faults for 2015 and 2016 were consistent with long-term trends in terms of (i) the total number of faults as compared to previous years and

(ii) the very low number of faults that actually result in customer impact.⁴ As NASCA previously explained, data compiled by the International Cable Protection Commission indicate that between 2008 and 2014 there were only 13 faults in U.S. waters in the Atlantic and only 8 in the U.S. waters of the Pacific.⁵ That works out to an average of just *three faults per year* in the combined U.S. Atlantic and Pacific waters (including the U.S. territorial sea and the U.S. Exclusive Economic Zone (“EEZ”)).⁶ Global Marine Systems has calculated that, in the last 25 years, approximately 1.4 faults per year have occurred in the U.S. territorial sea and EEZ, including the U.S. Pacific and Caribbean territories.⁷ The rarity of such events simply does not justify a reporting regime.

Given the low number of faults to be addressed, the *Outage Reporting R&O* simply does not provide sufficient justification for such an expensive and elaborate new reporting regime. The Outage Reporting NPRM and *Outage Reporting R&O* reference the anomalous outage event of the single cable connecting the Commonwealth of the Northern Marianas. But, as NASCA has described in detail, that outage was caused by one company’s failure to have backup satellite redundancy or a second cable in place. Most submarine cable systems landing in the United

⁴ This also confirms the absence of an underreporting problem in the voluntary UCIS system, contrary to assertions underlying the proposed and prospective rules. *See Improving Outage Reporting for Submarine Cables and Enhancing Submarine Cable Outage Data*, Notice of Proposed Rulemaking, 30 FCC Rcd. 10,492, 10,498-10,498 ¶ 14 (2015) (“Outage Reporting NPRM”); *Outage Reporting R&O*, 31 FCC Rcd. at 7953 ¶ 13.

⁵ Comments of the North American Submarine Cable Association at 4, GN Docket No. 15-206 (filed Dec. 3, 2015) (“NASCA Comments”).

⁶ *Id.*

⁷ *Id.* at 5.

States already have same-system, intra-company, or third-party submarine cable redundancy or satellite backup on routes with limited submarine cable connectivity.⁸

Rather than impose new paperwork requirements, the Commission should focus on reforming its licensing processes to speed the deployment of new infrastructure to promote network resilience. The sole specific vulnerability identified in the *Outage Reporting R&O*—the potential for a blackout of the Commonwealth of the Northern Mariana Islands (“CNMI”) due to an outage on the sole submarine cable connecting the CNMI to Guam, one of the few routes lacking connectivity via additional submarine cables—no longer exists. Since the Commission issued the *Outage Reporting R&O*, the Commission licensed, and DOCOMO Pacific has since built, the new ATISA submarine cable system on the Guam-CNMI route, providing geographically-diverse capacity that greatly reduces the chances of a repeat blackout in the CNMI.⁹ NASCA notes that it took the Commission 341 days from the date of application filing to license ATISA due to delays with the national security review conducted by the Team Telecom agencies—for a licensee that was already a party to a network security agreement with those agencies. NASCA believes that the Commission’s efforts would be better directed toward reforming its licensing processes and imposing deadlines for application reviews than in creating new paperwork burdens for licensees—paperwork that only adds to the costs of new infrastructure.

⁸ See *id.*

⁹ See *Actions Taken Under Cable Landing License Act*, Public Notice, 32 FCC Rcd. 1436 (2017); *Docomo announces Atisa cable completed*, Pacific Daily News (July 14, 2017), www.guampdn.com/story/money/2017/06/14/docomo-announces-atisa-cable-completed/395197001/.

II. A Customer Impact-Based Outage Definition for Submarine Cable Operators Has Proven Unworkable

Given the prospective rules' overbroad outage definition, which would capture mundane events, NASCA had proposed to limit reportable outages to events impairing customer connectivity.¹⁰ Based on NASCA members' experiences in preparing to implement the Commission's prospective rules, however, NASCA determined that an outage definition based on customer impact is unworkable.

In practice, a definition based on customer impact would require that submarine cable operators have access to real-time information regarding end-to-end communications. Because they are wholesale providers of connectivity over long-haul infrastructure that generally does not connect to local networks owned or controlled by the same provider,¹¹ however, most submarine cable system operators lack information—much less real-time information—about other providers in the chain of communications ultimately connecting end users. Consequently, they are in most cases unable to make a meaningful determination as to whether or not an outage would impact communications—not only the submarine cable systems. NASCA therefore withdraws its proposal for such a definition.

NASCA continues to believe that the prospective outage reporting rules are overbroad and would capture mundane events. Consistent with the existing outage definition in Section 4.5(a) of the Commission's rules, NASCA believes that the Commission should continue to focus on network events constituting “a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the

¹⁰ See NASCA Petition at 5-6.

¹¹ Those providers with affiliates that do own or control such infrastructure already report under the Commission's Part 4 rules, as noted in part III below.

performance of a communications provider's network."¹² As discussed in part III below, NASCA believes that other providers already reporting in the Commission's Network Outage Reporting System provide the Commission with information about such events.

III. The Prospective Rules Violate the Paperwork Reduction Act by Duplicating Existing Commission and DHS Regulatory Efforts

The *Outage Reporting R&O* failed to explain how the prospective rules would avoid duplicating the well-established Commission and DHS efforts. Absent such a justification, the prospective rules would not qualify for Office of Management and Budget ("OMB") approval under the Paperwork Reduction Act ("PRA").¹³

First, the prospective reporting requirements attempt to duplicate reporting in NORS. As noted in part II above, most submarine cable operators are poorly placed to determine when a network event might disrupt end-user communications, as they do not own or control networks connecting to end users. The other providers reporting in NORS, however (a few of which are affiliated with submarine cable operators), do own or control such networks and provide the Commission with more timely information about disruptions of end-user connectivity than a submarine cable operator could. Section 4.9 of the Commission's rules requires reporting for outages based on customer impact, such as those potentially affecting at least 900,000 user minutes of telephone service, affecting at least 667 OC3 minutes, or generating at least 90,000 blocked calls.¹⁴ New reporting for instances like these is unnecessary, because providers of services to U.S. customers are already required to report outages meeting these criteria. Consequently, rescission of the prospective rules would not leave a reporting gap, given that

¹² 47 C.F.R. § 4.5(a).

¹³ See 5 C.F.R. § 1320.5(d)(1)(ii).

¹⁴ 47 C.F.R. § 4.9.

most submarine cable systems re-route traffic in the event of an outage, and even if there were an outage that affected communications, that would likely be reported under the existing rules.

Second, DHS already has a mechanism in place for submarine cable operators to report outage-type information through the National Coordination Center for Communications (“NCC”).¹⁵ The NCC “continuously monitors national and international incidents and events that may impact emergency communications,”¹⁶ including “not only acts of terrorism, but also natural events such as tornadoes, floods, hurricanes and earthquakes.”¹⁷ As part of the NCC, “11 federal government agencies and over 60 private sector communications and information technology companies routinely share critical communications information and advice in a trusted environment to support the NCC’s national security/emergency preparedness communications mission.”¹⁸

As the agency authorized to take part in emergency-preparedness and monitoring of critical infrastructure, DHS has already set up systems to monitor submarine cable outages that could threaten U.S. infrastructure. NASCA raised this issue in its Comments on the Outage Reporting NPRM,¹⁹ but the *Outage Reporting R&O* does not justify duplicating these efforts—or deal in any meaningful way with the obvious overlap. To the extent the Commission believes that cable outages raise concerns related to critical infrastructure and emergency communications, the NCC is better positioned to address those issues.

¹⁵ Department of Homeland Security, *National Coordinating Center for Communications* (Apr. 13, 2017), <https://www.dhs.gov/national-coordinating-center-communications>.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ NASCA Comments at 28.

IV. The Commission Should Reconsider the Prospective Outage Reporting Rules Using a Rigorous Cost-Benefit Analysis

The Commission should reconsider the prospective outage reporting rules using a rigorous cost-benefit analysis consistent with current Commission thinking on such matters and the Executive Branch's current policy with respect to burdensome new regulations.²⁰ As then-Commissioner Pai noted, the *Outage Reporting R&O*'s cost-benefit analysis is "embarrassingly deficient."²¹ With renewed focus on justifying new regulations, the Commission should re-analyze the costs and benefits of the prospective rules. A more accurate analysis will reveal that the burdens far outweigh the minimal benefits and do not justify implementing the prospective rules.

A. The *Outage Reporting R&O* Underestimated Actual Costs

The *Outage Reporting R&O* failed to account for both the recurring costs that will arise from the prospective rules and the substantial upfront costs that licensees will incur.²² The *Outage Reporting R&O* suggested that the prospective rules will cost the industry \$152,500 per year, but "the actual costs are going to be orders of magnitude higher."²³

Then-Commissioner Pai's dissent aptly raised key flaws in the original cost-benefit analysis. *First*, the *Outage Reporting R&O* started with the wrong number of licensees by assuming there were only 61, when, as of the *Outage Reporting R&O*, there were up to 161.²⁴ *Second*, the *Outage Reporting R&O* used an arbitrary number of estimated hours the prospective

²⁰ See Exec. Order No. 13771, 82 Fed. Reg. 9339 (Jan. 30, 2017).

²¹ *Outage Reporting R&O*, 31 FCC Rcd. at 8000 (Dissenting Statement of Commissioner Ajit Pai) ("Pai Statement").

²² See NASCA Petition at 15.

²³ Pai Statement, 31 FCC Rcd. at 8000.

²⁴ *Id.*

rules will require by taking the 40 hours associated with the voluntary Undersea Cable Information System (“UCIS”) reporting system adopted in 2008 and adding 25 percent to obtain 50 hours. But, as then-Commissioner Pai’s dissent pointed out, that estimate failed to recognize that the prospective reporting regime would be far more burdensome than the voluntary system, which did not require licensees to generate new information or submit formal reports. In contrast, the prospective rules require licensees to produce new information and submit three separate formal reports for every event, and they adopt a far broader definition than the UCIS voluntary reporting.²⁵ Third, the *Outage Reporting R&O* ignored significant costs or lowered the costs without explanation. The *Outage Reporting R&O* assigned an unreasonably low labor cost of \$80 per hour—which many commenters, including NASCA, challenged—and then used \$50 an hour for the actual calculation without any justification for either number.²⁶ The *Outage Reporting R&O* also “assign[ed] a value of exactly \$0” to the “actual and recognized” implementation costs for the prospective rules. These costs will likely be substantial, however, as one NASCA member estimates that it has already spent approximately 220 hours preparing to implement the prospective rules. In addition, the *Outage Reporting R&O* acknowledged that it ignored additional costs associated with the rule.²⁷ As then-Commissioner Pai notes, if there are additional costs associated with the rules, those should be determined prior to adoption of the prospective rules.²⁸

The *Outage Reporting R&O* comes to its annual burden estimate of \$152,500 in an arbitrary way. The *Outage Reporting R&O* uses only *one* of the categories of the 2014 UCIS

²⁵ *Id.* at 8001.

²⁶ *Id.* at 8002.

²⁷ *Id.*

²⁸ *Id.*

collection—the cost for system restoration messages (at \$122,000, increased by 25 percent to arrive at \$152,500)—which it says is analogous to the reporting requirements. It ignores what it calls the three “static” categories for the UCIS collection, representing \$183,000 of the \$305,000 total for the 2014 UCIS cost.²⁹ Failing to account for the fact that it is ignoring substantial costs specific to the prospective rules, the *Outage Reporting R&O* dismissively suggests that a burden of \$335,500 (a 25 percent increase from the \$305,000 amount) would still be a “minimal cost” compared to the potential benefits. But the Commission sticks with the lower amount for its annual burden estimate, and fails to address the fact that the prospective rules will be substantially more burdensome than the UCIS voluntary system.

B. The *Outage Reporting R&O* Failed to Conduct a Meaningful Analysis of the Prospective Rules’ Benefits

The *Outage Reporting R&O*’s benefit analysis of the prospective rules is also deficient.³⁰ As Commissioner O’Rielly notes, the *Outage Reporting R&O* simply omitted a quantitative analysis of the benefits.³¹ Even in its attempts at a qualitative analysis, the *Outage Reporting R&O* made only broad suggestions that the prospective rules will serve the public interest, without pointing to concrete benefits.

The *Outage Reporting R&O* merely pointed to the importance of submarine cables as justification for the overly broad prospective rules, noting that “there is too much riding on these cables for the Commission to be less than fully aware about [their] status.”³² The *Outage Reporting R&O* also suggested that “improved situational awareness will help ensure that

²⁹ *Id.* at 7979.

³⁰ *See also* NASCA Petition at 6.

³¹ *Outage Reporting R&O*, 31 FCC Rcd. at 8006 (Dissenting Statement of Commissioner Michael O’Rielly) (“O’Rielly Statement”).

³² *Outage Reporting R&O*, 31 FCC Rcd. at 7980 ¶ 91.

licensees are consistently and appropriately acting to ensure the availability of submarine cable service,”³³ but made no indication of how these rules would serve that purpose. As Commissioner O’Rielly points out, the *Outage Reporting R&O* failed to explain the benefit of simply knowing about outage issues.³⁴

Indeed, the *Outage Reporting R&O* failed to consider the potential harms of the prospective rules. As then-Commissioner Pai notes, the *Outage Reporting R&O* “decides not to encourage providers to construct facilities with . . . redundancies.”³⁵ Instead, the *Outage Reporting R&O* “decides to divert resources away from critical repair and restoration efforts and toward needless paperwork.”³⁶ An accurate benefit analysis requires the Commission to look more closely at the rules and provide sufficient justification, rather than a sweeping generalization of public interest benefits.

C. The Commission Should Re-Analyze the Cost-Benefit Analysis to Conform with Current Commission and OMB Policies to Reduce Regulatory Burdens

Since the Commission adopted the *Outage Reporting R&O* in June 2016, both Commission and Office of Management and Budget (“OMB”) policies have emphasized the removal of unnecessary regulatory burdens. Consistent with this emphasis, the Commission should re-analyze the costs and burdens of the prospective outage reporting rules.

As the Chairman recently indicated in a speech to the Hudson Institute, the “cost-benefit analysis has been largely ignored” and “[t]he public interest standard has become a free pass to

³³ *Id.* at 7981.

³⁴ O’Rielly Statement, 31 FCC Rcd. at 8006.

³⁵ Pai Statement, 31 FCC Rcd. at 7999.

³⁶ *Id.*

adopt rules without a meaningful attempt to determine the net benefits.”³⁷ In fact, out of 11 major rules the Commission adopted from 2006 to 2015, “*not one* was accompanied by an estimate of benefits or costs.”³⁸ Underscoring the importance of improving these analyses, Chairman Pai has announced the creation of an Office of Economics and Data to focus, in part, on improving the accuracy of paperwork filing requirements to “make sure we aren’t collecting information that’s duplicative or unnecessary.”³⁹

Re-analyzing the cost-benefit analysis is particularly important given the high costs of Commission regulations on the private sector.⁴⁰ Commissioner O’Rielly recently lamented that the cost of the Commission’s paperwork burden requirements rank high compared to several other lead agencies.⁴¹ Commissioner O’Rielly encouraged the Commission to embrace Executive Order 13771 and “make recommendations to repeal or simplify existing regulations that are unnecessary, burdensome or harmful to the economy.”⁴² Similarly, Chairman Pai has noted the importance of looking at the OMB “framework [Cass] Sunstein developed for cost-benefit analysis and use that as a yardstick”⁴³ for regulations.

The Administration has made clear the importance of reducing regulatory burden. Executive Order 13771 requires agencies to identify two regulations to remove for every new

³⁷ Ajit Pai, Chairman, Federal Communications Commission, Remarks at the Hudson Institute: The Importance of Economic Analysis at the FCC at 3 (Apr. 5, 2017) (“Pai Economics Speech”), https://apps.fcc.gov/edocs_public/attachmatch/DOC-344248A1.pdf.

³⁸ *Id.* at 4 (emphasis in original).

³⁹ *Id.* at 5.

⁴⁰ *Id.*

⁴¹ Michael O’Rielly, *Taking Stock of FCC Paperwork Burdens*, FCC Blog (Mar. 3, 2017), <https://www.fcc.gov/news-events/blog/2017/03/03/taking-stock-fcc-paperwork-burdens>.

⁴² *Id.*

⁴³ Pai Economics Speech at 3.

regulation added. OMB has issued guidance on how agencies should implement this Executive Order, which emphasizes the importance of reducing costs, as well as accurately identifying costs of regulations.⁴⁴ While the Executive Order and corresponding OMB Memo do not apply to independent agencies like the Commission, they nevertheless guide OMB in its review of Commission regulations under the PRA.

OMB urges agencies to ensure their analysis of costs and benefits comply with OMB Circular A-4 and Executive Order 12866,⁴⁵ both of which require, among other things, examination of alternative approaches and a quantitative and qualitative analysis of costs and benefits.⁴⁶ With respect to non-monetized costs, the OMB Memo also urges agencies “at a minimum, [to] clearly identify any non-monetized costs or cost savings, explain the key reason(s) why monetization is not possible, discuss any information the agency has that is relevant to estimating such costs, and request information from the public to monetize such costs at the final stage.”⁴⁷ As described more fully above, the *Outage Reporting R&O* did not attempt to address alternative approaches, failed to conduct a quantitative analysis of the benefits, glossed over costs without assigning them any value, and urged vague public interest benefits without explaining why the benefits cannot be monetized. The *Outage Reporting R&O* failed to address how the prospective rules avoid duplication of existing Commission and DHS efforts nor

⁴⁴ Memorandum from Dominic J. Mancini, Acting Adm’r, Office of Info. & Regulatory Affairs to Regulatory Policy Officers at Exec. Dep’ts & Agencies & Managing & Exec. Directors of Certain Agencies & Comm’ns, Guidance Implementing Executive Order 13771, Titled “Reducing Regulation and Controlling Regulatory Costs,” (Apr. 5, 2017) (“OMB Memo”).

⁴⁵ OMB Memo at 13.

⁴⁶ See Circular A-4 at 2-3, Office of Management and Budget (Sept. 17, 2003); Exec. Order 12866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

⁴⁷ OMB Memo at 12. While the OMB Memo raises this in the context of calculating costs for selecting regulations to remove under Executive Order 13771, the guidance is illustrative of an approach that could apply more broadly to cost-benefit analysis.

did it attempt to address whether the rules are the least burdensome way to achieve the Commission's goals.

To ensure compliance with the PRA, and to determine if the burden of this expensive reporting regime outweighs the benefits of learning of no more than a few actual outages per year, the Commission should redo the cost-benefit analysis, consistent with current policy goals of reducing regulatory costs.

CONCLUSION

For the foregoing reasons, NASCA urges the Commission to reconsider its submarine cable outage reporting rules and to rescind them entirely.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kent D. Bressie".

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