



FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 4

[PSHSB: PS Docket Nos. 21-346 and 15-80; ET Docket No. 04-35; FCC 24-5 FR ID 210795]

Amendments to Resilient Networks Disruptions to Communications; New Considerations Concerning Disruptions to Communications.

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communication Commission (FCC) proposes further examination of whether television broadcasters, radio broadcasters, and satellite providers should be subject to mandatory reporting in the FCC’s Disaster Information Reporting System (DIRS). Additionally, this document proposes requirements for the First Responder Network (FirstNet) to report in the Commission’s Network Outage Reporting System (NORS) and in DIRS. This document also proposes to require mobile and fixed Broadband internet access service (BIAS) providers to submit reports of outages to the FCC’s NORS and DIRS. The document also proposes requiring current and future service providers to supply the Commission with information concerning the location of their mobile recovery assets, including the location of their Cells on Wheels (COWs) and Cells on Light Trucks (COLTs). This document also proposes requiring providers that report in DIRS to provide “after action” reports at the Commission’s direction. These requirements would further protect the nation’s communications systems from cybersecurity threats. With this Second Further Notice of Proposed Rulemaking (SFNPRM), the Commission seeks comment on the proposed rules and any suitable alternatives.

DATES: Comments are due on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] and reply comments are due on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Written comments on the Paperwork Reduction Act proposed information

collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested parties on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by PS Docket No. 21-346; PS Docket No. 15-80; ET Docket No. 04-35; and FCC 24-5, by any of the following methods:

- Federal Communications Commission's website: <https://www.apps.fcc.gov/ecfs/>. Follow the instructions for submitting comments.
- Mail: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street NE, Washington, DC 20554.

Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20-304 (March 19, 2020).

<https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

- People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to

fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

FOR FURTHER INFORMATION CONTACT: For further information regarding these proposed rules, please contact Logan Bennett, Attorney Advisor, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-7790, or by email to Logan.Bennett@fcc.gov.

For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, send an email to PRA@fcc.gov or contact Nicole Ongele, Office of Managing Director, Performance Evaluation and Records Management, 202-418-2991, or by email to PRA@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Second Further Notice of Proposed Rulemaking (SFNPRM), FCC 24-5, adopted January 25, 2024, and released January 26, 2024. The full text of this document is available by downloading the text from the Commission's website at: <https://docs.fcc.gov/public/attachments/FCC-24-5A1.pdf>

Synopsis

1. In establishing a mandatory DIRS reporting obligation for subject providers in the Second Report and Order, released simultaneously with the Second Further Notice, we remain cognizant that a complete picture of the available means of communication and dissemination of critical emergency information necessitates that we evaluate whether additional reporting segments are appropriate. While we previously sought comment on the inclusion of mandatory DIRS reporting obligations for television broadcasters, radio broadcasters, and satellite providers, the ensuing record convinces us that these potential reporting entities are sufficiently different in kind and resources from subject providers in the Second Report and Order that additional information is needed. In addition, we note the growing presence of the First Responder Network (FirstNet) as a provider of critical public safety communications services in a variety of disaster contexts and seek comment on whether information on FirstNet's status

should be permitted or required in DIRS, and whether NORS reporting should also be extended to encompass its services. While the Commission previously sought comment on the inclusion of BIAS providers in our reporting regimes, in light of the Commission's recently released Open Internet Notice in which the Commission proposes re-classifying BIAS providers as a telecommunications service under Title II of the Communications Act of 1934, as amended (Communications Act), we find it prudent to revisit this issue, and refresh the record on this topic. See FCC, Safeguarding and Securing the Open Internet, Notice of Proposed Rulemaking (SFNPRM) (88 FR 76048, November 3, 2023), WC Docket No. 23-320, released Sept. 28, 2023, <https://docs.fcc.gov/public/attachments/DOC-397309A1.pdf> (Open Internet NPRM).

2. Through this Second Further Notice, we propose additional enhancements to DIRS in order to further improve communications and network resilience during emergencies specific to these segments of the communications network ecosystem and in response to the considerations raised by parties in the previous comment period. In addition, we seek comment on targeted expansions of the NORS system to advance similar goals for network reliability in non-disaster contexts and to address technological platforms providing essential components of an evolving and highly integrated network ecosystem supporting public safety and other critical services. For example, since the Commission issued its initial NPRM in this matter in 2021 (86 FR 61103, November 5, 2021), outage reporting and notification requirements were also adopted for covered 988 service providers. Should we extend mandatory DIRS reporting to this class of providers?

Second Notice of Proposed Rulemaking

A. Outage Reporting by Broadcast Entities

3. As broadcast providers, as well as satellite and broadband providers, have varying needs and differing responsibilities from the subject providers addressed in the Order, we find it vital to explore the elements and current workings of both the NORS and DIRS systems in accordance with these specific providers. Particularly, we examine reporting requirements for NORS and

DIRS, consider and compare the varying infrastructures of different providers, and determine whether there should be unique or modified reporting standards. We propose requiring TV and radio broadcasters report in both NORs and DIRS based on the type and modality of certain broadcast infrastructures and seek comment on this proposal. We seek comment on the classes of broadcasters that should be included as mandatory filers, whether a simplified reporting process would be appropriate, and what reporting elements should be included for such a purpose in NORs and/or DIRS.

4. Unlike the providers that are the otherwise discussed herein, broadcasters do not currently report in NORs. They may, however, voluntarily file reports in DIRS if they so choose. Broadcasters, however, play a crucial role in keeping the public updated on the status of public infrastructure and emergency response efforts as within the EAS distribution chain and provide for critical information including, for example, evacuation orders, real-time guidance from public safety organizations, and the availability of other public services. Broadcasters play a particularly important role in ensuring that non-English-speaking and rural communities have access to up-to-date emergency information during times of exigency, both on a localized basis and during widespread disasters.

6. In staff's experience, broadcasters voluntarily provide information in DIRS for between 20% and 35% of the stations in most activations. This, however, leaves gaps in the ability to adequately gauge the available communications pathways to disseminate information during emergencies. These statistics are based on DIRS data collected for Hurricane Lee, Hurricane Idalia, and Hurricane Ida. Beyond the disaster context, the Commission generally lacks timely insight into the resiliency of segments of the broadcast ecosystem. For example, the Commission's rules only require TV broadcast stations to notify the Commission within 10 days of discontinuing operations. The Commission, therefore, as well as other emergency response officials, may be unaware that a broadcast station that might otherwise be transmitting emergency, weather, or other timely government notices, is off air, and that its listeners are not

receiving relevant information. As such, the Commission has limited ability to know or understand on a timely basis when broadcast stations' facilities are impacted by infrastructure, equipment, or power failures, cybersecurity incursions or other issues that impact their ability to disseminate a signal. We believe this to be a particular deficiency in light of the broadcast community's critical role in the EAS and the need for emergency officials and the Commission to be able to have information on, and insight into, the operational readiness of this system at a moment's notice. We seek comment on this analysis.

7. We believe mandatory DIRS reporting for broadcasters could ensure a standardized and coordinated approach among entities potentially impacted by disasters, allowing authorities to make informed decisions about emergency response activities and avenues to communicate with the public during emergency situations. We seek comment on this belief. We believe this could be of particular significance given broadcasters' role in the EAS, as well as the continued reliance on broadcast communications by underserved and non-English-speaking communities for the dissemination of emergency and weather-related information. Objections to mandatory DIRS reporting for the broadcast community may overlook the fact that disasters often come with uncertainty and unpredictability. In such situations, as the Commission has experienced, a voluntary system does not guarantee comprehensive and accurate information for response officials, potentially leading to gaps in emergency response. While we understand REC Networks' concerns about the potential burden of mandatory reporting for smaller broadcasters, it is important to recognize that emergencies demand a coordinated effort to disseminate information quickly and effectively, or to provide follow up information to constituents over the course of a disasters as conditions change. We seek comment on whether, by participating in mandatory DIRS reporting, even smaller broadcasters can contribute to a broader emergency response network, ultimately benefiting the communities they serve, and if the benefits of requiring such reporting outweigh any burden on such broadcasters. In light of concerns expressed for smaller providers, however, we seek comment on whether we should consider

adopting different reporting requirements for small and large broadcasters and, if so, how should those lines be drawn? What specific challenges do small broadcasters experience, and how can the Commission require DIRS reporting while addressing these challenges? We also seek comment on whether low power broadcast stations should be excluded from this proposed mandate. We note that low power television and low power FM radio do not serve as Primary Entry Point (PEP) stations or Local Primary (LP) stations within the EAS daisy chain. Would this exemption disproportionately impact underserved or non-English speaking communities? Does the potential overlap in broadcast stations' coverage areas mitigate concerns regarding any exclusion low power broadcast stations? Conversely, should booster or translator stations, which we do not propose to subject to our reporting requirement, be included?

8. DIRS serves as a foundational tool for ensuring that the right information reaches the right people at the right time. Additionally, we believe that concerns about mandatory DIRS participation straining limited resources during disasters should be considered against the backdrop of Federal, State, local, Tribal, and territorial emergency response needs and invite comment on this balance. We believe a unified mandatory reporting system could minimize duplication of efforts and enable authorities to allocate resources efficiently as the Commission could instead collect data on behalf of all such entities and share it with these government entities in real-time (or as close to real-time as possible given the particular disaster or emergency situation) rather than multiple governments collecting the same information. Maintaining DIRS as a voluntary system for some segments of the communications ecosystem could lead to incomplete data during critical times, hindering the effectiveness of disaster response. Finally, we believe that NAB's advocacy for voluntary DIRS participation, based on the 2007 assessment of Hurricane Katrina, overlooks the advancements in technology across communications platforms, the growth in DIRS as an informational resource since that time, changes to the alerting environment to include the advent of WEA and IPAWS, as well as the changing landscape of emergency response as the frequency and severity of disasters increase.

While the voluntary state of DIRS may have been suitable back in 2007, the state of DIRS has not been reevaluated in almost two decades and the state of emergencies and disasters has significantly changed in the interim, as have advances in technology and resiliency solutions. As an alternative, NAB proposes a government-funded automated system that identifies which broadcast stations are operating during a disaster using “specialized spectrum observation equipment to determine the radio spectrum and identify disaster-related communications outages . . . [and] studying the radio frequency spectrum ‘Pre-disaster’ and ‘Post-disaster’ and comparing those results to each other and to licensee databases to determine which critical infrastructure systems are down.” While this approach could be useful, this more complex solution is beyond the scope of this proceeding as we are focused, and believe that, the shift from voluntary to mandated reporting could provide the Commission, other agencies, and the providers themselves with a larger scope of infrastructure status during and after disasters without the need for funding and creating specific systems beyond DIRS. Instead, the rules we propose here would merely require those to report who have not in the past but have the capacity to do so and would mandate reporting for a system that already has existed for years and will improve from including more participants for a wider view. We seek comment on this analysis.

9. While we acknowledge the position that some broadcasters may have unique limitations on their number of employees and the technical and legal expertise of those employees in addressing regulatory matters compared to the subject providers addressed in the Second Report and Order who report in NORS and DIRS, we believe that there is a significant public interest in ensuring that broadcasters’ facilities are operational and that the Commission has an accounting of when these facilities are offline, as broadcasters are often a principal way in which some communities, including certain rural, minority and non-English speaking, and elderly communities, receive critical emergency information. Without information on the operational status of broadcasters’ facilities, the Commission and its partners only have an incomplete picture of available resources which could stunt the Commission’s public safety initiatives and

its ability to direct resources to certain communities or share emergency information, especially as there is no NORS requirement for broadcasters. We seek comment on these views. We also seek comment on the specific limitations and challenges of small broadcasters and the way in which the Commission can assist or encourage cooperation with larger broadcasters who have more resources and funding and/or easier ways that small broadcasters can file. For small broadcasters that lack the ability to coordinate with larger broadcasters, what limitations or challenges do they face? Should the Commission consider relief to reduce the burden of reporting on these small broadcasters? How should we define small broadcasters?

10. Beyond the disaster context, the Commission generally lacks timely insight into the resiliency of segments of the broadcast ecosystem. For example, the Commission's rules only require TV broadcast stations to notify the Commission within 10 days of discontinuing operations. The Commission, therefore, as well as other emergency response officials, may be unaware that a broadcast station that might otherwise be retransmitting emergency, weather, or other timely government notices, is off air, and that its listeners are not receiving relevant information. As such, the Commission has limited ability to know or understand on a timely basis when broadcast stations' facilities are impacted by infrastructure, equipment, or power failures, cybersecurity incursions or other issues that impact their ability to disseminate a signal. We believe this to be a particular deficiency in light of the broadcast community's critical role in the EAS and the need for emergency officials and the Commission to be able to have information on, and insight into, the operational readiness of this system at a moment's notice regardless of whether there is a declared disaster that would otherwise trigger DIRS.

11. As such, we propose requiring TV and radio broadcasters report in both NORS and DIRS subject to a simplified reporting process based on the type and modality of certain broadcast infrastructures. Both NORS and DIRS provide distinct information serve distinct purposes and requiring reporting for both systems would help the Commission see outages across a geographic area via NORS, including so-called "sunny day" outages, while DIRS reports are submitted for

the affected area during a specific activation. We seek comment on this proposal. We also seek comment on the scope of such simplified reporting, the ability of broadcasters to provide it during events where DIRS is activated, and the burdens of doing so. Alternatively, would a simplified reporting requirement be preferable if the Commission could craft the requirement so that it would not hinder restoration efforts? If so, what could such a requirement entail? For instance, should simplified reporting in DIRS merely require a broadcaster to identify whether it is “on-air” or “off-air,” (i.e., unable to operate or broadcast regularly) or provide details on any necessary restoration? Should we also require broadcasters to notify us within 24 hours of going silent when DIRS has been activated and within 24 hours of resuming service after DIRS activation has been lifted? What alternative NORS or DIRS reporting intervals would be appropriate? Should NORS or DIRS filings specify if alerting capabilities are impacted, including whether the broadcaster’s access to FEMA’s IPAWS is operational? Should we require notice when a broadcaster’s ability to access IPAWS is disrupted regardless of the operational status of the transmitter? Should the DIRS filing requirement apply to translators and boosters that merely pass along programming from other stations without generating their own? We propose that reporting in NORS or DIRS would not supplant the ongoing requirement to notify the Commission about going silent in the Licensing and Management System (LMS); does this create duplication in effort? Further, a broadcast station can go silent for numerous reasons and reasons unrelated to disasters and emergencies at times. NORS puts these broadcast stations in a specific outage light and a direct path to a public safety specific view of what broadcast stations are experiencing outages and which are not. A silent station is not necessarily synonymous with a station experiencing an outage and should be reported distinctly from each other. We seek comment on ways that this information can be shared with the Commission.

12. What estimated costs would be part of the new reporting requirements? How would such reporting improve mortality or other measures of welfare? How does broadcasting differ in both cost and benefit from the subject providers mandated in the Second Report and Order based on

technology and/or how the technology is used? As some broadcasters may receive an automated alert when their facilities are “down,” to what extent could broadcasters use automated alerting to provide operational status directly to DIRS/NORS?

13. We estimate that the proposed filing rules would incur no more than \$33.7 million total per year to broadcasters, including \$33.5 million for NORS filing and \$212,000 for DIRS reporting. Among the 21,392 broadcast stations (which does not include 12,055 FM translators & boosters, UHF translators, and VHF translators), we estimate that approximately an average of 2,755 stations will have to file reports in NORS per year under the proposed rules. Per NORS data, each provider files an average of 2,175 reports in a 12-month period. Assuming that each report takes 10 minutes to file, we estimate that the total cost is approximately \$33.5 million per year for broadcasters to comply with the NORS reporting obligation. For DIRS reporting, we assume broadcast stations are evenly distributed across counties, and there would be about 7 broadcast stations per county. Given that an average of 339 counties were affected by DIRS activations for an average of 14 days per year, we estimate that the total cost of complying with DIRS reporting rules is approximately \$212,000 per year for broadcasters. We treat the cost estimate as an upper bound because it does not account for the cost savings from the waiver of NORS reporting obligation during DIRS activations, the potentially simplified reporting processes for broadcasters, or voluntary DIRS filings already being submitted by stations. We seek comment on our cost estimates for broadcasters to comply with the NORS and DIRS filing rules. The estimate may also be overstated because we rely on the average number of reports from all types of providers, including wireless providers which tend to file more reports than other types of providers. We note, in particular, that the record indicates that the average number of outages, or 2,175, which we use for our NORS reporting cost estimates, may be too high, resulting in a corresponding overestimate of costs. We seek comment on the average number of annual outages that broadcast stations experience.

14. With respect to NORS reporting, should we require that NORS filings provide more detail than that proposed for DIRS, particularly with respect to final reports filed within 30 days? What would the appropriate thresholds be to trigger broadcast reporting obligations? Is a simple duration standard sufficient? Satellite providers are required to file a notification in NORS within 120 minutes of an outage's discovery – is the same standard appropriate here? Why or why not? Should initial reports at 72 hours and final reports in 30 days also follow? How should an outage be defined for broadcast services? We seek comment on the costs and benefits of these options.

B. Outage Reporting by Satellite Providers

15. We seek comment on whether to require DBS providers, SDARS providers, Fixed Satellite Service (FSS) providers, and Mobile Satellite Service (MSS) providers report in DIRS, and if so, what fields should be included in mandatory DIRS reporting as to these providers. We further seek comment on whether these or other categories of satellite providers should be required to file in NORS or DIRS, and how the existing NORS reporting thresholds for satellite providers should be modified to reflect technological changes to these networks that have occurred since the initial adoption of the rules.

16. While it is a small measure of burden to require an additional type of reporting, we believe that the public safety benefits outweigh the cost burden to satellite providers by providing the Commission and therefore consumers with potentially life-saving information. We seek comment on this belief. All satellite providers are currently required to report in NORS and are able to voluntarily report in DIRS. Yet the Commission has observed that satellite providers supply only a very small number of NORS reports, and we currently lack comprehensive insight as to why satellite providers file so few mandatory NORS reports. Satellite providers similarly provide very few voluntary DIRS reports. The Commission's original 2004 NORS outage reporting thresholds for satellite providers remain in place today, despite changes that have occurred to the status of satellite provider network operations since that time. Specifically,

outage reporting in NORS for satellite providers is triggered for outages meeting the 30 minute duration threshold and manifesting as “a failure of any of the following key system elements: One or more satellite transponders, satellite beams, inter-satellite links, or entire satellites.” For MSS satellite operators, reporting is triggered where the outage “manifests itself as a failure of any gateway earth station, except in the case where other earth stations at the gateway location are used to continue gateway operations within 30 minutes of the onset of the failure.” Certain satellite infrastructure used for internal networks and one-way distribution of audio or video are also excluded from reporting obligations in NORS. As discussed with subject providers in the Second Report and Order, a voluntary state for reporting makes it difficult for the Commission to know whether entities are electing not to report because reporting is voluntary or whether they do not physically have the capacity to report because of infrastructure damages or the disaster event itself.

17. In response to the proposal regarding the requirement for satellite providers to report in DIRS, we received several industry comments. DirecTV does not opine on whether service providers should report on infrastructure status through DIRS post-emergencies, but suggests that if such a requirement is imposed on DBS systems like theirs, reporting should be confined to key infrastructure under the provider’s control. They advocate for reporting limited to transmitting earth stations supporting the DBS system. Iridium, an MSS provider, asserts that satellite services like theirs, which do not rely on ground infrastructure for user links, remain largely unaffected by terrestrial disasters and should not be required to submit DIRS reports at all. In alignment with DirecTV’s viewpoint, SDARS provider SiriusXM agrees that any DIRS reporting requirement for satellite networks should be limited to “key infrastructure under the provider’s control,” citing the difficulty of determining subscriber receiver functionality during disasters and the lack of location information for SDARS receivers in vehicles or mobile devices.

18. Based on the responses to the proposal regarding the requirement for satellite providers to report in DIRS, we received several industry comments that raise issues we believe merit

additional inquiry. DirecTV and Iridium express concerns that any mandatory DIRS reporting for satellite providers should only include information on key infrastructure equipment within a satellite provider's control (e.g., excluding equipment installed at customers' homes) that, if compromised, could affect the ability of the satellite provider to offer service. However, Iridium itself says that "[s]atellite services provide essential connectivity in disaster response and recovery, including voice and data services, satellite imagery, and satellite for cellular backhaul. Iridium [says they] play[] an important role in enabling critical communications before, during, and after disasters. [The] demand for and use of Iridium's MSS devices spikes and government agencies and consumers use Iridium devices more extensively." In cases where a terrestrial component is involved, reporting in DIRS could help authorities gauge the extent of disruption and fill-in informational gaps daily filing updates for an entire affected area, which NORS does not do. Finally, we acknowledge that SiriusXM, Iridium, and DirecTV share the view that they do not have all the location information that current DIRS forms request as some of their equipment is located in customers' vehicles or in other mobile facilities. We seek comment on these concerns. Are there satellite providers that do not have any terrestrial components that could be affected by natural disasters, or should we limit reporting to include only specific types of terrestrial network components? We note, however, that a better understanding of network operations of various satellite technologies would give the Commission insight into the reliability of connectivity for customers located in remote or rural areas, who may disproportionately rely on satellite-based communications for broadband connectivity or where rural communications companies may more heavily rely on satellite capabilities for backhaul. We believe that knowledge of impacts to satellite communications capabilities, particularly in disaster contexts, could also provide situational awareness for emergency response personnel in some of the most potentially dire circumstances where impacts to solely terrestrial based infrastructure may be more severe. We seek comment on these views.

19. We also seek comment on whether and how the NORS reporting thresholds for satellite providers should be modified to reflect technological changes to these networks since the Commission's original 2004 reporting rules were effectuated. Do the definitions currently used in part 4 remain the most salient way to capture impactful outages? If not, what alternative thresholds should be utilized? Is 120 minutes the appropriate time threshold for outage notifications for all satellite providers? Are there additional data elements specific to some or all satellite reporting entities that should be added to or eliminated from the existing notification, initial report or final report templates? Should the scope of reporting satellite providers be amended, or exclusions re-examined? Are there estimates of how the reporting would improve public safety or other measures of welfare? What are the estimated costs of the proposed reporting requirements? How do satellites differ in cost and benefits from the subject providers mandated in the Second Report and Order based on their difference in technology and use?

20. Although these satellite providers were not addressed in the Second Report and Order we seek comment on whether the Commission should require satellite BIAS providers and satellite broadcast providers to report in DIRS as the subject providers in the Second Report and Order have been mandated. If adopted, we seek comment on potential modification of the types of information requested in DIRS forms pertaining to satellite providers and seek comment on how to best capture information relevant to satellite network status and availability in potential disaster scenarios. We seek comment on the types of satellite equipment that are relevant to ensuring operation during exigencies and on whether DIRS forms need to be revised to include or exclude certain pieces of infrastructure equipment. Should our rules, as some commenters suggest, differentiate more completely between types of infrastructure within the satellite providers network and how it may be impacted? What are the costs and benefits of the proposed reporting?

21. According to an analysis of operational licensee and ownership data, there are a total of 18 satellite service providers, including six FSS providers, six MSS providers, two DBS

providers and one SDARS provider. If all 18 providers are subject to the DIRS reporting mandate, we estimate that the total cost would not exceed \$545,000 per year. We seek comment on our cost estimate.

C. Outage Reporting by FirstNet

22. We seek comment on whether FirstNet should be subject to reporting requirements in NORS, DIRS, or in both systems. FirstNet is not currently subject to NORS or DIRS outage reporting obligations and has never participated in NORS or DIRS on a voluntary basis.

However, the Commission believes that the information collected through these reports will provide us with a more complete picture of the overall health and resiliency of the nation's communications infrastructure, particularly during disasters during which FirstNet is specifically designed to provide more robust public safety communications. Thus, the Commission is now considering whether outage reporting of FirstNet operations is necessary and appropriate given its importance to the public safety community and the unique customer base it serves.

23. The First Responder Network Authority (FirstNet) is an independent authority within the National Telecommunications and Information Administration (NTIA). FirstNet serves as a high-speed, nationwide wireless broadband network for first responders. FirstNet was established as an independent authority within the Department of Commerce with the responsibility of standing up and managing the network. After a competitive Request for Proposal process, AT&T won a 25-year contract to deploy, operate, and maintain the network and use the company's telecommunications network assets (in addition to the 20 MHz of FirstNet spectrum) to connect FirstNet users. While FirstNet is required to provide an annual report to Congress and holds monthly public meetings informing its Board of FirstNet's operations, these reports do not supply near real-time information on FirstNet outages and infrastructure status. Moreover, while FirstNet's operations partner, AT&T, is subject to the Commission's reporting rules (and so some information on FirstNet may be inferred as to network health and operation through AT&T's filings) information on FirstNet specific

infrastructure and services is not available to the Commission, or to the public safety personnel the network serves. In 2013, the Commission last sought comment on whether to institute reporting obligations on FirstNet. FirstNet opposed this proposal on grounds that FirstNet already had Congressionally created obligations to consult with stakeholders and report to Congress on its network. The Commission did not draw conclusions on FirstNet's arguments or make final determinations on the merits of a reporting requirement, deferring any action for future consideration. Since that time, however, parties have expressed concern regarding the lack of information with FirstNet's operations and the performance of its network during times of crisis. For example, parties to the proceeding addressing FirstNet's recent license renewal process and participating in the Commission's hearing following Hurricane Ida each expressed frustration in this regard.

24. To ensure that we have a fuller picture of the health of all public safety networks and that our first responders have the information they need, we seek comment on whether FirstNet, or AT&T, should file outage reports with the Commission in NORS with respect to FirstNet infrastructure and services. As the related Second Report and Order adopts a mandatory obligation for subject providers to file in DIRS, we seek comment in this Second Further Notice on whether this obligation should be extended with regard to FirstNet. Given the importance of the clients served by FirstNet, we seek comment on this position. Alternatively, we seek comment on whether one or both of these obligations should be voluntary. Consistent with the purpose of NORS and DIRS reporting in other contexts, timely situational awareness on the part of the Commission and its Federal, State, Tribal, and territorial information sharing partners could allow more nimble decision making when public safety may need alternative communications paths or operational support.

25. In considering this issue, we remain cognizant of FirstNet's unique status as a Congressionally-created entity with statutory reporting requirements. Due to its preexisting reporting requirements, we seek comment on providing the Commission with this type of

reporting in addition to the FirstNet reporting already required by statute and on the Commission's authority to request that of FirstNet as a Commission licensee. Do the Commission's general Title III authorities, coupled with section 6003(a) of the Public Safety Spectrum Act, support our ability to seek information beyond FirstNet's statutorily mandated reports? What other provisions might support such reporting? What quantitative estimates of potential costs and benefits of this integration are available? What would be additional improvements to public safety and other measures of welfare due to specifically reporting about the FirstNet network? How would the magnitude of these benefits compare to the benefits estimated in the Second Report and Order?

D. Reporting By Broadband Internet Access Service Providers

26. In the 2021 Resilient Networks Notice, 36 FCC Rcd 14802 (2021), the Commission sought comment on the inclusion of broadband providers within the mandatory reporting rules for NORS. Currently, while BIAS providers may voluntarily report their status in DIRS when activated, they are not required to report their status in NORS. The Commission sought input on the public interest benefits and the costs of reporting of broadband service outages, as well as whether the inclusion of broadband reporting in NORS reporting would improve emergency managers' situational awareness during disasters, help identify broadband outage trends, and/or support first response and network reliability efforts. Since issuing that Notice, the FCC released the Open Internet Notice in 2023, which seeks comment on reestablishing the framework the Commission adopted in 2015 to classify BIAS as a telecommunications service and to classify mobile BIAS as a commercial mobile service. The Open Internet Notice, WC Docket No. 23-320, posits that restoration of Title II authority will allow the Commission to prevent BIAS providers from engaging in harmful consumer practices, strengthen the Commission's ability to secure communications networks and critical infrastructure against national security threats, and better enable the Commission to protect public safety during disasters and other emergencies including by preventing blocking and discrimination of Internet traffic.

27. In response to the 2021 Resilient Networks Notice (86 FR 61103, November 5, 2021), proponents of a NORS/DIRS filing requirement for BIAS providers agree with the Commission's premise that "improving the information in these important systems will be helpful for situational awareness and ongoing efforts to improve network resiliency," although APCO also notes that even more specific information is typically required by emergency personnel. The National Association of State Utility Consumer Advocates (NASUCA) similarly supports outage filings by BIAS providers, noting that BIAS is used to provide emergency information to the public about emergency situations. For DIRS in particular, NCC notes that "[r]equiring providers to include broadband data can fill information gaps for areas that lack DIRS reporting" which "may be due to nonparticipation by providers or a lack of broadband connection." Public Knowledge states, "[o]ne of the most significant problems when discussing network reliability and resiliency is that there is no meaningful way to measure it other than 'is the network operating today?'" This is why Public Knowledge called on the Commission for years to evaluate end-user technologies based on objective metrics, which are consistent with the FCC's latest proposals for reform, including: network capacity under stress; call quality; device interoperability; service and support for users with disabilities; system availability; service to 911 entities and PSAPs; cybersecurity; call persistence; call functionality; and wireline coverage."

28. Commenters against broadband reporting argue that it is duplicative or otherwise unnecessary. T-Mobile, for example, asserts that wireless providers should not be required to separately report BIAS outages as such reporting requirement "would be duplicative of other outage reporting requirements that CMRS providers are already subject to." T-Mobile further states that "[e]very commenter in the prior proceeding that addressed whether distinct outage reporting rules should apply to BIAS offered by CMRS providers opposed such a requirement" and shares that "CMRS providers long have been subject to the Commission's network outage reporting rules and that subjecting the CMRS industry to BIAS outage reporting will increase costs, cause confusion, and produce little if any benefits." Verizon argues that some of the

Commission’s reporting proposals “would constitute reporting for its own sake without consumer benefit” and that “[w]ith respect to broadband services . . . existing outage reporting requirements already capture most significant broadband outages since broadband and voice services increasingly use the same IP-enabled networks, so additional rules would be duplicative.” SIA suggests that the Commission should “issue a supplemental public notice in this proceeding that provides a clear definition of a ‘broadband outage’ and include potential thresholds that would require providers to file a report in NORS.” NCTA “urges the Commission not to significantly alter [DIRS] and [NORS] . . . [as] DIRS can be valuable in providing emergency managers with facts on the ground during major disasters, and NORS can play a valuable role in identifying trends in network reliability, provided that appropriate protections are in place for sensitive network information with serious competitive and national security implications. As the Commission considers potential expansion of these programs, it should be sensitive to the burdens that reporting places on providers during disaster situations and take care not to duplicate other information sharing that is already occurring at the state and local level or to impose burdensome reporting requirements that divert resources away from maintaining and restoring service to customers.”

29. Consistent with an objective of the Second Report and Order to provide a more complete and comprehensive snapshot of the status of critical communications networks, we believe that reported data to NORS and DIRS should also encompass disruptions to BIAS, including mobile and fixed wireless BIAS service. In light of the Commission’s pending consideration of the regulatory classification of BIAS as a telecommunications service under the Communications Act and the increasing importance of BIAS to a host of uses by consumers, public safety officials, and others, particularly during times of disaster, we renew our inquiry into whether BIAS providers should be required to submit outage reports in NORS. We also seek comment on whether participation in DIRS when activated should also be mandatory.

30. The Open Internet Item seeks comment on whether Title II classification would enhance the Commission's authority to impose reporting requirements on BIAS providers for BIAS outages should the Commission classify BIAS as a Title II service. We seek comment on the impact of Title II classification on our authority to require BIAS providers to file NORS and/or DIRS reports. We also renew our assertion that the statutory provisions cited in the 2016 document considering outage reporting for BIAS provide the Commission with authority to require such reporting and seek comment on additional authority that may be relevant. Among other considerations, we seek comment on how outage reporting might support the Commission's obligations under, and implementation of, the digital discrimination provisions of the 2021 Infrastructure Investment and Jobs Act.

31. We estimate that the proposed filing rules would incur no more than \$3.9 million total cost per year to BIAS providers, including \$3.5 million for NORS filing and \$394,000 for DIRS reporting. Among the 2,234 BIAS providers, we estimate that approximately an average of 288 BIAS providers will have to file reports in NORS per year under the proposed rules. Per NORS data, each provider filed an average of 2,175 reports in a 12-month period. Assuming that each report takes 10 minutes to file, we estimate that the total cost is approximately \$3.5 million per year for BIAS providers to comply with the NORS reporting obligation. For DIRS reporting, we estimate that on average there are 13 BIAS providers in each county. Given that an average of 339 counties were affected by DIRS activations for an average of 14 days per year, we estimate that the total cost of complying with DIRS reporting rules is approximately \$394,000 per year for BIAS providers. We treat the cost estimate as an upper bound because it does not subtract the cost savings from the waiver of NORS reporting obligation during DIRS activations and the potentially simplified reporting processes for BIAS providers. We seek comment on our cost estimates for broadband service providers to comply with the NORS and DIRS filing rules.

32. With respect to reporting obligations of BIAS providers, we seek comment on how to define an "outage" within the context of BIAS provision. Is the current threshold of 900,000

user minutes appropriate in this context? What other ways should the Commission measure “impact” for BIAS outage reporting purposes? Is the current 30-minute threshold otherwise utilized in part 4 appropriate, coupled with a scope metric? Should the duration metric be higher or lower? Should reporting be required based on significant degradation in throughput and, if so, how should that be measured? Should the definition consider redundant or alternate pathways for data already being reported to the Commission pursuant to some other requirement? We seek comment on how an appropriate threshold would support the ability of the Commission to discern when outages or significant network degradation stemming from issues such as cybersecurity breaches, wire cuts, infrastructure damages from natural disasters, and/or operator errors or misconfigurations in support of its public safety obligations, and what those thresholds should be.

33. In considering the record to date, parties objecting to the inclusion of BIAS in reporting obligations argued that such reporting would be redundant, as many providers in this space already report outages under different provisions of part 4. We do not believe, however, that requiring the Commission or other emergency response personnel to infer when a BIAS outage occurs from an outage report made by a communications provider as to a related service is a tenable way to mitigate the impact of a network outages, or promptly and clearly provide emergency managers with an understanding of how they can communicate with the public and how the public can communicate with them. We seek comment on this view, and more generally on the costs and benefits of our proposal. We also seek comment on any other service categories that might be included in order to gain a relevant picture of network outage impact on the call/data transmission chain; for example, should SS7 providers or other transport providers be required to report in DIRS? Are there other classes of broadband providers that should be reporting in NORS and/or DIRS? We also seek comments on ways to mitigate any perceived burden for filers that would otherwise be obligated, in whole or in part, to report outages on services already subject to the Commission’s part 4 rules.

E. Reporting Mobile Recovery Assets in DIRS

34. We seek comment on whether current or future providers who are subject to DIRS reporting requirements should be required to supply the Commission with information concerning the location of their mobile recovery assets, and specifically whether providers should be required to supply the Commission with information on the location of their Cells on Wheels (COWs) and Cells on Light Truck (COLTs) or comparable assets, either as a component of their daily DIRS reporting or through alternate means. Additionally, we seek comment on whether subject providers should be required to quantify the traffic load provided by those assets. For example, could providers report on select metrics such as the number of texts, voice minutes, broadband data provided by a recovery asset over the last 24 hours as well as the total data provided since that recovery asset was incorporated into that location, or other metrics? We note, for example, that these types of metrics may help with understanding the use of such assets on a long-term basis, gauging the speed of transition of traffic back to permanent network assets, and the utility of placement emergency uses such as 911 calling and distribution of emergency information. We seek comment on this position.

35. The Commission does not currently systematically collect information regarding the location of mobile recovery assets, although staff experience in providing disaster response support indicates to the Commission that public safety organizations and first responders critically need this information in the aftermath of disaster events to improve situational awareness and assist in coordinating on the ground recovery efforts. Currently, the Bureau's OEM Division will contact providers for this information on an event-by-event basis, with varying degrees of responsiveness to OEM's (non-compulsory) request.

36. We tentatively conclude that if information regarding the location of mobile recovery assets were required to be supplied in DIRS, the Commission would obtain this information more efficiently and uniformly across providers than is currently the case, likely leading to better

public safety outcomes. We seek comment on this conclusion. Should we require such reporting? If so, which subject providers should be required to provide such information?

37. If reporting is adopted, we seek comment on what types of mobile assets should be reported (including COWs and COLTs) based on provider type, the level of granularity for which location information should be reported (e.g., on a zip code or street address basis) and on whether this information should be reported directly in existing DIRS forms or through other means. Should information on the time of deployment, coverage, or available power for such assets be reported as well? We further seek comment on whether the reporting should indicate whether the mobile recovery assets support WEAs, as we note in particular the ability to disseminate WEAs in disaster environments may be of critical importance for evacuation, safety of life, or other disaster mitigation and response efforts.

38. We also seek comment on the logistics and parameters of these submissions. How frequently should this information be reported? We note that in some instances mobile assets are repositioned at the request of state or local emergency managers; should such repositioning be reported? Should this information be available to those entities that have access to DIRS under the Commission's information sharing framework? Should this information be treated as presumptively confidential? We further seek comment on the costs and benefits of adopting a reporting requirement for mobile recovery assets. What would be additional improvements to public safety and other measures of welfare due to improved information to the Commission about mobile recovery assets? How would the magnitude of these benefits compare to the benefits estimated in the Second Report and Order?

F. After Action Reporting

39. In the Second Report and Order, we establish a mandate for subject providers to furnish the Commission with a conclusive status report within 24 hours following the deactivation of DIRS. This report will serve as a crucial source of information concerning the restoration of communication infrastructure that may still be offline in the aftermath of a disaster. However, it

is important to note that this report alone will not offer a comprehensive overview of how networks performed throughout the disaster. For that reason, we seek comment as to whether providers subject to DIRS reporting requirements should be required to supply the Commission with “after action” reports detailing more specifically how their networks fared after the event or exigency and the nature, timing, duration, and effectiveness of their pre-disaster response plans after the Commission’s deactivation of DIRS and within 60 days of when the Bureau, under delegated authority, issues a Public Notice announcing such reports must be filed. We seek comment as to whether providers would prefer an after action report template to complete or if the flexibility of a free-text document would be better suited to an entity’s individual needs for reporting.

40. The Commission does not currently collect qualitative information on how a provider’s efforts and preparation may have impacted the resiliency of its networks over the duration of a DIRS event. The MDRI is activated by the Commission in response to real-world exigencies and requires that providers take steps to further network resiliency. The Commission recently adopted a related rule, however, that requires facilities-based mobile wireless providers to submit a report detailing the timing, duration, and effectiveness of their implementation of the Commission’s MDRI provisions within 60 days of when the Bureau, under delegated authority, issues a Public Notice announcing such reports must be filed.

41. We believe that the collection of this “after action” information could better inform the Commission’s analysis and any subsequent assessment or action that the Commission may take in the aftermath of disaster events. Further, we believe that this approach could complement the MDRI reports required of facilities-based mobile wireless providers by detailing additional aspects of a provider’s network resiliency plans and actions. We seek comment on this belief, and on whether these reports should be required of all DIRS filers, or just a subset, and seek comment on how to address potential overlap between reports filed pursuant to the MDRI and under the proposal herein. Are there ways to minimize such overlap, or to incorporate MDRI

related filings such that burden is minimized for this class of filers? Should subject providers be held to these after action reports? Should such reports be confidential, or should they be shared, for example, with the Federal, State, local, Tribal and territorial public response agencies that managed a particular disaster pursuant to which such reports are filed? We have proposed that these after action reports be filed 60 days the Bureau issues a PN announcing such a requirement; should the trigger be tied to the event? Is 60-days too much or too little of a timeframe?

42. We also seek estimates on the benefits and costs of this proposal for mandatory after-action reports. How much would public safety and other measures of welfare improve due to additional information to the Commission caused by this proposal? How would the magnitude of these benefits compare to the benefits estimated in the Second Report and Order?

Procedural Matters

43. **Paperwork Reduction Act.** This document contains proposed new and modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

44. **Ex Parte Rules – Permit-But-Disclose.** The proceeding initiated by the Second Further Notice shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must: (1) list all persons attending or otherwise participating in the meeting at which

the ex parte presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

45. **Comment Period and Filing Requirements.** Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS. <https://www.fcc.gov/ecfs>.
- Paper Filers: Parties that choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington DC 20554.
- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. *See* FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788, 2788-89 (OS 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.

46. **People with Disabilities.** To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

47. **Regulatory Flexibility Act.** The Regulatory Flexibility Act of 1980, as amended (RFA), requires that a regulatory flexibility analysis be prepared for notice and comment rulemaking proceedings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.” Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning potential rule and policy changes contained in this Second Report and Order on small entities. The FRFA is set forth in Exhibit B of the FCC’s Second Report and Order and Second Further Notice of Proposed

Rulemaking, FCC 24-5, adopted January 26, 2024, at this link:

<https://docs.fcc.gov/public/attachments/FCC-24-5A1.pdf>.”

48. We have also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of rule and policy change proposals contained in the Second Further Notice.

Written public comments are requested on the IRFA. Comments must be filed by the deadline for comments on the Second Further Notice indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

49. The Second Further Notice may contain proposed new or modified information collection requirements related to providers’ reporting of their roaming measures to the Commission. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on any such information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

50. **Providing Accountability Through Transparency Act.** The Providing Accountability Through Transparency Act requires each agency, in providing notice of a rulemaking, to post online a brief plain-language summary of the proposed rule. Accordingly, the Commission will publish the required summary of this Second Further Notice on <https://www.fcc.gov/proposed-rulemakings>.

Legal Basis

51. The proposed action is authorized pursuant to sections 1, 4(i), 4(j), 4(n), 201, 214, 218, 251(e)(3), 301, 303(b), 303(g), 303(j), 303(r), 307, 309316, 332, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i)-(j) & (n), 201, 214, 218, 251(e)(3), 301, 303(b), 303(g), 303(j), 303(r), 307, 309(a), 309(j), 316, 332, 403; sections 2, 3(b), and 6-7 of the

Wireless Communications and Public Safety Act of 1999, 47 U.S.C. sections 615 note, 615, 615a-1, and 615b.

Initial Regulatory Flexibility Analysis

52. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the Second Further Notice of Proposed Rulemaking (Second Further Notice).

Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Second Further Notice. The Commission will send a copy of the Second Further Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). The IRFA Analysis for the rules proposed in this Second Further Notice can be found as Exhibit C of the FCC's Second Report and Order and Second Further Notice of Proposed Rulemaking, FCC 24-5, adopted January 26, 2024, at this link: <https://docs.fcc.gov/public/attachments/FCC-24-5A1.pdf>.

Federal Communications Commission.

Marlene Dortch,
Secretary.

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