



FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 4

[PS Docket No. 21-346; PS Docket No. 15-80; ET Docket No. 04-35; FCC 22-50; FR ID 103483]

Disruptions to Communications

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, the Federal Communications Commission (Commission or FCC) takes steps to improve the reliability and resiliency of commercial wireless networks by codifying key provisions of the 2016 Wireless Resiliency Cooperative Framework (Framework). The Commission mandates key provisions of the Framework for all facilities-based wireless providers, expands the conditions that trigger its activation, adopts testing and reporting requirements, and codifies these modifications in a new “Mandatory Disaster Response Initiative” (MDRI).

DATES: The final rule is effective [INSERT 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: For additional information on this proceeding, contact Erika Olsen, Acting Division Chief, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-2868 or via email at Erika.Olsen@fcc.gov or Logan Bennett, Attorney-Advisor, Cybersecurity and Communications Reliability Division, Public Safety and Homeland Security Bureau, (202) 418-7790 or via email at Logan.Bennett@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Report and Order (RO), FCC 22-50, adopted June 27, 2022, and released July 6, 2022. 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-22-50A1.pdf>. When the FCC Headquarters reopens to the public, the full text of this document will also be available for public inspection and copying during regular business hours in the FCC Reference Center, 45 L Street NE, Washington, DC 20554.

Congressional Review Act: The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), concurs, that this rule is non-major under the Congressional Review Act, 5 U.S.C. 804(2). The Commission will send a copy of the Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. 801(a)(1)(A).

Synopsis

1. This document requires that all facilities-based mobile wireless providers, including each such signatory to the Framework, comply with the MDRI. As explained below, we find that the incremental costs imposed on facilities-based mobile wireless providers by these new requirements will be minimal in many cases and, even when significant, will be far outweighed by the nationwide benefits.

A. Mandating the Framework

2. The Resilient Networks notice of proposed rulemaking (Resilient Networks NPRM) (86 FR 61103, November 5, 2021) sought comment on whether providers should be required to implement the Framework's provisions and, if so, which providers should be subject to the requirements. We require that all facilities-based mobile wireless providers comply with the MDRI, which, among other elements, codifies the Framework's existing provisions. We defer for later consideration whether some similar construct to the Mandatory Disaster Response Initiative (MDRI) should be extended to entities outside of facilities-based mobile wireless providers in the manner described in the Resilient Networks NPRM. Many commenters address the merits and drawbacks of mandating the Framework's provisions for entities beyond the wireless industry, but this item addresses requirements for facilities-based mobile wireless providers only. We also defer for later consideration the proposals in the Resilient Networks NPRM related to promoting situational awareness during disasters and addressing power outages.

3. We find it appropriate to apply this requirement to all facilities-based mobile wireless providers. We recognize the merits of the current Framework and agree with the commenters who argue

that its provisions would be more effective if they were expanded to include entities beyond the Framework's current signatories. We observe that the existing Framework, which was developed specifically for use in facilities-based mobile wireless networks, would be more effective and valuable if extended to all providers operating those types of networks.

4. We make these requirements mandatory for all facilities-based mobile wireless providers. No commenter took issue with the Commission's authority to require facilities-based mobile wireless providers to implement the Framework. A number of commenters agree that the Framework's requirements should be mandatory for current signatories and other facilities-based mobile wireless providers. Our approach in this document is consistent with Verizon's view that the Framework "could apply to all wireless providers," AT&T's observation that the Framework could be applied to non-Framework signatories who are capable of roaming, and Public Knowledge's view that the Framework should be extended to at least the entire wireless industry. The California Public Utilities Commission (CPUC) opines that a mandatory approach would make reporting more effective and consistent, incentivize action from those providers that currently do not undertake Framework-like steps in the aftermath of disasters, create more accountability, and close a disparity in service for customers based on whether their provider follows Framework-like measures or not. Public Knowledge believes that by mandating some of the Framework's requirements, including those related to entering into roaming agreements with other providers, the Commission would lower transactional costs faced by small- and medium-size (e.g., regional) providers, making their adoption of such requirements more viable. We agree with these comments and find that mandating the Framework's requirements for a broader segment of the wireless industry, as provided by the MDRI we adopt in this document, will enhance and improve disaster and recovery efforts on the ground in preparation for, during, and in the aftermath of disaster events, including by increasing predictability and streamlining coordination in recovery efforts among providers. We find this to be true even for providers that already implement Framework-like steps. The efforts of all facilities-based mobile wireless service providers will be standardized based on a common set of required actions, thus better informing further Commission actions, enhancing resiliency, and better serving the public – particularly in times of need.

5. We reject the views of commenters who opine that codifying the Framework's requirements

(i.e., in the MDRI) would meaningfully limit the variety of solutions providers may implement or investments they may otherwise make in their network restoration and recovery efforts, e.g., due to fears that the efforts would make them non-compliant with these rules. These rules provide baseline actions and assurances that facilities-based mobile wireless providers will undertake to ensure effective coordination and planning to maintain and restore network connectivity around disasters. Nothing in this rule prevents or disincentivizes a provider from implementing additional measures that exceed the requirements of the MDRI. The record does not identify specific scenarios where taking additional steps beyond those required by the MDRI would make a provider non-compliant with the rules adopted in this document. Nevertheless, in the case that a provider desires to implement practices that would improve network resiliency but that, in some way, run counter to the rules we adopt in this document, a provider may explain these considerations in detail pursuant to the Commission's usual rule waiver procedures under 47 CFR 1.3.

6. In making the MDRI mandatory for all facilities-based mobile wireless providers, regardless of their size, we reject the views of the Competitive Carriers Association (CCA) and NTCA—The Rural Broadband Association (NTCA) that smaller providers should be excepted from these rules because they need to prioritize work on their own networks or lack the resources required for compliance in the midst of emergencies. We find that, as a practical matter, such concerns can be mitigated. Each of the Framework's provisions involves significant preparation and coordination steps to be taken well in advance of, rather than in the midst of, an emergency. For example, establishing mutual aid agreements, entering into appropriate contractual agreements related to roaming, enhancing municipal preparedness, increasing consumer readiness and preparing and improving public awareness are steps that can be taken in advance of a disaster. Making these advance preparations would reduce the resources needed to comply with these requirements during an emergency. Moreover, as NTCA notes, small wireless providers already generally abide by the underlying principles of the Framework. Requiring small providers to take certain actions to ensure that their networks remain operational during emergencies will have the effect of streamlining and standardizing those efforts, thus making coordination with other entities, including other providers, more efficient than would be possible absent uniform rules. Indeed, signatories to the Framework now have a commendable eight-year track record demonstrating how the

Framework operates and its benefits before, during, and after disaster events, which offers lessons that smaller providers can follow. Additionally, the provisions of the MDRI are framed in terms of reasonableness and technical feasibility, which further mitigates these concerns.

7. We note that these rules will require that providers negotiate roaming agreements, including related testing arrangements, and mutual aid provisions. We require that all such negotiations be conducted in good faith and note that any disputes will be addressed by the Commission on a case-by-case basis. We delegate authority to the Enforcement Bureau to investigate and resolve such disputes.

8. This rule requires that each facilities-based mobile wireless provider enter into bilateral roaming agreements with all other facilities-based mobile wireless providers from which it may foreseeably request roaming privileges, or that may foreseeably request roaming privileges from it, when the MDRI is active. We clarify that roaming is foreseeable, without limitation, when two providers' geographic coverage areas overlap. We agree with NTCA that roaming agreements should be bilateral to ensure that roaming is implemented across the nation on equitable terms and that no provider prevents its subscribers from roaming onto the networks of other providers when it would be technically feasible to do so during disasters and emergencies. We also require that each bilateral roaming agreement be executed and in place no later than the compliance date for the MDRI. This advance planning will allow, for example, time for the providers subject to the agreement to undertake initial testing and confirm that the roaming functionality works as intended and/or take remediation steps to address technical issues prior to the actual onset of a disaster or emergency event, as well as to swiftly implement roaming when the MDRI is triggered. Where a disaster can be reasonably anticipated, such as in the case of a hurricane, this will also permit advance coordination and planning among parties to the roaming under disaster arrangement (RuD). It is our expectation that these bilateral roaming requirements will increase consumer access to emergency communications services in the direst of circumstances, and to the maximum extent technically feasible, when life and property are at stake.

9. We find strong support in the record for mandating the roaming provision of the Framework in the MDRI. We agree with the Association of Public-Safety Communications Officials (APCO) that mandatory roaming is critical to ensuring that the public has access to 9-1-1 and other avenues of emergency communications, such as web-based services, that the public may rely upon for important

information during an emergency, and with T-Mobile's general view that roaming should be promptly and broadly available to other providers on request absent extenuating circumstances and that such provisions should be made in anticipation of a disaster rather than only after a disaster has struck. We decline to adopt at this time T-Mobile's view that roaming should be required without permitting the host provider to perform a capacity evaluation. Requiring that RuDs be executed prior to disaster provides some assurance that issues can be identified and resolved prior to onset of the actual disaster event, reducing the chance that consumers will lose a life-saving lifeline when it is most needed. We also agree with Public Knowledge that providers located in vulnerable areas with less infrastructure are the least likely to have adequate roaming agreements in place with their neighboring providers absent an appropriate requirement.

10. We find that the roaming provision of the Framework has been sufficiently refined through eight years of implementation to provide a basis for its adoption in this document. CTIA—The Wireless Association (CTIA) observes, for example, that “[w]ireless stakeholders have been developing new practices for enhancing the implementation and effectiveness of the Framework’s RuD tool based on lessons learned during earlier disaster events.” Further, CTIA offers as lessons learned that parties to roaming agreements should use uniform terminology throughout the RuD request process, establish provider connectivity and roaming terms before disasters occur, and conduct “blue skies” exercises with potential roaming partners. We agree with Verizon that roaming is workable, provided there is sufficient flexibility in the rules to account for a provider’s technical and capacity issues, appropriate testing of capabilities, and safeguards to prevent opportunistic “free riding” roaming from providers who leverage another provider’s more reliable network rather than invest in improving the reliability of their own. Accordingly, we reject AT&T’s view that requiring roaming would necessarily be counterproductive or impair access to emergency services.

11. The roaming requirement adopted in this document requires facilities-based mobile wireless providers to provide for reasonable roaming under disaster arrangements (RuDs) when technically feasible, where: (i) a requesting provider’s network has become inoperable and the requesting provider has taken all appropriate steps to attempt to restore its own network, and (ii) the provider receiving the request (home provider) has determined that roaming is technically feasible and will not adversely affect

service to the home provider's own subscribers, provided that existing roaming arrangements and call processing methods do not already achieve these objectives and that any new arrangements are limited in duration and contingent on the requesting provider taking all possible steps to restore service on its own network as quickly as possible. We note that this industry-developed standard is a flexible one that allows providers to adapt to the particular circumstances that each disaster or exigency presents on a case-by-case basis. For example, what constitutes "reasonable roaming," "technically feasible" and "adverse[] affect" will typically depend on facts and realities that cannot be determined universally in advance of a situation that gives rise to a particular MDRI activation. We find it useful, however, to provide clarification and basic guidance that would help providers understand what activities do meet this standard, where appropriate.

12. We clarify that "reasonable roaming" is roaming that does not disturb, but includes compliance with, the Commission's existing requirements that voice roaming arrangements be just, reasonable, and non-discriminatory, and that data roaming arrangements be commercially reasonable. We further clarify that "technically feasible" roaming for purposes of the Commission's disaster roaming rules requires a host provider to permit a requesting provider's customers to roam on the host provider's network on all compatible generations of network technology that it offers to its own customers. We note that requiring that a host provider support roaming regardless of network generation will contribute meaningfully to the Commission's objective of increasing consumer access to emergency communications services in the direst of circumstances, when life and property are at stake. Moreover, we find this would provide some measure of technological neutrality, as well account for the often-rapid evolution of wireless technology.

13. We also clarify that "reasonable roaming" would include providing a means of denying a roaming request in writing to the requesting provider, preferably with the specific reasons why roaming is infeasible. We believe that this approach would allow the requesting provider to evaluate the substance of the reasons so that it can make a renewed request at an appropriate time later, if warranted, and will create accountability on the part of requesting providers to ensure that denials are only issued when the circumstances truly warrant. Moreover, this approach, while optional, could help to provide insight into modifications that would facilitate a future roaming agreement or create a record in the event a dispute

arises.

14. By way of example, we further clarify that an RuD that specifies that a provider may make a network health assessment within four hours post-disaster and activate its roaming functionality within three hours of completing the health assessment would generally be considered reasonable. In this respect, we agree with AT&T on the practicality of these time frames as best practices and note that appropriate time frames may depend on a specific scenarios and circumstances involved.

15. We find that the Commission could effectively ensure accountability on the part of providers and their compliance with this roaming provision, and could do so at minimal cost to providers, if the Commission had the ability to request copies of a provider's bilateral roaming agreements. We thus require that a provider retain RuDs for a period of at least one year after their expiration and supply copies of such agreements to the Commission promptly upon Commission request. If appropriate, such agreements may be submitted with a request for confidential treatment under § 0.459 of the Commission's rules.

16. This rule requires that each facilities-based mobile wireless provider enter into mutual aid arrangements with all other facilities-based mobile wireless providers from which it may request, or receive a request for aid during emergencies. Providers must have mutual aid arrangements in place within 30 days of the compliance date of the MDRI. This rule also requires providers to commit to engaging in necessary consultation where feasible during and after disasters, provided that the provider supplying the aid has reasonably first managed its own network needs. We find that requiring providers to coordinate and collaborate (e.g., to determine ways in which excess equipment from one provider can be shared or exchanged with the other) has been successful during past disasters and serves the public interest during times of emergency. We find that, without this provision in place, providers are less likely to fully engage in such actions, particularly among providers that do not regularly collaborate on other matters (e.g., between a large nationwide provider and smaller, rural provider). In arriving at this rule, we note and commend some of the nation's largest providers who already engage in this coordination on some level among themselves, and we believe that the public interest would greatly benefit from such commitments being extended to all facilities-based mobile wireless providers.

17. The MDRI mutual aid requirement is a codification of the flexible standard already

developed by industry in proposing its successful Framework. As such, AT&T's concern that this rule would require a provider to grant mutual aid regardless of its own circumstances and ATIS's concern that this provision would require a provider to work to restore a competitor's network before its own are unfounded. Rather, as indicated by the plain language of this rule, a provider's obligations apply only if it has "reasonably first managed its own network needs." Similarly, because a provider supplying aid under this provision would only do so after it has managed its own needs, we find USTelecom's concerns that this provision would create disincentives for a requesting provider to invest in its own resiliency and restoration capabilities are countered by the language of the rule itself, and further mitigated by the flexibility that the rules afford providers in coming to a reasonable mutual agreement. We similarly clarify that nothing in this rule requires that providers share their limited fuel or other equipment when they do not have enough of these resources to reasonably service their own subscribers' needs first.

18. Several other provisions of the MDRI track corresponding elements of the existing Framework and require that each facilities-based mobile wireless provider take reasonable measures to: 1) work to enhance municipal preparedness and restoration, 2) increase consumer readiness and preparation, and 3) improve public awareness and stakeholder communications on service and restoration status. The Commission declines to address at this time a provision similar to the existing Framework's provision that a provider establish a provider/public safety answering point (PSAP) contact database. The Commission is currently examining these issues in its pending 911 Reliability proceeding. We find that each of these provisions would enhance public safety objectives by tracking the elements of the Framework. We find that these actions, taken individually and as a whole, would provide significant public safety benefits by reducing the costs borne by both wireless providers and public safety entities in responding to and recovering from a disaster and by creating information that can be used by public officials, including first responders, to enable more effective and efficient responses in an emergency. We find that the MDRI, as a codification of successful provisions already implemented by the nationwide and certain regional providers to date, allows the needed flexibility to respond to the individual needs of providers and the communities they serve.

19. We find it in the public interest to supply clarity and assurance that providers have complied with as many of the MDRI's provisions as practical if they implement, or continue their implementation

of, corresponding elements of the Framework. Accordingly, a provider that files a letter in the dockets associated with this proceeding truthfully and accurately asserting, pursuant to § 1.16 of the Commission's rules, that it complies with the Framework's existing provisions, and has implemented internal procedures to ensure that it remains in compliance with these provisions, for (i) fostering mutual aid among wireless providers during emergencies, (ii) enhancing municipal preparedness and restoration by convening with local government public safety representatives to develop best practices, and establishing a provider/PSAP contact database, (iii) increasing consumer readiness and preparation through development and dissemination with consumer groups of a Consumer Readiness Checklist, and (iv) improving public awareness and stakeholder communications on service and restoration status, through Commission posting of data on cell site outages on an aggregated, county-by-county basis in the relevant area through its Disaster Information Reporting System (DIRS) will be presumed to have complied with the MDRI counterpart provisions at § 4.17(a)(3)(ii) through (iv). We clarify that providers that rely on this safe harbor provision are representing adherence to these elements of the Framework as it was laid out and endorsed by the Commission in October 2016.

20. Given the new requirements related to testing roaming, however, we do not extend this "safe harbor" mechanism to these rules requiring that providers implement bilateral roaming arrangements (§ 4.17(a)(3)(i)), test their roaming functionality (§ 4.17(b)), provide reports to the Commission (§ 4.17(c)) or retain copied of RuDs (§ 4.17(d)). Nor we do extend safe harbor to § 4.17(e), which summarizes an announcement of compliance dates for these rules. These four provisions cover important aspects of the Framework related to roaming (among other functionality), where there is some evidence that the existing Framework has not performed as strongly as possible or else new requirements that have no counterpart in the existing Framework.

B. Implementing New Testing and Reporting Requirements

21. In the Resilient Networks NPRM, we sought comment on whether each provider should be required to implement annual testing of their roaming capabilities and related coordination processes. We adopt the requirement that this testing must be performed bilaterally with other providers that may foreseeably roam, or request roaming from, a given provider including, without limitation, between providers whose geographic coverage areas overlap. The first round of such testing, i.e., with respect to

all other foreseeable providers, must be performed no later than the compliance date for the roaming provision of the MDRI.

22. We agree with NTCA that providers should regularly test their roaming capabilities and believe that the public interest would be served if providers conducted bilateral roaming capabilities testing with other providers to ensure that roaming will work expeditiously in times of emergencies. We agree with Verizon that testing in advance of an actual disaster event is necessary for a provider to best understand its network capabilities and ensure that roaming is performed in a way that does not compromise its service to its own customers. We find that bilateral testing will ensure that providers spend time optimizing, debugging and diagnosing their networks well advance of emergencies, ensuring that these networks roam as effectively as possible when a disaster strikes, ultimately saving lives and property. We find that by requiring the testing to be bilateral, each provider will be incentivized to take affirmative steps to ensure their own network can handle demands indicative of emergency scenarios, diminishing the possibility that such a provider would act as a “free-rider” when disaster strikes.

23. In the Resilient Networks NPRM, we also sought comment on whether providers should submit reports to the Commission, in real time or in the aftermath of a disaster, detailing their implementation of the Framework’s provisions and whether the reports should include information on the manner in which the provider adhered to the various provisions of the Framework. We adopt this requirement and require that providers submit a report detailing the timing, duration and effectiveness of their implementation of the MDRI’s provisions within 60 days of when the Bureau, under delegated authority which we grant in this document, issues a Public Notice announcing such reports must be filed for providers operating in a given geographic area in the aftermath of a disaster.

24. We agree with Free Press that that it is in the public interest for providers to submit an “after-action” report detailing how their networks fared and whether their pre-disaster response plans adequately prepared for a disaster and with Next Century Cities that requiring providers to submit reports detailing implementation of the Framework’s provisions would help the Commission gauge the effectiveness of these provisions and potential future improvements in furtherance of public safety.

25. We reject the views of Verizon and other commenters who suggest that such reports should be filed only annually. We find that such reports would be most accurate and useful if they were provided

shortly after a disaster event has concluded (i.e., by a date specified in a Bureau issued public notice). We find that such reports should be filed shortly after a disaster event concludes, and not in real time, to avoid consuming public safety resources during times of exigency.

C. Expanding Activation Triggers

26. In the Resilient Networks NPRM, the Commission recognized circumstances where mutual aid or other support obligations could have been implemented, but were not warranted or provided because the Framework's activation triggers were not met. The Commission applauded the Framework but sought to expand its reach by working with providers to revisit the conditions that trigger activation of the Framework. Commenters generally agreed that new triggers for Framework activation are appropriate. Verizon identified that "[a]uthorizing the Chief of the Public Safety and Homeland Security Bureau to activate the Framework based on [Emergency Support Function 2] ESF-2 or DIRS" could be the right approach.

27. We find that the public interest supports a rule that the MDRI is triggered when either ESF-2 or DIRS is activated, or when the Chief of the Public Safety and Homeland Security Bureau announces that the MDRI is activated in response to a request received from a state in conjunction with the state activating its Emergency Operations Center, activating mutual aid, or proclaiming a local state of emergency. As such, we delegate to the Chief, Public Safety and Homeland Security Bureau the authority to issue a public notice effectuating the MDRI under these circumstances, and to prescribe any mechanisms for receiving such a request.

28. We agree with those commenters who argue that the Framework's current activation criterion, which only applies when both ESF-2 and DIRS are activated, is too narrow. CTIA and Verizon agree that Framework elements could be helpful during events not currently covered by the Framework and are open to considering other activation triggers to help ensure cooperative efforts during disasters impacting communications networks. (Knowledge and CTIA point out that the current stringent activation requirements prevent consumers from receiving the benefits of the Framework like mutual aid and roaming arrangements because there are many disasters and events would not reach the dual ESF-2/DIRS trigger, such as the recent California power shutoffs and wildfires for which ESF-2 was not activated. CTIA states that they are committed to working with the Commission to consider other

objective activation triggers.) Certain events like wildfires are not expressly covered by the Framework and have the potential to occur more frequently than other covered events like hurricanes. Next Century Cities (NCC) explains that DIRS is typically activated before an anticipated major emergency or following an unpredicted disaster but ESF-2 is only activated under specific circumstances when the Department of Homeland Security or FEMA has identified that a significant impact to the nation's communications infrastructure has occurred or is likely to occur. These two programs differ in activation requirements, meaning that the Framework is not always activated even during critical disaster events and the Commission is not always able to collect vital communications outage data. We agree with NCC's and Public Knowledge's recommendation that the Framework would be more effective if it were activated when either DIRS or ESF-2 is activated and if it remained active until the emergency has ceased and network disruption has been resolved. Further, we agree with Verizon's suggestion that the Chief of the Public Safety and Homeland Security Bureau should be able to activate the Framework based on ESF-2 or DIRS, or when a state experiences events such as FEMA-recognized or declared disasters, events that could affect a significant geographic area, or events that could result in outages for a significant duration and have the potential to impact multiple providers. The activation criteria for the MDRI incorporates these views.

29. We disagree with those commenters, including the CCA and NTCA, who think a codified version of the Framework cannot incorporate remedies and procedures for a variety of differing disasters and emergencies. We agree that the current Framework offers flexibility to address various challenges brought on by differing disasters in differing locations, and we note that the MDRI will allow for the same flexibility and offer even more benefits and restorative efforts with a wider range of activation triggers. CTIA argues that the beneficial elements of the Framework outweigh the doubts and points out the Framework's success in advancing wireless resiliency over the past few years. Recognizing the merits of the Framework and building upon it in the MDRI will also better incorporate the uniqueness of individual disasters by offering additional circumstances in which the obligations would be triggered.

D. Cost-Benefit Summary

30. In the Resilient Networks NPRM, the Commission generally sought information on costs and benefits of requiring providers to implement provisions of the Framework, including mandating some or

all of the Framework, and tentatively concluded that the benefits exceeded the costs for doing so. We affirm that tentative conclusion as to facilities-based mobile wireless providers.

31. No commenter provides a detailed quantitative analysis of costs or benefits, though some commenters provide qualitative views. For example, Public Knowledge opines that mandating the Framework, particularly the roaming provision of the Framework, would lower transaction costs for smaller providers while also providing benefits to the nation's network resiliency and emergency response. CPUC notes that the benefits of ensuring heightened network resiliency are likely to increase in the coming years as the number of weather and climate disaster events continues to increase. On the other hand, AT&T, CCA, and USTelecom, among others, argue that mandating the Framework would create harms, rather than benefits, because it would remove flexibility in providers' disaster recovery approaches and, as a result, would lead to worse public safety outcomes. CCA further argues that some providers, including small providers, may lack the resources necessary to adopt a mandatory regime. As discussed below, we find that the incremental costs to the nation's facilities-based mobile wireless providers for codifying the Framework in the MDRI rules will be minimal in many cases and, even when significant, will be far outweighed by nationwide benefits.

32. We find that Framework signatories are unlikely to incur significant one-time implementation costs to comply with the MDRI because they already implement actions aligned with the Framework's steps and, in some cases, take significant additional actions as part of their existing business practices. AT&T, for example, cites multiple examples evidencing that it and other signatories commonly invoke the Framework's provisions and notes it has extended roaming privileges to other wireless providers during numerous events in which the Framework's activation criteria were not triggered. AT&T notes that it has universally allowed roaming on its network when it has had capacity, including by non-Framework signatories, and believes the same to be true of other signatories. Verizon notes that it has already voluntarily entered into bilateral roaming agreements with AT&T, T-Mobile, and some mid-sized and smaller providers that pertain to disaster scenarios. Other wireless providers, or their industry groups, provide numerous examples of how providers are already investing significant time and resources into complying with the Framework provisions, even when they are not signatories or bound to the Framework's terms, to enhance their networks' resiliency. Given these efforts, we find it reasonable to

conclude that the one-time implementation costs imposed on Framework signatories to implement uniform procedures to comply with the MDRI will be minimal. We note for clarity that any framework signatory that qualifies as a small entity under the definition is afforded additional time for compliance with these rules compared to non-small entities.

33. We find that regional and local entities will incur one-time implementation costs to transition from their existing processes to new processes to comply with the MDRI. As noted in the record, regional and local facilities-based mobile wireless providers already accrue costs to implement steps similar to those described in these rules. For example, ACA Connects notes that its members (which are small regional or local entities) have “developed plans outlining specific actions to be performed at specific preparatory stages (e.g., at 72, 48 or 24 hours in advance of an impending storm),” including typically by “identify[ing] service restoration priorities[,] coordinat[ing] extensively within their companies to ensure all available resources are brought to bear effectively and that customers (both residential and enterprise) are kept informed of service impacts and progress in restoring outages[,] and coordinat[ing] with first responders, power companies, and fellow communications providers in their service area.” ACA Connects notes that its members currently “readily coordinate and share information with local, State and Federal authorities, as well as other communications providers and power companies.” ACA Connects further notes that this sort of information exchange “allows for a more efficient and coordinated restoration effort” and enables providers to “continually update their plans based on ‘lessons learned’ from previous events.” Similarly, NTCA notes that small wireless providers “certainly abide” by the underlying principles of the Framework—i.e., even if they do not follow the Framework’s specific requirements as mandated by these rules. Given these efforts, we believe that the total setup costs for regional and local providers to implement the MDRI will be limited.

34. Specifically, we estimate that the nation’s regional and local facilities-based mobile wireless providers that are not current Framework signatories will incur total initial setup costs of approximately \$945,000 based on our estimate of 63 such providers each spending 50 hours of time on legal services at \$107/hour, 50 hours of time on software development at \$87/hour, and 100 hours of time on public relations and outreach activities at \$53/hour. These setup costs enable the regional and local providers to update or revise their existing administrative and technical processes to conform to processes required by

these rules, including those related to roaming arrangements, fostering mutual aid, enhancing municipal preparedness, increasing consumer readiness, and improving public awareness and shareholder communications on service and restoration status.

35. Commenters have provided no evidence, as requested in the Resilient Networks NPRM, of any significant additional recurring costs. Nevertheless, the industry will incur an annual recurring cost, imposed by the new testing and reporting requirements. We find, however, that these costs are likely mitigated for a number of reasons. The incremental costs of testing are lessened to the extent that facilities-based providers already engage in regular assessments of their roaming capabilities with their roaming partners. Moreover, we find that these cost increases will be substantially offset, over the long term, by the lowering of transaction costs. Under our new rules, a provider's bilateral roaming agreements with other providers will contain similar elements in key provisions and these details will no longer need to be determined on a partner-by-partner basis, thus reducing transaction costs. The setup and recurring costs also will be substantially offset by the network's increase in economic efficiency as providers start sharing more of their unused capacity and idle equipment during disasters and other emergencies. Finally, because our requirement for providers to issue reports detailing the timing, duration and effectiveness of their implementation of the MDRI first entails a Public Notice specifying the providers and geographic area affected, the recurring costs for reporting purposes will be limited to instances where the Commission sees a legitimate need to require such reports.

36. We agree with Public Knowledge that there are significant benefits in requiring providers to coordinate preparation for disasters and with Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI) that the benefits of adopting a mandatory approach, as in this rule, would be widespread, including by increasing access to critical information by individuals in the deaf, hard of hearing, and deafblind communities. Further, CTIA testified at the Commission's 2021 virtual Field Hearing on improving the resiliency and recovery of communications networks during disasters that the Framework is a "collaborat[ive] . . . jumpstart[] [to] response and recovery" and allows for continuous growth through lessons learned during "increasing severity and frequency of disasters" allowing for the development of "best practices [to] strengthen our networks, our response, and our performance for everyone who relies on wireless during emergencies." Moreover, we find that the benefits attributable to improving facilities-

based mobile wireless network resiliency in the context of emergency situations is substantial and will promote the health and safety of residents during times of natural disaster or other unanticipated events that impair telecommunications infrastructure.

37. While it would be impossible to quantify the precise financial value of these health and safety benefits, we note that the value of these benefits would have to exceed the implementation cost of less than \$1 million, together with the annual recurring costs imposed by the new testing and reporting requirements, to outweigh the total cost of compliance. This reasoning is an example of a “breakeven analysis” recommended by the Office of Information and Regulatory Affairs (OIRA) in cases where precise quantification and monetization of benefits is not possible. In light of the record reflecting large benefits to consumers and other communities, we find that the total incremental costs imposed on the nation’s facilities-based mobile wireless providers by these new requirements will be minimal in many cases and, even when significant, will be far outweighed by the nationwide benefits.

E. Timelines for Compliance

38. We set a compliance date for these rules at the later of (i) 30 days after the Bureau issues a Public Notice announcing that OMB has completed review of any new information collection requirements associated with this document or (ii) nine months after the publication of this document for small facilities-based mobile wireless providers and six months after the publication of this document in the Federal Register for all other (i.e., not small) facilities-based mobile wireless providers. We adopt the Small Business Administration’s (SBA) standard, which classifies a provider in this industry as small if it has 1,500 or fewer employees. We require a provider have each bilateral roaming agreement, as described in § 4.17(a)(3)(i), executed and in place no later than its associated compliance date, have mutual aid arrangements, as described in § 4.17(a)(3)(ii), in place within 30 days of its associated compliance date, and perform a complete first round of testing, as described in § 4.17(b), no later than its associated compliance date. We note for clarity that the compliance date associated with a small facilities-based mobile wireless providers applies for the requirements of § 4.17(a)(3)(ii) when at least one party to the mutual aid arrangement is a small facilities-based mobile wireless provider. We further note that finalization of arrangements under § 4.17(a)(3)(ii) will be required 30 days after compliance with the other provisions of § 4.17. To the extent that a new facilities-based mobile wireless service provider

subsequently commences service, it is required to comply with these provisions 30 days following commencement of service. As reflected at § 4.17(e), we direct the Bureau to issue a Public Notice that announces the compliance dates for all facilities-based mobile wireless providers upon obtaining OMB approval of the new information collection requirements associated with this document.

39. These rules require that facilities-based mobile wireless providers take steps to update their processes to implement our MDRI, which codifies many of the Framework's provisions. We find that providers will require only a modest amount of time to adjust their processes to comply with these rules because, as noted above, they already implement actions closely aligned with the Framework's steps and, in some cases, take significant additional actions as part of their existing practices. For instance, AT&T and a non-Framework signatory roamed on each other's networks for months after disaster Hurricane Maria. Signatories to the Wireless Network Resiliency Cooperative Framework implemented it immediately and, when hurricane season arrived six months later, the signatories demonstrated their implementation by voluntarily reporting in DIRS. In addition, we find that these changes must be made expeditiously given recent observations of network failures during disasters. As small and large providers, or their industry groups, have emphasized that they could implement the Framework immediately, or else take Framework-like measures already, we believe that this time range provides sufficient time for providers to implement any changes and make any necessary arrangements.

I. PROCEDURAL MATTERS

40. Final Regulatory Flexibility Analysis. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Resilient Networks; Amendments to part 4 of the Commission's Rules Concerning Disruptions to Communications; New part 4 of the Commission's Rules Concerning Disruptions to Communications notice of proposed rulemaking (Resilient Networks NPRM) released in October 2021. The Commission sought written public comment on the proposals in the Resilient Networks NPRM, including comment on the IRFA. No comments were filed addressing the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

41. **Paperwork Reduction Act Analysis.** These rules may constitute new or modified information collection requirements. All such new or modified information collection requirements will

be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the Paperwork Reduction Act of 1995 (PRA). OMB, the general public, and other Federal agencies will be invited to comment on any new or modified information collection requirements contained in this proceeding. In addition, we note that, pursuant to the Small Business Paperwork Relief Act of 2002, the Commission previously sought, but did not receive, specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. The Commission does not believe that any new information collection requirements will be unduly burdensome on small businesses. Applying these new information collection requirements will promote public safety response efforts, to the benefit of all size governmental jurisdictions, businesses, equipment manufacturers, and business associations by providing better situational information related to the Nation's network outages and infrastructure status.

A. Need for, and Objectives of, the Final Rules

42. In this document, the Commission adopts rules that require all facilities-based mobile wireless providers to comply with the Mandatory Disaster Response Initiative (MDRI), which codifies the Wireless Network Resiliency Cooperative Framework (Framework), an agreement developed by the wireless industry in 2016 to provide mutual aid in the event of a disaster, and expands the events that trigger its activation. The document also implements new requirements for testing of roaming capabilities and MDRI performance reporting to the Commission. These actions will improve the reliability, resiliency, and continuity of communications networks during emergencies. This action uniformizes the Nation's response efforts among facilities-based mobile wireless providers who, prior to these rules, implemented the Framework on a voluntary basis. The Framework commits its signatories to compliance with the following five prongs: (1) providing for reasonable roaming arrangements during disasters when technically feasible; (2) fostering mutual aid during emergencies; (3) enhancing municipal preparedness and restoration; (4) increasing consumer readiness and preparation, and (5) improving public awareness and stakeholder communications on service and restoration status. Under these rules, the Mandatory Disaster Response Initiative incorporates these elements, the new testing and reporting requirements and will be activated when any entity authorized to declare Emergency Support Function 2 (ESF-2) activates ESF-2 for a given emergency or disaster, the Commission activates the Disaster Information Reporting

System (DIRS), or the Commission’s Chief of Public Safety and Homeland Security issues a Public Notice activating the MDRI in response to a state request to do so, where the state has also either activated its Emergency Operations Center, activated mutual aid or proclaimed a local state of emergency.

43. The rules in this document also address findings of the Government Accountability Office (GAO) concerning wireless network resiliency. In 2017, the Government Accountability Office (GAO), in conjunction with its review of federal efforts to improve the resiliency of wireless networks during natural disasters and other physical incidents, released a report recommending that the Commission should improve its monitoring of industry efforts to strengthen wireless network resiliency. The GAO found that the number of wireless outages attributed to a physical incident—a natural disaster, accident, or other manmade event, such as vandalism—increased from 189 in 2009 to 1,079 in 2016. The GAO concluded that more robust measures and a better plan to monitor the Framework would help the FCC collect information on the Framework and evaluate its effectiveness, and that such steps could help the FCC decide if further action is needed. In light of prolonged outages during several emergency events in 2017 and 2018, and in parallel with the GAO recommendations, the Public Safety and Homeland Security Bureau (Bureau) conducted several inquiries and investigations to better understand and track the output and effectiveness of the Framework and other voluntary coordination efforts that promote wireless network resiliency and situational awareness during and after these hurricanes and other emergencies.

B. Summary of Significant Issues Raised by Comments in Response to the IRFA

44. There were no comments filed that specifically address the proposed rules and policies in the IRFA.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business

Administration

45. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities Which the Rules Will Apply

46. The RFA directs agencies to provide a description of and, where feasible, an estimate of, the number of small entities that may be affected by the rules, adopted herein. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and

“small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

47. Small Businesses, Small Organizations, and Small Governmental Jurisdictions. Our actions may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein. First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States which translates to 32.5 million businesses.

48. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.

49. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.” U.S. Census Bureau data from the 2017 Census of Governments indicate that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 36,931 General purpose governments (county, municipal and town or township) with populations of less than 50,000 and 12,040 special purpose governments – independent school districts with enrollment of less than 50,000. Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”

50. The rules adopted in this document apply only to facilities-based mobile wireless providers, which include small entities as well as larger entities. The Commission has not developed a small

business size standard directed specifically toward these entities. However, in our cost estimate discussion below in section E, we estimate costs based on Commission data that there are approximately 63 small facilities-based mobile wireless providers. As described below, these entities fit into larger industry categories that provide these facilities or services for which the SBA has developed small business size standards.

51. Wireless Telecommunications Carriers (except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 797 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 715 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

52. We note that while facilities-based mobile wireless providers fall into this industry description, in assessing whether a business concern qualifies as "small" under the above SBA size standard, business (control) affiliations must be included. Another element of the definition of "small business" requires that an entity not be dominant in its field of operation. An additional element of the definition of "small business" is that the entity must be independently owned and operated. The Commission notes that it is difficult at times to assess these criteria and its estimates of small businesses to which they apply may be over-inclusive to this extent. We are unable at this time to define or quantify the criteria that would establish whether a specific facilities-based mobile wireless provider impacted by this document is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply for this industry description is therefore possibly over-inclusive and thus may overstate the number of small entities that might be affected by our action.

53. Wireless Communications Services. Wireless Communications Services (WCS) can be used for a variety of fixed, mobile, radiolocation, and digital audio broadcasting satellite services. Wireless spectrum is made available and licensed for the provision of wireless communications services in several frequency bands subject to part 27 of the Commission's rules. Wireless Telecommunications Carriers (except Satellite) is the closest industry with a SBA small business size standard applicable to these services. The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year. Of this number, 2,837 firms employed fewer than 250 employees. Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

54. The Commission's small business size standards with respect to WCS involve eligibility for bidding credits and installment payments in the auction of licenses for the various frequency bands included in WCS. When bidding credits are adopted for the auction of licenses in WCS frequency bands, such credits may be available to several types of small businesses based average gross revenues (small, very small, and entrepreneur) pursuant to the competitive bidding rules adopted in conjunction with the requirements for the auction and/or as identified in the designated entities section in part 27 of the Commission's rules for the specific WCS frequency bands.

55. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

56. The requirements in this document will impose new or modified reporting, recordkeeping

and/or other compliance obligations on small entities. The rules adopted in this document require all facilities-based mobile wireless providers to make adjustments to their restoration and recovery processes, including contractual arrangements and public outreach processes, to account for MDRI. The mutual aid, roaming, municipal preparedness and restoration, consumer readiness and preparation, and public awareness and stakeholder communications provisions adopted in the Order are a codification of the flexible standard already developed by the industry in proposing its voluntary Framework. The new provision that expands the events that trigger its activation and that require providers test and report on their roaming capabilities will ensure that the MDRI is implemented effectively and in accordance with the Commission's rules, and the new requirements related to testing and reporting will ensure that roaming is performed effectively with the aim of saving life and property.

57. The roaming requirement adopted by the Commission requires facilities-based mobile wireless providers to provide for reasonable roaming under disaster arrangements (RuDs) when technically feasible, where: (i) a requesting provider's network has become inoperable and the requesting provider has taken all appropriate steps to attempt to restore its own network, and (ii) the provider receiving the request (home provider) has determined that roaming is technically feasible and will not adversely affect service to the home provider's own subscribers, provided that existing roaming arrangements and call processing methods do not already achieve these objectives and that any new arrangements are limited in duration and contingent on the requesting provider taking all possible steps to restore service on its own network as quickly as possible. In this document, we also require facilities-based mobile wireless providers to: (1) enter into bilateral roaming agreements with all other facilities-based mobile wireless providers from which it may foreseeably request roaming privileges, or that may foreseeably request roaming privileges from it, when the MDRI is active, (2) have each bilateral roaming agreement executed and in place no later than the compliance date for the roaming provision of the MDRI, and (3) make copies their bilateral roaming agreements available to the Commission promptly upon Commission request.

58. Pursuant to the "safe harbor" provision we adopt in this document, a provider may file a letter in the dockets associated with this proceeding which truthfully and accurately asserts pursuant to § 1.16 of the Commission's rules, that the provider is in compliance with the Framework's existing provisions,

and has implemented internal procedures to ensure that it remains in compliance with the provisions for: (i) fostering mutual aid among wireless providers during emergencies, (ii) enhancing municipal preparedness and restoration by convening with local government public safety representatives to develop best practices, and establishing a provider/PSAP contact database, (iii) increasing consumer readiness and preparation through development and dissemination with consumer groups of a Consumer Readiness Checklist, and (iv) improving public awareness and stakeholder communications on service and restoration status, through Commission posting of data on cell site outages on an aggregated, county-by-county basis in the relevant area through its DIRS will be presumed to have complied with the MDRI counterpart provisions at § 4.17(a)(3)(ii) through (iv). The “safe harbor” mechanism adopted in the rules does not apply to the requirements that providers implement bilateral roaming arrangements (§ 4.17(a)(3)(i)), test their roaming functionality (§ 4.17(b)) provide reports to the Commission (§ 4.17(c)), or retain RuDs (§ 4.17(d)). Providers that make a "safe harbor" filing are representing adherence to these elements of the Framework as laid out and endorsed by the Commission in October 2016.

59. Small and other regional and local facilities-based mobile wireless providers that are not current Framework signatories will incur one-time implementation costs to transition from their existing processes to new processes to comply with the MDRI. The Commission estimates that the Nation’s regional and local facilities-based mobile wireless providers as a whole will incur one-time total initial setup costs of \$945,000 to implement the requirements of this document and may require professionals in order to comply. We base our estimate on 63 such providers each spending 50 hours of time on legal services at \$107/hour, 50 hours of time on software development at \$87/hour, and 100 hours of time on public relations and outreach activities at \$53/hour, to update or revise their existing administrative and technical processes to conform, to processes their record keeping and other compliance requirements to those required by this rule, including those related to roaming arrangements, fostering mutual aid, enhancing municipal preparedness, increasing consumer readiness and improving public awareness and shareholder communications on service and restoration status.

60. Facilities-based providers in the industry may also incur an annual recurring cost, imposed by the new testing and reporting requirements and determined that these costs are likely to be mitigated for a number of reasons. The incremental costs of testing are lessened to the extent that facilities-based

providers already engage in regular assessments of their roaming capabilities with their roaming partners. Moreover, these cost increases will be substantially offset, over the long term, by the lowering of transaction costs. Under our new rules, a provider's bilateral roaming agreements with other providers will contain similar elements in key provisions and these details will no longer need to be determined on a partner-by-partner basis, thus reducing transaction costs. The setup and recurring costs also will be substantially offset by the network's increase in economic efficiency as providers start sharing more of their unused capacity and idle equipment during disasters and other emergencies.

61. Finally, because our requirement for providers to issue reports detailing the timing, duration and effectiveness of their implementation of the MDRI first entails a Public Notice specifying the providers and geographic area affected, we anticipate recurring costs to be limited to instances where the Commission sees a legitimate need to require such reports. We set compliance dates for these rules as the later of (1) 30 days after the Office of Management and Budget completes review of such requirements pursuant to the Paperwork Reduction Act or the Public Safety and Homeland Security Bureau determines that such review is not required, or (2) nine months after publication of this document in the Federal Register for facilities-based mobile wireless service providers with 1500 or fewer employees and six months after publication of this document in the Federal Register for all other facilities-based mobile wireless service providers, except that compliance with paragraph (a)(3)(ii) of § 4.17 will not be required until 30 days after the compliance date for the other provisions of the section. The Commission has directed the Public Safety and Homeland Security Bureau to announce the compliance dates § 4.17 by subsequent Public Notice and to cause the section to be revised accordingly.

62. We conclude that the benefits of participation by small entities and other providers likely will exceed the costs for affected providers to comply with the rules adopted in this document. The benefits attributable to improving resiliency in the context of emergency situations is substantial and may have significant positive effects on the abilities of these entities to promote the health and safety of residents during times of natural disaster or other unanticipated events that impair telecommunications infrastructure.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

63. The RFA requires an agency to provide “a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”

64. The actions taken by the Commission in this document were considered to be the least costly and minimally burdensome for small and other entities impacted by the rules. The Commission took a number of actions in this document to minimize any significant economic impact on small entities and considered several alternatives. For example, this document’s requirements are only applicable to facilities-based mobile wireless providers and thus other small entity providers that may be capable of roaming are not subject to the adopted provisions. In addition, several of the adopted requirements are based on or incorporate industry-developed standards, and utilize and are consistent with existing Commission requirements. In developing the requirement that facilities-based mobile wireless providers provide reasonable roaming under disaster arrangements (RuDs) when technically feasible, for instance, we define “reasonable roaming” as roaming that does not disturb, but includes compliance with, the Commission’s existing requirements that voice roaming arrangements be just, reasonable, and non-discriminatory, and that data roaming arrangements be commercially reasonable. Consistency with existing industry standards and Commission requirements increase the likelihood that small entities already have processes and procedures in place to facilitate compliance with the rules we adopt in this document and may only incur increment costs which will minimize the impact for these entities.

65. Some commenters supported an alternative view that all small providers should be excepted from the rules adopted in this document because they need to prioritize work on their own networks or else generally lack the resources required for compliance in the midst of emergencies. Upon consideration of this position the Commission determined that these concerns can be mitigated because the Framework's provisions such as establishing mutual aid agreements, enhancing municipal preparedness, increasing consumer readiness and preparing and improving public awareness are preparation and coordination can and should be taken well in advance of, rather than in the midst of an emergency. Likewise, securing the appropriate contractual agreements related to roaming is an obligation

that should be completed prior to an emergency event. Further and notably, some commenters indicated that small mobile wireless providers already generally abide by the underlying principles of the Framework. Given that such efforts are already in place or in progress, we believe that the total setup costs for small regional and local providers to implement the MDRI will be limited. Moreover, requiring small providers to take actions adopted in this document to ensure their networks remain operational during emergencies will have the effect of streamlining and standardizing those efforts, thereby making coordination with other entities, including other providers, more efficient than would be possible if small providers were not subject to uniform rules. Small providers are also affording an additional measure of time to comply with adopted rules, requiring compliance within nine months (rather than the six month afforded other providers).

66. Lastly, we considered whether providers should submit reports to the Commission, in real time or in the aftermath of a disaster detailing their implementation of the Framework's provisions and whether the reports should include information on the manner in which the provider adhered to the various provisions of the Framework. We declined to adopt a real-time submission reporting requirement, and instead required that providers submit a report detailing the timing, duration and effectiveness of their implementation of the MDRI's provisions within 60 days of when the Bureau, under delegated authority, issues a Public Notice announcing such reports must be filed for providers operating in a given geographic area in the aftermath of a disaster. In light of our decision to examine ways to standardize and streamline the reporting processes for providers in the further notice of proposed rulemaking (FNPRM), published elsewhere in this issue of the **Federal Register**, we did not mandate a timeline for compliance with the reporting requirements, therefore small entities will not be immediately impacted by the requirements.

II. ORDERING CLAUSES

67. ACCORDINGLY IT IS ORDERED that, pursuant to the authority contained in Sections 1, 4(i), 4(j), 4(o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(j), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a-1, and 615c of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i)-(j) & (o), 201(b), 214(d), 218, 251(e)(3), 301, 303(b), 303(g), 303(j), 303(r), 307, 309(a), 309(j), 316, 332, 403, 615a-1, and 615c, the Report and Order and Further Notice of Proposed Rulemaking in PS

Docket Nos. 21-346 and 15-80 and ET Docket No. 04-35 is HEREBY ADOPTED.

68. IT IS FURTHER ORDERED that the amended Commission rules as set forth in § 4.17 ARE ADOPTED, effective 30 days after publication in the Federal Register. Compliance with the rules adopted in document will not be required until the later of (i) 30 days after the Public Safety and Homeland Security Bureau issues a Public Notice announcing completion of Office of Management and Budget (OMB) review of any new information collection requirements associated with this document or (ii) nine months after the publication of this document in the Federal Register for facilities-based mobile wireless providers with 1500 or fewer employees and six months after the publication of this document in the Federal Register for all other facilities-based mobile wireless providers. For the purposes of the provisions of § 4.17(a)(3)(ii), compliance will be required 30 days after the compliance date for all other provisions, and the compliance date for a small facilities facilities-based mobile wireless provider will apply when at least one party to the mutual aid arrangement is a small facilities-based mobile wireless provider. The Commission directs the Public Safety and Homeland Security Bureau to announce the compliance dates by subsequent Public Notice and to cause 47 CFR 4.17 to be revised accordingly.

69. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of the Report and Order and Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

70. IT IS FURTHER ORDERED THAT the Office of Managing Director, Performance Evaluation and Records Management, SHALL SEND a copy of the Report and Order and Further Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A).

List of Subjects in 47 CFR Part 4

Airports, Communications common carriers, Communications equipment, Reporting and recordkeeping requirements, Telecommunications.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene Dortch,
Secretary.

Final Regulations

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 4 as follows:

PART 4 – DISRUPTIONS TO COMMUNICATIONS

1. The authority citation for part 4 continues to read as follows:

Authority: 47 U.S.C. 34-39, 151, 154, 155, 157, 201, 251, 307, 316, 615a-1, 1302(a), and 1302(b); 5 U.S.C. 301, and Executive Order no. 10530.

2. Add § 4.17 to read as follows:

§ 4.17 Mandatory Disaster Response Initiative.

(a) Facilities-based mobile wireless providers are required to perform, or have established, the following procedures when:

(1) Any entity authorized to declare Emergency Support Function 2 (ESF-2) activates ESF-2 for a given emergency or disaster;

(2) The Commission activates the Disaster Information Reporting System (DIRS); or

(3) The Commission's Chief of the Public Safety and Homeland Security Bureau issues a Public Notice activating the Mandatory Disaster Response Initiative in response to a state request to do so, where the state has also either activated its Emergency Operations Center, activated mutual aid or proclaimed a local state of emergency:

(i) Provide for reasonable roaming under disaster arrangements (RuDs) when technically feasible, where:

(A) A requesting provider's network has become inoperable and the requesting provider has taken all appropriate steps to attempt to restore its own network; and

(B) The provider receiving the request (home provider) has determined that

roaming is technically feasible and will not adversely affect service to the home provider's own subscribers, provided that existing roaming arrangements and call processing methods do not already achieve these objectives and that any new arrangements are limited in duration and contingent on the requesting provider taking all possible steps to restore service on its own network as quickly as possible;

(ii) Establish mutual aid arrangements with other facilities-based mobile wireless providers for providing aid upon request to those providers during emergencies, where such agreements address the sharing of physical assets and commit to engaging in necessary consultation where feasible during and after disasters, provided that the provider supplying the aid has reasonably first managed its own network needs;

(iii) Take reasonable measures to enhance municipal preparedness and restoration;

(iv) Take reasonable measures to increase consumer readiness and preparation; and

(v) Take reasonable measures to improve public awareness and stakeholder communications on service and restoration status.

(b) Providers subject to the requirements of paragraph (a) of this section are required to perform annual testing of their roaming capabilities and related coordination processes, with such testing performed bilaterally with other providers that may foreseeably roam, or request roaming from, the provider during times of disaster or other exigency.

(c) Providers subject to the requirements of paragraph (a) of this section are required to submit reports to the Commission detailing the timing, duration, and effectiveness of their implementation of the Mandatory Disaster Response Initiative's provisions in this section within 60 days of when the Public Safety and Homeland Security Bureau issues a Public Notice announcing such reports must be filed for providers operating in a certain geographic area in the aftermath of a disaster.

(d) Providers subject to the requirements of paragraph (a) of this section are required to retain RuDs for a period of at least one year after their expiration and supply copies of such

agreements to the Commission promptly upon Commission request.

(e)(1) This section may contain information collection and/or recordkeeping requirements. Compliance with this section will not be required until this paragraph (e) is removed or contains compliance dates, which will not occur until the later of:

(i) 30 days after the Office of Management and Budget completes review of such requirements pursuant to the Paperwork Reduction Act or the Public Safety and Homeland Security Bureau determines that such review is not required; or

(ii) June 30, 2023 for facilities-based mobile wireless service providers with 1,500 or fewer employees and March 30, 2023 for all other facilities-based mobile wireless service providers, except that compliance with paragraph (a)(3)(ii) of this section will not be required until 30 days after the compliance date for the other provisions of this section.

(2) The Commission directs the Public Safety and Homeland Security Bureau to announce the compliance dates for this section by subsequent Public Notice and notification in the Federal Register and to cause this section to be revised accordingly.