Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)
Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks) EB Docket No. 06-119) WC Docket No. 06-63)

ORDER

Adopted: May 31, 2007 Released: June 8, 2007

By the Commission: Chairman Martin and Commissioners Copps, Adelstein, Tate and McDowell issuing

separate statements.

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I. INTRODUCTION

1. In this Order, we direct the Public Safety and Homeland Security Bureau (PSHSB) to implement several of the recommendations made by the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (Katrina Panel). We further order PSHSB to report to us on its efforts three months from the date of release of this Order and nine months from the date of release of this Order. We also adopt rules requiring some communications providers to have emergency/back-up power and to conduct analyses and submit reports on the

redundancy and resiliency of their 911 and E911 networks. Finally, we extend limited regulatory relief from Section 272 of the Communications Act of 1934, as amended, accorded last year by the Wireline Competition Bureau (WCB).

II. BACKGROUND

- 2. Hurricane Katrina struck the Gulf Coast of the United States on Monday, August 29, 2005, causing extraordinary destruction to communications companies' facilities and communications services upon which citizens rely, in Alabama, Louisiana, and Mississippi. Hurricane Katrina knocked out more than three million customer phone lines in the region. The wireline telecommunications network sustained enormous damage dozens of central offices and countless miles of outside plant were damaged or destroyed as a result of the hurricane or the subsequent flooding. Local wireless networks also sustained considerable damage more than a thousand cell sites were knocked out of service by the hurricane. In the aftermath of the hurricane, more than thirty-five Public Safety Answering Points (PSAPs) were out of service, and some parishes in Louisiana remained without 911 or enhanced 911 (E911) service for weeks.¹
- 3. In the aftermath of Hurricane Katrina, the Commission took a number of steps to assist the public safety community and the industry to restore communications. For example, the Commission staff reached out to industry to assess the status of their operations and coordinated with other federal agencies to address FCC licensees' needs with respect to restoration of their systems. In addition, the Commission instituted an expedited process of approving requests for Special Temporary Authority, waivers and other regulatory relief to FCC licensees.
- 4. In January 2006, Chairman Kevin J. Martin established the Katrina Panel pursuant to the Federal Advisory Committee Act, Public Law 92-463, as amended. The mission of the Katrina Panel was to review the impact of Hurricane Katrina on communications infrastructure in the areas affected by the hurricane and to make recommendations to the Commission regarding ways to improve disaster preparedness, network reliability and communications among first responders such as police, fire fighters, and emergency medical personnel. 3
- 5. The Katrina Panel submitted its report on June 12, 2006. The Katrina Panel's report described the impact of the worst natural disaster in the Nation's history, as well as the overall public and private response and recovery efforts. The Commission's goal is to take the lessons learned from that disaster and build upon them to promote more effective, efficient response and recovery efforts, as well as heightened readiness and preparedness.

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¹ See generally Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, Report and Recommendations to the Federal Communications Commission, 5-31 (Katrina Panel Report); see also Federal-State Joint Board on Universal Service, Order, 20 FCC Rcd 16883, para. 2 (2005) (Katrina USF Order).

² 5 U.S.C. App. 2 (1988).

³ See the Katrina Panel Charter available at http://www.fcc.gov/eb/hkip/HKIPCharter.pdf (last visited June 15, 2006); see also the Notice of Establishment of the Commission's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, 71 Fed. Reg. 933 (2006).

- To accomplish this goal, the Commission issued a Notice of Proposed Rulemaking (Notice) on June 19, 2006 inviting comment on what actions the Commission should take to address the Katrina Panel's recommendations. Noting that several of the Katrina Panel's recommendations involved Commission actions that were not dependent on a rulemaking or measures that may not fall within the Commission's statutory authority and jurisdiction, the *Notice* asked commenters to note what actions would fall within the Commission's statutory authority and jurisdiction, and what the Commission could do to encourage the appropriate entities to take action. The Notice also generally sought comment on whether, in adopting any of the Katrina Panel's recommendations, any additional safeguards should be implemented to limit disclosure of sensitive infrastructure information or commercial information to prevent exposing potential targets to wrongdoers and subjecting regulated entities to competitive harm. In addition, the Notice asked whether the Commission, in implementing the Panel's recommendations, should rely on voluntary consensus recommendations as advocated by the Panel or whether it should rely on other measures for enhancing readiness and promoting more effective response efforts. The Notice also sought comment on whether and how the Commission can assist organizations whose primary business is not communications (e.g., hospitals, nursing homes, day care facilities, and so forth) with developing communications plans for an emergency.
- 7. On July 26, 2006, the Commission issued a Public Notice asking commenters to address the applicability of the Katrina Panel's recommendations to all types of natural disasters (*e.g.*, earthquakes, tornadoes, hurricanes, forest fires) as well as other types of incidents (*e.g.*, terrorist attacks, influenza pandemic, industrial accidents). The Public Notice also asked parties to address whether the Panel's recommendations are broad enough to take into account the diverse topography of our Nation, the susceptibility of a region to a particular type of disaster, and the multitude of communications capabilities a region may possess. The Commission received over 100 comments and reply comments in response to the *Notice*.

III. DISCUSSION

A. Preparation for Disasters

8. Readiness Checklists. The Katrina Panel recommended that the Commission work with and encourage each industry sector, through their organizations or associations, to develop and publicize sector-specific readiness recommendations. This recommendation further stated that "such a checklist should be based upon relevant industry best practices as set forth by groups such as the Media Security and Reliability Council ("MSRC") and the Network Reliability and Interoperability Council ("NRIC"). The Katrina Panel also stated that such checklists should include: (1) developing and implementing business continuity plans; (2) conducting exercises to evaluate business continuity plans and train personnel; (3) developing and practicing a communications plan to identify "key players" and multiple means of contacting them;

⁴ Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, Notice of Proposed Rulemaking, EB Docket No. 06-119, 21 FCC Rcd 7320 (2006) ("Notice").

and (4) routinely archiving critical system backups and providing for their storage in "secure off-site" facilities.⁵

- 9. Commenters generally supported the creation of voluntary sector-based readiness checklists with input from industry. Some commenters specifically encouraged development by industry trade associations with encouragement from the Commission. In fact, one such readiness checklist has already been developed for the telecommunications industry by the Alliance for Telecommunication Industry Solutions ("ATIS") Network Reliability Steering Committee ("NRSC").
- 10. Testimony before the Katrina Panel revealed that industry sectors had not adequately prepared for a disaster of Hurricane Katrina's magnitude. We find that implementation of the Panel's recommendations in this area will improve the security and reliability of the Nation's communications infrastructure. Hence, we direct the Public Safety & Homeland Security Bureau to work with the industry to develop voluntary industry-sector readiness checklists to ensure that industry is better prepared for future disasters and emergencies, including an influenza pandemic. MSRC and NRIC best practices and other materials should serve as a foundation for developing these checklists. To ensure that the checklists take into account the needs of different types of companies, we direct the Bureau to reach out to a variety of trade organizations including those representing small communications companies. The Bureau should also publicize and promote implementation of the readiness checklists once developed, for example, by placing the readiness checklists on the Bureau's website and encouraging use of these checklists at summits and conferences.
- 11. Awareness Program on Alternative Technologies. In the Notice, we sought comment on the Katrina Panel's recommendation that we act to enhance the public safety community's awareness of non-traditional emergency alternative technologies that might be of value as back-up communications systems in a crisis. In particular, the Panel mentioned satellite systems and two-way paging systems as especially resilient to disaster. Other technologies, such as WiFi and WiMAX, were cited for their ability to restore service rapidly. In addition to a lack of knowledge about these alternatives, the Panel described the need that members of the public safety

⁶ Some commenters noted that providers should be afforded the flexibility to create practices tailored to their unique circumstances. *See, e.g.*, BellSouth Comments at 8-9; T-Mobile USA Reply Comments at 4-5; United States Telecom Association Comments at 9-12. Some commenters asserted that the Commission should require that regulated communications entities develop and maintain business continuity plans for significant disruptions. *See* AT&T Comments at 4-5; Adolph Holmes Comments at 3. However, several others opposed this and encourage industry self regulation regarding development of business continuity plans. *See, e.g.*, Sprint Nextel Comments at 7-8.

⁵ Katrina Panel Report at 31.

⁷ See, e.g., Motorola Comments at 3-4; NAB Comments at 5-6.

⁸ On October 19, 2006, the NRSC adopted a Hurricane Checklist and submitted that checklist in the docket for the Katrina Panel NPRM (EB Docket 06-119). *See*http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6518531475. Commenters noted that NRSC had been developing readiness checklists for the telecommunications industry.

community be trained in their use prior to disasters. The Katrina Panel suggested that the lack of such training may have contributed to these technologies being overlooked during Katrina, and such training would have to occur prior to a crisis since the days following such an event are consumed with far more pressing issues.

- 12. Commenting parties favored the Katrina Panel's recommendation that the Commission work to enhance the public safety community's awareness of alternative communications technologies. Many emphasized the importance of satellite technologies, with most of these commenters stressing the need for training in alternative technologies before disaster strikes. Motorola also emphasizes that "... these important technologies will be of little help unless public safety trains on them frequently." SIA and USA Mobility suggested that the Commission improve awareness through a combination of fact sheets and web site distribution of relevant information about alternative technologies. Several commenters suggested that the public safety community be educated about the applicability of amateur radio in a crisis. MAET observed that digital television datacasting is an alternative technology that should not be overlooked for emergency communications.
- 13. The Commission agrees that improving the public safety community's knowledge of, and training in, alternative technologies would improve preparedness for future crises. We direct PSHSB to develop and implement an awareness program to educate public safety agencies about alternative technologies and to encourage agencies to provide regular training on any alternative technologies to be used. The program could include: (1) web pages describing alternative technologies and how they work; (2) hosting summits and conferences that include discussion of alternative technologies; (3) educating public safety agencies about alternative technologies at events sponsored by third parties; and (4) making staff available to provide advice to public safety agencies on issues regarding specific technologies.¹⁶ Commenters have

⁹ The Katrina Panel learned that a variety of non-traditional, alternative technologies could have served as effective, back-up communications for public safety until primary systems were repaired during Hurricane Katrina. The Katrina Panel noted that satellite infrastructure was generally unaffected by the storm and could have provided a viable back-up system. Two-way paging operations also remained generally operational during the storm. These paging operations did provide communications capabilities for some police, fire emergency medical personnel and could have been more widely utilized. The Katrina Panel noted that other types of non-traditional but easily deployable technology, such as WiFi and WiMax, or self-contained communications vehicles, could also have been effectively utilized. The Katrina Panel noted that these technologies appear deserving of exploration as back-up communications options to primary public safety systems. *Katrina Panel Report* at 24.

¹⁰ Globalstar Reply Comments at 2-5; Inmarsat Comments at 2-4; Iridium Comments at 2-5; MSV Comments at 4; and SIA Comments at 3-8.

¹¹ Globalstar Reply Comments at 6; Inmarsat Comments at 6; Iridium Comments at 5-7; and MSV Comments at 8-9.

¹² Motorola Comments at 4.

¹³ SIA Comments at 9-10; USA Mobility Comments at 10-12.

¹⁴ Society for Preservation of Amateur Radio Comments at 4; Whitman Comments at 3.

¹⁵ Mississippi Authority for Educational Television (MAET) Comments at 4-5.

¹⁶ As suggested by one commenter, PSHSB should also encourage public safety entities to consider whether pooling communications funds could help better prepare for future emergencies. *See* Globalstar Comment at 7.

suggested a number of technologies be included in this program, including two-way paging, satellite, IP-based systems, WiFi and WiMAX. We agree that these technologies as well as others to be determined by PSHSB should be included.

- 14. Outreach Program for Emergency Medical and Other Communities. The Katrina Panel recommended that the Commission work to assist the emergency medical community to facilitate the resiliency and effectiveness of their emergency communications systems. Specifically, the Katrina Panel stated that the Commission should: (1) educate the emergency medical community about emergency communications and help to coordinate this sector's emergency communications efforts; (2) work with Congress and other appropriate federal departments and agencies to ensure emergency medical personnel are treated as public safety personnel under the Stafford Act; and (3) support the U.S. Department of Homeland Security's (DHS) efforts to make emergency medical providers eligible for funding for emergency communications equipment under the State Homeland Security Grant Program. 17 In the Notice, we also sought comment on whether and how the Commission can assist organizations whose primary business is not communications (e.g. hospitals, nursing homes, day care facilities) with developing communications plans for an emergency.¹⁸ Commenters generally support these recommendations.
- 15. The PSHSB provides guidance and assistance to state and local governments, health care providers and law enforcement agencies on the use of Land Mobile Radio (LMR) equipment and systems, licensing requirements, and spectrum and frequency use for public safety emergency communications. The PSHSB continues to provide assistance to various stakeholder groups in their efforts to ensure that they have operable, reliable, resilient and redundant emergency communications systems in place. In 2006, several state and regional hospital associations ran on-line articles describing the Commission's expanded outreach to the health care sector regarding emergency communications, noting that the PSHSB is committed to working closely with the nation's health care providers to further strengthen emergency response capabilities and preparedness.¹⁹ As discussed further *infra* at paragraphs 45–48 the Commission has also conducted outreach to encourage the emergency medical community and others to enroll in priority communications service programs.
- 16. We direct PSHSB to continue these efforts, including its coordination with the Department of Health and Human Services (HHS) in the area of health care emergency preparedness as it relates to communications. PSHSB should continue to educate and encourage the ability of health care providers to employ a plurality of communications systems (e.g., land mobile relay systems, satellite communications, and/or high frequency communications) on premises, outside of their facility, and facility-to-facility. PSHSB should also work with DHS and other federal agencies to ensure emergency medical personnel are treated as public safety personnel under the

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¹⁷ The Katrina Panel also recommended that the Commission educate the emergency medical community about the various priority communications services (*i.e.*, GETS, WPS and TSP) and urge them to subscribe. This recommendation is addressed *infra* at ¶45-48.

¹⁸ Notice at para. 10.

¹⁹ http://mhanewsnow.typepad.com/prepared/.

Stafford Act. This recommendation is critical because the medical sector will be supporting first responders and potential disaster victims.

- 17. We further direct PSHSB to work with the Nation's health care, education and business communities to include, in their business continuity planning, robust emergency communication plans that ensure that these entities will be able to function during emergencies such as an influenza pandemic.²⁰ Such emergencies could result in sudden and significant shortages of personnel, changes in communications traffic, possible disruptions to communications networks (i.e., due to increased telecommuting by the nation's workforce and society in general during an influenza pandemic), and lack of manpower to immediately repair affected communications networks. PSHSB has already begun efforts to establish a new federal advisory committee that will replace NRIC and MSRC and will address, inter alia, communications issues related to an influenza pandemic. PSHSB has also started to assemble information regarding pandemic influenza to place on its website. We direct PSHSB to continue with these efforts. In particular, PSHSB should update its website as soon as possible to include information that addresses pandemic influenza and how to prepare communications systems for such an emergency. The website should include links to other relevant government websites, such as http://www.pandemicflu.gov.
- Monitoring of Situational Awareness During Disasters. The Katrina Panel observed that there was often a lack of clarity about which federal agency was responsible for collecting outage information and that competing requests for such information at the federal, state and local levels was distracting to restoration efforts and added to confusion about agency roles.²¹ In the Notice, we sought comment on the Katrina Panel's recommendation that the Commission coordinate all federal outage and infrastructure reporting requirements in times of crisis, functioning as a single repository and contact with consistent data collection procedures. We asked parties to comment on the appropriate content of such emergency outage reports, their format, frequency. distribution and related issues. We also asked parties to comment on whether additional safeguards should be put into effect to address the potential disclosure of commercially sensitive information to avoid potential harm to communications providers or others. 22
- 19. The vast majority of commenting parties agreed with the Katrina Panel's recommendation that the Commission serve as a single repository for outage information and implement appropriate safeguards to protect sensitive information that would be provided in such instances.²³ DHS agrees that a central repository for network

²⁰ A pandemic influenza occurs when a novel strain of the virus appears that causes readily transmissible human illness for which most of the population lacks immunity. History shows that influenza pandemics typically occur with very little warning and hit wide geographic areas in multiple waves, lasting two to three months at a time. See CDC Influenza Pandemic OPLAN (20 December 2006) at 11 which can be found at http://www.cdc.gov/flu/pandemic/pdf/cdc_oplan_122006.pdf.

²¹ Katrina Panel Report at 21.

²² See Notice at 4.

²³ See ATIS Comments at 5; Bechtel Comments at 10; BellSouth Comments at 13-14; Cox Comments at 17-18; Named State Broadcasters Association Reply Comments at 3; NAB Comments at 4; NCTA et al Comments at 21; (continued....)

outage information during a disaster is necessary and suggests that a rulemaking is necessary to facilitate outage reporting to such a repository to improve NS/EP programs.²⁴ The National Telecommunications and Information Administration (NTIA) supports the Panel's recommendation to the extent that it does not include Federal communications system outages and suggests that the outage database be maintained by the Commission representative to the Joint Field Office (JFO). 25 Several commenting parties urged the Commission to ensure that the data collection effort is coordinated with the National Communications System (NCS) and the National Coordinating Center for Telecommunications²⁶ (NCC) and conducted in a way that does not alter the NCC's role as the "primary entity in the federal government for coordinating communications network recovery and information sharing among affected industry members."27 Commenting parties urged the Commission to implement the steps necessary to protect network outage information from unauthorized disclosure.²⁸ Commenters also encouraged the Commission to work proactively with state and local entities on a process to share outage information that preserves appropriate confidentiality safeguards, thereby minimizing duplicative requests for such information from different sources.²⁹ Others encouraged the Commission to work with industry prior to the onset of a disaster to select data fields that are necessary to support emergency management and systems that facilitate data collection, 30 and asserted that the decisions about what data to collect should be balanced against the burden that it would impose on communications providers that are actively engaged in restoration efforts.³¹ SIA suggested that reporting entities maintain a method of submitting outage data to the Commission during a disaster even if their primary reporting facility is impaired and urges the Commission to encourage the use of satellite technology for this purpose.³² NENA suggests that the Commission conduct detailed analyses of the 911 outage data

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PRT Comments at 8; Qwest Comments at 6-7; SIA Comments at 10-11; Sprint Nextel Comments at 10-12; T-Mobile Reply Comments at 6-8; Union Telephone Reply Comments at 8-9; US Telecom Association Comments at 17-18: Verizon Comments at 17.

²⁴ DHS Comments at 5-6.

²⁵ NTIA Ex Parte at 2.

²⁶ ATIS Comments at 5; Qwest Comments at 6-7; Union Telephone Reply Comments at 8-9; DHS Comments at 5-6.

²⁷ AT&T Comments at 5. We note that NCC is not part of the Federal government.

²⁸ AT&T Comments at 5-6; BellSouth Comments at 14; Cox Comments at 18; Iridium Comments at 8-9; Motorola Comments at 5; SIA Comments at 10-11; Sprint Nextel at 10-12.

²⁹ AT&T Comments at 6-9; T-Mobile Reply Comments at 6-8; US Telecom Association Comments at 17-18.

³⁰ AT&T Comments at 6-7; Cox Comments at 17; Motorola Comments at 5; Qwest Comments at 6-7; Sprint Nextel at 10-12; T-Mobile at 6-8; DHS Comments at 5-6.

³¹ Cox Comments at 17-18; CTIA Comments at 15; NCTA *et al* Comments at 21; PRT Comments at 8; SIA Comments at 10-11; Union Telephone Reply Comments at 8-9.

³² SIA Comments at 10-11.

that it routinely collects pursuant to Part 4 and ". . . work with appropriate entities to mitigate these conditions where appropriate." ³³

- 20. We agree with the Katrina Panel that the Commission should serve as the central point of contact for communications outage information during major events and should provide access to this information to other agencies. The Commission has extensive experience in this area both through its collection of outage information pursuant to Part 4 of the Commission's rules (outage reporting requirements) and from its efforts to collect situational awareness information from licensees in the aftermath of the 2005 hurricanes. Moreover, we note that, prior to the Katrina Panel's Report, PSHSB staff had already begun working with the communications industry and the NCS on ways to streamline the process used to collect situational awareness information from FCC licensees during emergencies. Indeed, PSHSB is now in the late stages of developing a system and process for collection of this information. Under the process contemplated by the PSHSB staff, communications companies serving areas affected by disasters could voluntarily submit information regarding, inter alia, the status of their operations, the status of their restoration efforts, their power status (i.e., are they operating based on commercial power, a generator or battery power) and their use of fuel. The information submitted would be accorded confidential treatment, and would be shared with NCS on a confidential basis. This information would allow the Commission and other governmental agencies to not only track the status of communications companies' operations in the aftermath of a disaster, but also their restoration status. The information could also be used to determine communications companies' needs (e.g., generator, fuel).34
- 21. We direct PSHSB to continue working with NCS and the communications industry, including the broadcast and cable industries, to resolve any outstanding issues in order to facilitate the activation of the system as soon as possible. The Bureau should also work to obtain any necessary regulatory approvals for collection of this information as soon as possible.³⁵ Finally, we direct the Bureau to work with the communications industry, NCS and state government agencies to address whether information submitted by the industry should be shared with state governments.³⁶
- 22. We decline to initiate a rulemaking at this time to make the outage reporting process mandatory. The voluntary process that was put in place during Katrina provided the necessary information on a timely basis. Furthermore, a mandatory process would be less flexible and would not adapt well to the unique needs of a particular crisis. For these reasons we find that a voluntary situational awareness process is more effective during disasters. Finally, we note that PSHSB currently

³⁴ This process is separate from the mandatory reporting requirements that apply to certain communications carriers under Part 4 of the Commission's rules, 47 C.F.R. Part 4.

³³ NENA Comments at 17.

³⁵ See, e.g., Paperwork Reduction Act, 44 U.S.C. § 3501, et seg.

³⁶ We take no action on SIA's recommendation that the Commission urge terrestrial carriers to apply satellite technology as a back-up to their primary reporting facilities, noting that terrestrial carriers are likely to be aware of a number of alternative reporting mechanisms that could be so applied and will use the ones that best suit their needs.

conducts the analyses of 911 outage data recommended by NENA, including coordination with appropriate entities and industry bodies to effectuate improvements in 911 reliability where appropriate.

- 23. Automatic Special Temporary Authority and Waiver Relief. The Notice sought comment on the Katrina Panel's recommendation that the Commission establish a prioritized system by which affected parties could automatically be granted waivers of certain regulatory requirements, or be granted automatic Special Temporary Authority (STA) in a particular geographic area if the President declares that area to be a "disaster area." The Katrina Panel stated that, as a condition of such waivers or STAs, the Commission could require verbal or written notification to Commission staff contemporaneously with activation or promptly after the fact. The Katrina Panel also recommended that the Commission examine expanding the on-line filing opportunities for STA requests. In this recommendation, the Katrina Panel also included a list of "possible rule waivers and STAs to study for this treatment." For the reasons indicated below, we have concluded not to automate the waiver and STA process.
- 24. Although most commenters supported this recommendation, few commented on how such an automatic waiver/STA process would work or be structured. Further no commenter asserted that the manner in which the Commission expedited the grant of waivers and STAs during the 2005 hurricanes was not effective.³⁹ We believe that, on balance, public safety would be better served by an expedited review, rather than a fully automated system. Although we wish to relieve all licensees of unnecessary regulatory burdens during an emergency, we are concerned that a general policy of allowing the automatic grant of STAs and waivers of operational requirements could have serious consequences.
- 25. For example, without minimal Commission review, an automatic STA could allow operations of a new facility using spectrum already in use by an essential communications provider and thereby inadvertently cause essential communications to fail. We believe that it would be far easier, and more consistent with public safety to grant expedited review of an STA application than to try to undo an automatic STA once operations have begun. Further, the declaration of a "presidential disaster area" does not appear to be a sufficient basis, by itself, to grant an STA or waiver, whether automatically or otherwise. For example, there could be instances where the communications infrastructure in a Presidentially declared disaster area remains intact. In such a case, an STA or waiver may be unwarranted. On the other hand, there may

39 Dather commenters such as the Asse

³⁷ See Notice, 21 FCC Rcd at 7320, ¶9; Katrina Panel Report at 32.

³⁸ See Katrina Panel Report at 32-33.

³⁹ Rather, commenters such as the Association of Public Television Stations (APTS) noted that "[t]he Commission was particularly responsive to these kinds of waiver requests in the aftermath of Katrina . . ." APTS Comments at 12.

⁴⁰ We note that in certain specific instances, it may be appropriate to allow automatic relief of certain regulations based on a Presidentially declared disaster or the activation of a licensee's emergency plan. In fact, there may be circumstances where licensees have received certain types of regulatory relief based on these triggers. Our concerns here relate to establishing a general policy of automatic relief that would apply across the board. We will continue to consider specific requests for regulatory relief based on the underlying facts supporting these requests.

be situations where there is damage to a telecommunications carrier's infrastructure in an area that is never declared a disaster area. Thus, an automatic STA or waiver process based on a Presidentially declared disaster area could be overinclusive in some cases and underinclusive in others. For the same reason we disagree that the triggering by a licensee of its emergency plan generally should act as a trigger for automatic STAs or waivers. There may also be legal impediments to automatic STAs for Title III authorizations under Sections 308(a) and 309(f) of the Communications Act. Finally, we agree with NTIA that, in an emergency, the close coordination that is required between the Commission and NTIA regarding the use of shared Federal/non-Federal bands and shared spectrum management responsibilities precludes a fully automated waiver/STA process.⁴¹ Accordingly, we conclude that some level of Commission review is necessary during an emergency to ensure that STAs or waivers are properly granted.

26. We believe, at this time, the best approach would be to use an expedited process for acting on requests for STAs, waivers and other regulatory relief based on the particular circumstances of the disaster at hand. An expedited process would allow the Commission to ensure that there is a link between the relief being requested and the emergency at issue. During Hurricane Katrina, the Commission publicized its procedures for seeking regulatory relief, granted some relief on its own motion and otherwise processed requests for relief on an expedited basis. Many of these requests were processed within four hours and all were processed within 24 hours.⁴² Additionally, Commission rules permit the suspension or waiver of rule requirements on its own motion, STA requests by telephone during emergencies and the grant of station licenses, modification, renewal or STAs without the filing of formal applications in certain emergency situations.⁴³ Other rules provide additional flexibility for licensees to adjust operations during emergency situations. 44 Therefore, the Commission has procedures in place to ensure that waivers and STAs are promptly reviewed and granted during an emergency. Accordingly, we direct PSHSB to work with other Bureaus and Offices, as necessary, to publicize emergency-related rules and procedures prior to disaster. This could be done by, among other things, providing relevant information on PSHSB's

⁴¹ NTIA Ex Parte at 2.

⁴² The Commission granted more than 90 STA requests and more than 100 temporary frequency authorizations for emergency workers, organizations and companies to provide wireless and broadcast service in the affected areas and shelters around the country. *See* Written Statement of Kevin J. Martin, Chairman, Federal Communications Commission at Hearing on Public Safety Communications from 9/11 to Katrina: Critical Public Policy Lessons, Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives (September 29, 2005).

⁴³ See, e.g., 47 C.F.R. §§ 1.3, 1.915(b), 1.925, 1.931(b)(5).

⁴⁴ See, e.g., 47 C.F.R. § 90.407 (providing a self-actuating mechanism whereby private land mobile and public safety licensees may utilize their radio stations for emergency communications in a manner other than that specified in the station authorization or in the rules and regulations governing the operation of such stations, during a period of emergency in which the normal communication facilities are disrupted as a result of hurricane, flood, earthquake or similar disaster).

website as well as through outreach programs directed at public safety agencies and the industry.⁴⁵

- 27. Other Pre-Positioning Recommendations From Commenters. Several commenters submitted additional suggestions for improving network resiliency and redundancy.
- 28. Permanent Relief from InterLATA Restrictions. BellSouth⁴⁶ recommends that the Commission grant the Bell Operating Companies (BOCs) permanent relief from interLATA boundary restrictions. It argues that such action would enhance network resiliency and redundancy. The BOCs have already raised the issue of relief from Section 272 and its implementing rules in a number of pending forbearance petitions and waiver requests. Accordingly, we will consider this issue in those proceedings as appropriate.
- 29. One Year Section 272 Relief. Last year, WCB granted a one-year Special Temporary Authority from enforcement of Section 272 and its implementing rules to BOCs in order to allow them to share non-public, BOC network information with their Section 272 and other affiliates to engage in disaster planning.⁴⁷ In addition, WCB granted Verizon a one-year waiver of Part 64 requirements to allow Verizon to engage in disaster planning with its former GTE company affiliates. The relief for disaster planning ends April 20, 2007 for AT&T⁴⁸ and June 9, 2007 for BellSouth, Qwest and Verizon. Verizon and BellSouth argue that the Commission should reconsider the one-year limitation of this relief or change its rules so that an STA or waiver is not necessary. Verizon, for example, states that it will need to conduct disaster planning well beyond June 2007 to prepare for, among other things, next summer's hurricane season.⁴⁹

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⁴⁵ Verizon noted that the Commission granted Verizon Wireless authority to lease spectrum temporarily to vendors operating on CMRS equipment to assist the Department of Defense in the Hurricane Katrina recovery effort. Verizon suggested that the Commission adopt an expedited procedure for temporary spectrum leases. Verizon Comments at 16. However, no such action is necessary because the Commission already has an expedited process for granting short-term leases which allows the grant of leases overnight. See 47 C.F.R. § 1.9035(e) (immediate approval procedures for short-term de facto leasing arrangements). Verizon has not shown that this process is insufficient.

⁴⁶ We note that, subsequent to filing its comments in this proceeding, BellSouth merged with AT&T. For purposes of this Order, we will refer to BellSouth's comments separately from those filed by AT&T.

⁴⁷ See Petition of AT&T Inc. for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Order, WC Docket No. 06-63, 21 FCC Rcd 4306 (Wireline Comp. Bur. 2006); Petition of BellSouth Corporation for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Petition of Verizon for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Petition of Qwest Communications International Inc. for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Order, WC Docket No. 06-63, 21 FCC Rcd 6518 (Wireline Comp. Bur. 2006).

⁴⁸ The Public Safety & Homeland Security Bureau extended the STA to April 27, 2007. *See* Letter from Derek Poarch, Chief, Public Safety & Homeland Security Bureau, FCC, to Frank Simone, Executive Director, Federal Regulatory, AT&T Services, Inc., WC Docket No. 06-63 (issued April 23, 2007).

⁴⁹ Verizon Comments at 16.

- 30. In light of the upcoming hurricane season and the separate tornadoes that recently struck parts of Kansas and Alabama, we grant an extension of the regulatory relief granted by WCB last year to AT&T, Qwest and Verizon for a period of one-year from the date the originally-granted relief is due to expire. Specifically, we grant AT&T, Verizon and Qwest a one-year STA and waiver of Section 272 of the Act and the Commission's accounting and non-accounting structural separation safeguards. We also extend for an additional year, a waiver previously issued to Verizon to engage in integrated disaster recovery planning with its former GTE affiliates. Under the STA and waiver, AT&T, Qwest and Verizon will continue to be permitted to share non-public BOC network information with its Section 272 affiliates (as well as other affiliates that adhere to the Section 272-like safeguards), as necessary to engage in integrated disaster planning. S1
- 31. We find that an extension of the regulatory relief previously accorded these carriers serves the public interest. The unique circumstances of a hurricane, tornado or other disaster warrant a deviation from Section 272 and the accompanying rules, and such deviation will better serve the public interest in a time of emergency. This relief will allow AT&T, Verizon and Qwest to continue to develop risk mitigation strategies and contingency plans that will reduce the likelihood and duration of any service outage and will permit these carriers' networks to continue to operate in the event a "choke point" is compromised.

B. Recovery Coordination

32. <u>Credentialing Guidelines</u>. In the *Notice*, we sought comment on the Katrina Panel's recommendation that the Commission work with other appropriate federal departments and agencies and the communications industry to promptly develop national credentialing requirements and process guidelines to enable

⁵⁰ We note that a broader request for extension of this regulatory relief remains pending. See Letter from Terri L. Hoskins, Senior Counsel, AT&T Services, Inc. to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-63 (filed March 9, 2007) (seeking a two-year extension of the Special Temporary Relief and waiver that the Commission granted AT&T for disaster recovery purposes). In its request, AT&T states that as a result of its merger with BellSouth, BellSouth is an affiliate of AT&T and is included in its request for an extension of the STA and waive relief. Id, at 2.

⁵¹ While the Section 272 requirements have sunset for AT&T, Verizon and Qwest, AT&T and Verizon may continue to provide in-region, interstate, interLATA telecommunications services through Section 272 separate affiliates, and these affiliates should be treated as nondominant in the provision of such services. See Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interestate, Interexchange Marketplace, CC Docket No. 96-149 and 96-61, Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, 12 FCC Rcd 15756, 15834-35, paras, 133-34 (1997), recon. denied, Second Order on Reconsideration and Memorandum Opinion and Order, 14 FCC Rcd 10771 (1999). In addition, we understand that Qwest has begun implementing the relief granted by the Commission to provide in-region, interstate, interLATA telecommunications services on an integrated basis subject to nondominant carrier regulation. Qwest may be able to benefit from the relief granted here to engage in disaster recovery planning and implementation during its transition from section 272 separation to integrated provisioning and therefore, we continue to include Owest in granting this relief. See Petition of Owest Communications, Inc. for Forbearance form Enforcement of the Commission's Dominant Carrier Rules as They Apply After Section 272 Sunsets, Memorandum Opinion and Order, WC Docket No. 05-333, 22 FCC Rcd 5207 (2007); see also Letter from Boucher, Corporate Counsel, Owest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 00-175 and WC Docket No. 05-333 (filed May 22, 2007).

communications infrastructure providers and their contracted workers access to affected areas after a disaster. The President's National Security Telecommunications Advisory Committee's (NSTAC's)⁵² made similar recommendations to the President last year.⁵³ The Panel advocated, however, expanding the NSTAC's credentialing recommendations to include repair workers of all communications infrastructure (e.g., wireline, wireless, Wireless Internet Service Providers (WISPs), cable, broadcasting, and satellite). Further, the Katrina Panel recommended that the Commission work with the communications industry to develop an appropriate basic NIMS training course for communications repair workers that can be completed online as a requirement for credentialing. Additionally, the Katrina Panel recommended that the Commission should: (1) encourage states to develop and implement a credentialing program consistent with NSTAC guidelines as promptly as possible and encourage appropriate communications industry members to secure any necessary credentialing; (2) encourage states to recognize and accept credentials issued by other states; and (3) encourage, but not require, each regional, state and local EOC or JFO to develop credentialing requirements and procedures, consistent with any national credentialing guidelines, for purposes of allowing communications infrastructure providers, their contracted workers and private security teams, if any, access to the affected areas postdisaster.54

- 33. Most commenters generally supported credentialing communications personnel to access affected areas post-disaster. Many stressed that credentialing recommendations should apply to all communications providers, including their contracted workers. In fact, DHS noted that it is making significant efforts to advance the implementation of a national standard for the credentialing of telecommunications repair workers. ⁵⁵ Commenters were split regarding whether NIMS training should be required as a requirement for credentialing.
- 34. The Commission's experience with Hurricane Katrina and the record in this proceeding reveal that access to affected areas post-disaster was one of the most critical issues for the communications industry. As the National Response Plan⁵⁶ makes clear, DHS has primary responsibility to coordinate federal incident management activities, including disaster site access and credentialing, for all emergency personnel. As such DHS, rather than the FCC, has jurisdiction and authority to adopt credentialing guidelines that apply to the communications industry.

⁵² Bechtel suggests that the Commission spearhead the transfer of network resilience and reliability work currently performed by voluntary bodies like NSTAC or NCC to a formal and professional cross-disciplinary entity with hands-on experience supported by government professionals. Bechtel Comments at 8-9. The Commission does not have authority to transfer work currently performed by NSTAC, a Presidential committee established by Executive Order, or NCC which is organized by NCS. The Commission should continue to work with these entities to support their efforts.

⁵³ The President's National Security Telecommunications Advisory Committee Trusted Access Task Force, Screening, Credentialing, and Perimeter Access Controls, p. 9 (January 19, 2005).

⁵⁴ See Katrina Panel Report at 34.

⁵⁵ See DHS Comments at 7-8.

⁵⁶ See NRP, paragraph 15.

- 35. DHS and the states have taken a number of steps to develop credentialing guidelines that would allow communications providers access to disaster areas. For example, DHS/NCS worked with the State of Georgia and BellSouth to develop a pilot access program focused on priority access for critical response personnel, including telecommunications, which resulted in the publication of a Georgia Standard Operating Procedure (SOP) for emergency access.⁵⁷ This SOP has been distributed as suggested protocol to all 50 states and the territories.⁵⁸ DHS/Federal Emergency Management Agency (FEMA) is also working on an access pilot program to give telecommunication repair crews better access to disaster areas and is aggregating documentation for emergency personnel nationwide into a National Emergency Responder Credentialing Program that DHS/FEMA expects to make operational this year.
- 36. PSHSB staff is already working with DHS to help ensure that any credentialing program would encompass critical communications infrastructure repair crews and their contracting support staff and to support coordination with regional, state and local officials regarding the development of consistent credentialing programs for communications providers. We believe the issue of whether to require NIMS training as a requirement for credentialing is best addressed by DHS/NCS and regional, state and local authorities as they develop their credentialing programs. We agree with DHS's assertion that the Commission's credentialing efforts should complement, not supersede or duplicate, those of DHS/NCS.⁵⁹ We direct PSHSB to continue to work with DHS and the states on these efforts.
- 27. Emergency Responder Status for Communications Infrastructure Providers. In the Notice, we sought comment on the Katrina Panel's recommendations that the Commission work with Congress and appropriate federal departments and agencies to afford all communications infrastructure providers, including wireline, wireless, WISPs, satellite, cable and broadcast infrastructure providers and their contracted workers emergency responder status under the Stafford Act and to incorporate this designation into the National Response Plan ("NRP") and state and local emergency response plans. Most commenters supported this recommendation and stressed that the emergency responder status should be afforded to all communications service providers.
- 38. Section 607 of the recently enacted Warning, Alert and Response Network Act (WARN Act) amended the Stafford Act to add the term "essential service provider" which includes entities that provide telecommunications service.⁶¹ This section of the

⁵⁷ See DHS Comments at 7.

⁵⁸ *Id*.

⁵⁹ See DHS Comments at 8.

⁶⁰ The Panel "support[ed] the NSTAC's recommendation that telecommunications infrastructure providers and their contracted workers be afforded emergency responder status under the Stafford Act and that this designation be incorporated into the NRP, as well as state and local emergency response plans." *See Katrina Report* at 35. However, the Katrina Panel recommended that this be broadened to include all communications infrastructure providers.

⁶¹ Title VI of the Security and Accountability for Every Port Act of 2006, Pub. L. 109-347, § 607 (October 13, 2006) (Warning Alert and Response Network Act, or the "WARN Act").

WARN Act also states that, unless exceptional circumstances apply, in an emergency or major disaster, the head of a Federal agency, to the greatest extent practicable, shall not deny or impede access to the disaster site to an essential service provider whose access is necessary to restore and repair an essential service and shall not impede the restoration or repair of telecommunications services. We direct PSHSB to work with DHS, and all other relevant federal, state, tribal and local government agencies, to facilitate: (1) access to disaster areas for communications provider personnel so that recovery efforts can be expedited; and (2) the incorporation into the NRP and state, tribal and local emergency response plans of the designation of telecommunications service providers as "essential service providers." PSHSB should also encourage DHS to seek Congressional action, if necessary, to ensure that the term "essential service provider" includes all communications service providers.

- 39. Utilization of State/Regional Coordination Bodies. The Katrina Panel recommended that the Commission work with state and local governments and the communications industry (including wireline, wireless, WISP, satellite, cable and broadcasting) to better utilize the coordinating capabilities at regional, state and local Emergency Operations Centers (EOCs), as well as the Joint Field Office (JFO). In particular, the Panel recommended that the Commission encourage, but not require, each regional, state and local EOC and JFO to: (1) facilitate coordination between communications infrastructure providers and state and local emergency preparedness officials (such as the state EOC) in the state or region at the EOC or JFO; (2) develop and facilitate inclusion in state emergency preparedness plans, where appropriate, one or more clearly identified post-disaster coordination areas for communications infrastructure providers, their contracted workers, and private security teams to gather post-disaster where credentialing, security, escorts and further coordination can be achieved; and (3) share information and coordinate resources to facilitate repair of key communications infrastructure post-disaster.
- 40. Commenters generally support the recommendation that the Commission work with state and local governments and the communications industry to better facilitate coordination between emergency responders and the communications infrastructure providers. In its comments CTIA recommended that the Commission work with Federal, state and local governments to create a process to establish embarkation points for communications recovery efforts in the wake of a disaster. DHS agrees that it would be advantageous to engage the EOCs and JFOs in support of greater communications crisis preparedness and more effective response planning. DHS asserts, however, that it would be more appropriate, and consistent with mission responsibilities and existing relationships between the entities, for such activities to be coordinated jointly by NCS and DHS/FEMA in the first instance rather than by the FCC. Cingular asserts that the Commission should urge states to refrain from imposing emergency preparedness requirements on the industry. Cingular states that the

⁶² *Id*.

⁶³ CTIA Comments at 18.

⁶⁴ DHS Comments at 8.

⁶⁵ Cingular Comments at 7.

adoption of state specific requirements, while well intended, hinder recovery efforts by eliminating flexibility and creating a patchwork of inconsistent requirements that carriers must follow.⁶⁶

- 41. These recommendations generally fall under the jurisdiction of the NCS which, as the coordinator and primary agency for ESF #2 (Communications) of the NRP, performs these functions. The Commission supports these efforts in its role as an ESF #2 support agency. ESF #2 coordinates Federal actions for the restoration of the telecommunications infrastructure and ensures the provision of Federal communications support to Federal, state, tribal, local and private sector response during an Incident of National Significance. NCS assists in the coordination of planning and provision of emergency preparedness communications for the Federal government under all circumstances, including crisis or emergency, attack, recovery and reconstitution. The Commission and other government agencies such as FEMA have also taken a number of steps in this area. The Commission reached out to its licensees to determine their status and needs and provided the collected information to the NCS. The Commission then helped coordinate ESF #2 response efforts to aid the Commission's licensees (e.g., arranged for helicopter overflights, fuel shipments, access, curfew and airport information). The Commission is also working with DHS/NCS to encourage regional, state and local EOCs and/or JFOs to identify post-disaster coordination areas for communications providers and their contract workers and to create a process to establish embarkation points for communications recovery efforts. For example, the Commission assisted DHS with developing proposals making federal property available as a staging area for communications infrastructure providers under the Stafford Act.
- 42. We direct PSHSB to continue to work with DHS, state, tribal and local governments and the communications industry on these issues. However, we decline to take action to urge the states to refrain from imposing emergency preparedness requirements on the communications industry as Cingular advocates.⁶⁷
- 43. <u>Priority Utility Restoration for Communications Providers</u>. In its report, the Katrina Panel recommended that the Commission encourage, but not require, each regional, state and local EOC and JFO to facilitate electric and other utilities' maintenance of priority lists that include commercial communications providers for commercial power restoration. The Katrina Panel stated that power restoration activities should be coordinated with communications restoration. The majority of commenters support this recommendation.
- 44. Other agencies, such as DHS, the Department of Energy, and state agencies, have primary jurisdiction and authority over this matter. Loss of power is a critical failure that DHS/NCS is aware of and focused on. For example, NCS coordinates priority lists with the agencies responsible for NRP's Emergency Support Function #12 Energy. The communications sector is number two on the ESF #12 priority lists. NCS also has tools that can identify communication sites. The agencies responsible for ESF#12 have tools that can locate energy sites near communications

⁶⁶ Id.

⁶⁷ Cingular Comments at 9-10.

providers and determine whether there have been critical failures. Coordination of these priority lists between Emergency Support Functions 2 and 12 is ongoing. We direct PSHSB to support DHS/NCS and the other agencies addressing this issue in their efforts to ensure priority power and other relevant utility restoration for commercial communications providers during and after disasters.

- 45. Expanding and Publicizing Priority Communications Service Programs. The Katrina Panel recommended that the Commission work with the NCS to promote the use of existing priority communications services, such as Telecommunications Service Priority (TSP), Government Emergency Telecommunications Service (GETS) and Wireless Priority Service (WPS), to all eligible entities, particularly eligible government, public safety, emergency medical community, and critical industry groups.⁶⁸ Further, the Katrina Panel stated that the Commission should work with NCS to clarify whether broadcast, WISP, satellite, and cable company repair crews are currently eligible for GETS and WPS and, if so, should also promote the availability of those priority services to those entities. The Katrina Panel also recommended that the Commission work with NCS and industry to establish and promote best practices to ensure that all WPS, GETS, and TSP subscribers are properly trained in how to use these services. Finally, the Katrina Panel recommended that the Commission work with NCS to explore whether it is technically and financially feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities, thus avoiding the need for a WPS caller to also enter GETS information.69
- 46. DHS fully supports the Katrina Panel's recommendation that the Commission work with NCS to promote wider use of GETS, WPS and TSP programs among government, public safety, and critical industry groups. Broadcasters that provided comments support granting broadcasters access to GETS and WPS. Other commenters state that promotion of these programs must be coordinated with industry to ensure that providers can absorb additional demands placed on their networks through increased participation in the programs.
- 47. PSHSB staff members are actively engaged in priority services outreach. For example, PSHSB staff recently worked with the NCS TSP Program Office, various telecommunications carriers, and the State of New York to enroll over 2,000 circuits into the TSP program. Additionally, PSHSB staff is closely coordinating with the HHS to increase awareness among health care providers, particularly hospitals, about the benefits of enrollment and participation in federal priority service programs. This initiative includes expanded outreach in the health care sector and with state health departments to increase their understanding of TSP, GETS and WPS during and in the aftermath of a natural disaster or other emergency, such as an influenza pandemic. HHS is considering options to better incorporate support for these federal priority

⁷⁰ DHS Comments at 8, n.13.

⁶⁸ See Katrina Panel Report at 36.

⁶⁹ Id.

⁷¹ Gulf States Broadcasters Comments at 6; National Association of Broadcasters Comments at 13.

⁷² Cox Reply Comments at 21; NCTA et al Comments at 15.

service programs into their emergency preparedness funding streams. The Commission is also working with hospital associations to educate the medical community about priority communications services.⁷³ In addition, PSHSB is working with NCS to enhance WPS and resolve the issue of whether it is feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities.

- 48. We direct PSHSB to continue to work with DHS, including the NCS Committee of Principal's Priority Services Working Group (PSWG), to promote the priority communications services to all eligible entities, particularly eligible government, public safety, emergency medical community, and critical industry groups, including repair crews which could qualify under the eligibility criteria for both WPS and GETS under the category of disaster recovery. PSHSB should work with DHS to ensure that communications systems' capabilities are not overwhelmed by increased demands placed on networks by increased participation in these programs. We also direct PSHSB to support the creation and promotion of best practices to ensure proper training in how to use these services. Finally, we direct PSHSB to continue working with DHS and NCS's PSWG to enhance WPS and resolve the issue of whether it is feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities.
- 49. <u>Broadening NCC to Include All Communications Infrastructure Sectors</u>. The Katrina Panel recommended that the Commission work with the NCS to broaden the membership of the NCC to include adequate representation of all types of communications systems, including broadcast, cable, satellite and other new technologies, as appropriate. The NCC is a government and industry organization within DHS/NCS. It functions at the operational level and assists in initiating, coordinating, restoring and reconstituting national security and emergency preparedness (NS/EP) telecommunications services or facilities under all conditions of crises and disasters.
- 50. In January 2000, the NCC was designated an Information Sharing and Analysis Center (ISAC) for Telecommunications in accordance with Presidential Decision Directive 63.⁷⁴ The NCC-ISAC facilitates the exchange among government and industry participants regarding vulnerability, threat, intrusion, and anomaly information affecting the telecommunications infrastructure. Since its creation, the NCC has coordinated the restoration and provisioning of national security and emergency preparedness telecommunication services and facilities during natural disasters and armed conflicts. The NCC leverages its unique joint government/industry structure and all-hazard emergency response capabilities to coordinate the initiation, restoration, and reconstitution of United States government national security and emergency preparedness telecommunications services both nationally and internationally.⁷⁵

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⁷³ See supra at para. 15, for more information regarding the PSHSB's outreach to hospital associations and the emergency medical community regarding emergency communications.

⁷⁴ The Clinton Administration's Policy on Critical Infrastructure Protection: Presidential Decision Directive 63, White Paper (May 22, 1998).

⁷⁵ See http://www.ncs.gov/ncc.

- 51. DHS fully supports the Katrina Panel's recommendation that the Commission work with NCS to broaden the membership of the NCC. The DHS states that NCS is already working with the members of industry to explore expansion of NCC membership and would welcome the Commission's engagement in this area. Several additional commenters support this recommendation.
- 52. In coordination with DHS/NCS, PSHSB is currently engaged in efforts to make the NCC more of an overall communications information sharing and analysis center instead of one focused solely on telecommunications. The Commission is working with communications trade groups and broadcasters, among others, to encourage them to consider NCC membership. Recently, a fiber optic provider the Commission introduced to the NCC signed up for membership as did APCO, COMPTEL, Global Crossing, and Cox Cable. We direct PSHSB to continue its efforts in this area.
- 53. <u>Website for Emergency Coordination</u>. The Katrina Panel recommended that the Commission create a website identifying the key state emergency management contacts, particularly for communications coordinating bodies, and post-disaster coordination areas for communications providers. Some commenters support the proposal that the Commission create a disaster response website for communications providers; other commenters state that this function is best suited for other agencies, such as FEMA or DHS.
- 54. FEMA and many states already have publicly available information identifying key state emergency management contacts. FEMA's website has a compilation of state emergency contacts (http://www.fema.gov/about/contact/statedr.shtm) and the NCC website (http://www.ncs.gov/ncc) has links to federal agencies. Accordingly, we do not believe it is necessary for the Commission to create a similar website.
- 55. To facilitate access to this information by communications companies, we direct PSHSB to coordinate with FEMA to provide updated links to the relevant state emergency contact information contained on the FEMA website. Specifically, PSHSB should create a link on its website to FEMA's listing of state emergency contact information.
- 56. FCC Website for Emergency Response Team Information. The Katrina Panel recommended that the Commission create a website to publicize the Commission's emergency response team's contact information and procedures for facilitating disaster response and outage recovery. Commenters unanimously support the Katrina Panel's recommendation. Commenters contend that the Commission should maximize existing resources by developing and posting on the Commission's

⁷⁷ *Id*.

⁷⁶ DHS Comments at 8, n.13.

⁷⁸ See, e.g., Gulf State Broadcasters Comments at 3-4; AT&T Comments at 5; Cox Reply Comments at 20-21; Motorola Comments at 9; NCTA *et al* Comments at 10-11; PRT Comments at 10; Qwest Comments at 10; SIA Comments at 13; USA Mobility Comments at 15; Verizon Comments at 21.

website the Commission's emergency response team's contact information and procedures.

- 57. We agree that a website providing emergency contact information, procedures for facilitating disaster response and outage recovery, and procedures for obtaining regulatory relief during emergencies would be helpful. We direct PSHSB to work with other Bureaus and Offices, as appropriate, to do so.
- 58. <u>Other Recovery Coordination Recommendations</u>. Commenters submitted the following suggestions for improving the recovery coordination process:
- 59. Expedited Importation of Essential Communications Technology. Iridium Satellite LLC suggests that the Commission work with other federal agencies to establish a system that facilitates the delivery of replacement infrastructure and equipment during a disaster. 79 Additionally, Inmarsat asserts that, as part of creating redundancy, the federal government should recognize the importance of, and encourage the building of, mobile units that can be deployed as needed to any given disaster zone to assist in rapid restoration of vital communications using Mobile Satellite Service. 80 These functions are covered by ESF #2. The Commission is already working with other agencies to support these functions and will continue to coordinate with DHS/NCS and other agencies regarding these matters. Inmarsat also asserts that the Commission should work with U.S. Customs to ensure that bottlenecks do not slow the importation of essential communications technology in the aftermath of a disaster.81 Inmarsat and other satellite operators apparently experienced a sharp rise in demand after Hurricane Katrina that could not be met by the existing stock of satellite terminals in the U.S.82 We direct PSHSB to coordinate with DHS/NCS, U.S. Customs and other appropriate agencies to develop a systematic approach toward the importation of communications equipment needed for disaster response in the wake of disasters.
- 60. Real Time Tracking of Progress and Shared Experiences. Champaign Urbana Wireless Network, The Texas ISP Association, The Association for Community Networking, and Acorn Active Media (CUWN, et al.) suggest that the Commission provide a means by which communications responders could record their progress, share experiences in real time and avoid accidental conflicts. This function is primarily a responsibility of DHS/NCS under ESF #2 and PSHSB should continue to coordinate with DHS/NCS regarding these matters.

C. First Responder Communications

61. <u>Emergency Restoration Supply Cache and Alternative Inventory</u>. To facilitate the restoration of public safety communications, the Panel recommended that the Commission: (1) support the ongoing efforts of the NCC to develop and maintain a database of state and local public safety system information, including frequency usage,

⁷⁹ Iridium Comments at 6-7.

⁸⁰ Inmarsat Comments at 8.

⁸¹ *Id.* at 7.

⁸² *Id*.

to allow for more efficient spectrum sharing, rapid on-site frequency coordination, and emergency provision of supplemental equipment in the event of system failures; (2) support the efforts of the NCC to develop an inventory of available communications assets (including local, state, federal civilian and military) that can be rapidly deployed in the event of a catastrophic event⁸³ and work with the NCC and the appropriate agencies to educate key state and local emergency response personnel on the availability of these assets and how to request them; and (3) coordinate with the NCS/NCC to assure that, immediately following any large disaster, there is an efficient means by which federal, state and local officials can identify and locate private sector communications assets that can be made rapidly available to first responders and relief organizations. The Katrina Panel noted that one means by which to identify and locate private sector communications assets would be a website maintained by either the FCC or NCC through which the private sector could register available assets along with product information and stated that such a website should be designed with a special area for registering available equipment to assist persons with disabilities in their communications needs.⁸⁴

- 62. Support NCC Efforts to Develop a Database of State and Local Public Safety System Information. PSHSB has already provided support for the NCC's ongoing efforts to develop and maintain a database of state and local public safety system information. With assistance from PSHSB, the NCC has developed a public safety first responder frequency sharing guide. PSHSB consulted private frequency coordinators and collected and coordinated information from them for this effort. Additionally, although it was only developed for the states affected by Hurricane Katrina, FEMA recently developed a Gulf Coast communications plan for use during emergencies that identifies all public safety equipment and spectrum currently in use.
- Coordinate with NCC to Facilitate the Availability of Communications Assets for First Responders Post-Disaster. The Commission already coordinates with the NCS/NCC to assure that, following any large disaster, there is an efficient means by which federal, state and local officials can identify and locate private sector communications assets that can be made rapidly available to first responders and relief organizations. PSHSB has been providing a supporting role to FEMA on this issue. For example, per FEMA's request, PSHSB recently set up a meeting between FEMA and communications industry representatives to discuss, among other things, contingency contracts for equipment and the identification of equipment that can be airlifted through the Department of Defense. PSHSB already supports the efforts of the NCC to develop an inventory of available communications assets, in 2006 the NCS began development of an inventory database of government and industry assets. This inventory database of available government and industry communications assets developed by NCC and available to ESF #2 addresses this recommendation. Regarding a website, a function already exists whereby industry can report their available assets directly to the NCC.85

⁸³ The Katrina Panel stated that the list should include land mobile radios, portable infrastructure equipment, bridging technologies/gateways, and backup power system components and the information should include the steps necessary for requesting the deployment of these assets. See Katrina Panel Report at 38.

⁸⁴ Katrina Panel Report at 38.

⁸⁵ For security purposes, industry groups or entities advise the NCC of assets and the NCC inputs the information directly into the database.

- 64. We direct PSHSB to continue to work with DHS, NCS, NCC, FEMA, state governments, and industry on these issues. We also direct PSHSB to continue to work with NCC to address the Katrina Panel recommendation regarding the identification of private sector communications assets, including specifically identifying equipment available to assist persons with disabilities in their communications needs.
- 65. Equipment Cache. Another Katrina Panel recommendation intended to facilitate the restoration of public safety communications includes that the Commission encourage state and local jurisdictions to retain and maintain, including through arrangements with the private sector, a cache of equipment components that would be needed to immediately restore existing public safety communications within hours of a disaster. The Katrina Panel stated that the cache should: (1) include the necessary equipment to quickly restore communications capabilities on all relevant mutual aid channels; (2) be maintained as a regional or state-wide resource, and located in areas protected from disaster impacts; and (3) be included as an element of the NRP. Further, the Katrina Panel recommended that the Commission encourage state and local jurisdictions to utilize the cache through training exercises on a regular basis. 86
- In its comments, DHS stated that it has reservations about the 66. recommendation concerning the stockpiling of equipment. DHS noted that already limited budgets do not provide funding to procure additional equipment and, in many cases, the redundant equipment for network restoration is often unavailable because the systems at issue are legacy systems that are obsolete and no longer supported by manufacturers.87 We agree. The Commission is reluctant to encourage state and local jurisdictions to maintain such a cache of equipment unless funding for such an effort has been specifically identified. Many local jurisdictions do not have the requisite funds for this effort. Although some states have such equipment under "mutual aid agreements," most states do not have funds for equipment not in use; their funds are used for equipment intended for immediate use. Further, there are already a number of training exercises for responders. For example, there are regional annual training exercises held to demonstrate equipment in a disaster and to show options for restoration.88
- 67. Facilitating First Responder Communications Capabilities. To facilitate interoperability among first responder communications, the Katrina Panel recommended that the Commission: (1) maintain the schedule for commencing commercial spectrum auctions by January 28, 2008 to fully fund the \$1 billion public safety interoperability program, consistent with recent legislation; (2) work with NTIA and DHS to establish appropriate criteria for the distribution of the \$1 billion in a manner that best promotes interoperability with the 700 MHz band - among other things, such criteria should mandate that any radios purchased with grant monies must be capable of operating on 700 MHz and 800 MHz channels established for mutual aid and interoperability voice

⁸⁶ Katrina Panel Report at 37.

⁸⁷ DHS Comments at 9.

⁸⁸ E.g., National Communications System's Emergency Support Function 2 Training Conference, Homestead Air Reserve Base, Homestead, Florida (May 20-26, 2006).

communications; (3) encourage the expeditious development of regional plans for the use of 700 MHz systems and move promptly to review and approve such plans; (4) expeditiously approve any requests by broadcasters to terminate analog service in the 700 MHz band before the end of the digital television transition in 2009 in order to allow public safety users immediate access to this spectrum; (5) work with the NTIA and DHS to develop strategies and policies to expedite allowing Federal (including the military), state and local agencies to share spectrum for emergency response purposes, particularly the Federal incident response channels and channels established for mutual aid and interoperability; and (6) publicize interoperability successes and/or best practices by public safety entities to serve as models to further interoperability.

- 68. Schedule for 700 MHz Spectrum Auction. We agree that the Commission should, consistent with recent legislation, maintain the schedule for commencing commercial spectrum auctions in the 700 MHz bands by January 28, 2008. So Accordingly, the Commission should proceed with current plans for developing auction rules and procedures, including the conclusion of a pending rulemaking addressing the commercial 700 MHz spectrum. The Commission will commence auction of this spectrum in a manner consistent with the Digital Television Transition and Public Safety Act of 2005.
- 69. Criteria for the Distribution of the \$1 Billion Public Safety Interoperability *Program.* We direct PSHSB to offer to work with NTIA and DHS, as appropriate, to establish criteria for the distribution of the \$1 billion interoperability fund in a manner that best promotes interoperability with the 700 MHz band. No commenter opposed the idea of the FCC offering to work with NTIA and DHS in this regard. Although the statute places responsibility for implementing this grant program upon NTIA and DHS, the Commission could provide helpful input. We believe, however, that such funds should not be limited to the 700 MHz and 800 MHz bands and that the PSHSB should encourage NTIA and DHS to explore ways to use IP technology to facilitate interoperability with VHF and UHF. An IP-based approach would allow legacy systems to evolve into a broadband communications system. Additionally, any action relating to the 700 MHz band should include consideration of DHS' concern that the Katrina Panel's recommendations are focused only on state and local communications with little standardization across regions and, therefore, fail to address the need to incorporate federal coordination with state and local first responders into the solution.
- 70. Expeditious Development, Review and Approval of Regional Plans. We direct PSHSB to encourage, as part of their outreach efforts, the expeditious development of regional plans for use of 700 MHz systems and to promptly review and, where possible, approve such plans when submitted. This received strong support in the record. PSHSB should initiate outreach efforts to encourage states, tribal governments and localities to participate in the regional planning processes. PSHSB

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⁸⁹ The Commission is required, under the Digital Television Transition and Public Safety Act of 2005, to commence the auction no later than January 28, 2008. *See* 47 U.S.C. § 309(j)(15)(C)(v), (vi), as enacted by the Digital Television Transition and Public Safety Act of 2005, Title III of the Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4, 22, § 3003(a)(2)(2006) ("Digital Television Transition and Public Safety Act of 2005").

can work with regional planning committees in their efforts to develop regional plans and coordinate their plans with adjacent regions.

- 71. Requests by Broadcasters to Terminate Analog Service in the 700 MHz Band. Although we understand the importance of ensuring access to this spectrum by public safety agencies as quickly as possible, we must balance this goal with the need to protect consumers who could potentially lose service if they have not yet obtained digital televisions or converters. Accordingly, although we will endeavor to process requests from broadcasters to terminate analog service as quickly as possible, we will continue to review such requests pursuant to the policies previously adopted in *Upper 700 MHz Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*.90
- 72. Sharing of Spectrum. We agree that implementation of the recommendation that the Commission work with NTIA and DHS to develop strategies and policies to expedite allowing Federal, state and local agencies to share spectrum for emergency response purposes would serve the public interest. We direct PSHSB, together with the Office of Engineering and Technology, to work with NTIA and DHS on this issue. There is record support for the Commission working with NTIA and DHS to allow Federal and non-Federal spectrum sharing for emergency response purposes, both in spectrum allocated for Federal and non-Federal uses. 91 NTIA states in its comments that it and the Interdepartment Radio Advisory Committee ("IRAC") already are considering a proposal to revise current rules to allow more flexible use by state and local governments, and to simplify the regulations governing the use of Federal interoperability channels.92 The Commission should assist in these ongoing efforts in the IRAC and its subcommittees and should consider other possible solutions for making spectrum available for shared use by federal, state, tribal and local agencies for emergency response purposes.
- 73. Publicizing Interoperability Successes and Best Practices. We direct PSHSB to work with other federal agencies, the public safety community and the industry, as appropriate, to develop best practices to promote interoperability. In addition, PSHSB should encourage public safety organizations to provide interoperability success stories and make this information available on its website.
- 74. Resiliency and Restoration of E-911 Infrastructure and PSAPs. In order to ensure a more robust 911 and E-911 service, the Katrina Panel recommended that the Commission encourage the implementation of the following three best practices issued by the Network Reliability and Interoperability Council (NRIC):

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⁹⁰ Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, Carriage of the Transmissions of Digital Television Broadcast Stations, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-168, CS Docket No. 98-120, MM Docket No. 00-83, 15 FCC Rcd 20845, 20871, ¶ 62 (2000).

⁹¹ See, e.g., BellSouth Comments at 20.

⁹² NTIA Ex Parte at 1.

- (1) Service providers and network operators should consider placing and maintaining 911 circuits over diverse interoffice transport facilities (*e.g.*, geographically diverse facility routes, automatically invoked standby routing, diverse digital cross-connect system services, self-healing fiber ring topologies, or any combination thereof).⁹³
- (2) Network operators, service providers, equipment suppliers and public safety authorities should establish alternative methods of communication for critical personnel.⁹⁴
- (3) Service providers, network operators and property managers should ensure availability of emergency/backup power (e.g., batteries, generators, fuel cells) to maintain critical communications services during times of commercial power failures, including natural and manmade occurrences (e.g., earthquakes, floods, fires, power brown/blackouts, terrorism). The emergency/backup power generators should be located onsite, when appropriate.⁹⁵
- 75. We agree that PSHSB should be proactive in encouraging implementation of the first two of these NRIC recommendations, for example, through additional outreach efforts which could include, *inter alia*, NRIC best practice outreach efforts, promoting industry guidelines on its website, and working with FEMA to educate PSAP managers in disaster management, PSAP rerouting, and the National Incident Management System. This is consistent with the recommendations of both NRIC and the Katrina Panel that these best practices be encouraged, but not required. No commenters asserted that there is a need to make these best practices mandatory at this time. Additionally, there may be legitimate concerns that implementation of diverse 911 circuits would be cost-prohibitive in certain cases.
- 76. NENA recommends that "the FCC or the state commissions, as appropriate, require all telephone central offices to have an emergency back-up power source." St. Tammany's Parish Communications District 1 emphasizes the need for wireline providers to have backup procedures in place. Several commenters supported this voluntary best practice and indicated that they have backup power available at their facilities. For example, AT&T agrees that it is important to have backup power to ensure the continued operation of the nation's 911 system during disasters and states that it looks forward to helping implement the Katrina Panel's recommendation that the Commission encourage the implementation of the NRIC

⁹³ See NRIC VII Recommendation 7-7-0566

⁹⁴ See NRIC VII Recommendation 7-7-1011.

⁹⁵ See NRIC VII Recommendation 7-7-5204.

⁹⁶ NENA Comments at 6.

NENA Comments at 6

backup power best practice.⁹⁸ AT&T reported that all of its central offices are equipped with backup batteries and/or diesel generators.⁹⁹ Verizon also stated that every critical component in its networks is protected by automatic power back-up systems.¹⁰⁰

- 77. We agree with NENA's and St. Tammany Parish's suggestion and find that adoption of this requirement serves the public interest. Accordingly, pursuant to our authority under Section 1 of the Communications Act, as amended, ¹⁰¹ we will require all local exchange carriers (LECs), including incumbent LECs (ILECs) and competitive LECs (CLECs), as well as commercial mobile radio service (CMRS) providers to have an emergency back-up power source for all assets that are normally powered from local AC commercial power including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that normally are powered from local AC commercial power.
- 78. Our expectation is that this requirement will not create an undue burden since several reported in their comments that they already maintain emergency back-up power. We realize, however, that this requirement may present a financial burden to some small carriers. Accordingly, we will not impose this requirement on LECs (including both ILECs and CLECs) that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules. We will also not apply this requirement to non-nationwide CMRS providers with no more than 500,000 subscribers. 103
- 79. For the same reasons set forth in ¶75, we find that PSHSB should be proactive in encouraging implementation, by all other communications providers, of the third NRIC recommendation set forth above in ¶74 which states that communications service providers, network operators and property managers should ensure the availability of emergency/backup power.

⁹⁸ AT&T Comments at 2.

⁹⁹ AT&T Comments at 13.

¹⁰⁰ Verizon Comments, at 7-8.

¹⁰¹ 47 U.S.C. § 151.

¹⁰² Section 32.11 provides that Class B companies are those companies that have annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold. 47 C.F.R. § 32.11. The Wireline Competition Bureau recently announced that the 2006 revenue threshold for Class A to Class B companies is \$134 million. *Public Notice*, "Annual Adjustment of Revenue Thresholds," DA 07-1706 (WCB, April 12, 2007). Although Section 32.11, by its terms, applies only to ILECs, we are applying the same revenue categories to CLECs for the purpose of the exception to this requirement.

¹⁰³ Although this standard is based on the Tier III CMRS definition which is defined as non-nationwide CMRS providers with no more than 500,000 subscribers as of the end of 2001, we note that we are not exempting from this requirement those non-nationwide CMRS providers that have grown to exceed the 500,000 subscriber threshold since 2001 as we believe that such providers are at a size where they should be able to comply with the emergency back-up power rule.

- 80. The Katrina Panel also recommended that the Commission encourage the implementation of an NRIC best practice that states that network operators should consider deploying dual active 911 selective router architectures to enable circuits from the caller's serving end office to be split between two selective routers in order to eliminate single points of failure. This NRIC best practice further states that diversity should also be considered on interoffice transport facilities connecting each 911 selective router to the PSAP serving end office. Some commenters asserted that selective routers represent technology whose time has passed. NENA contends that deployment of a dual selective router at this point should be done only if particular circumstances strongly favor such an approach.
- 81. PSHSB should neither encourage nor mandate implementation of this NRIC best practice. We agree with the many commenters who advocated that public safety communications planning, including the 911 infrastructure, instead should move to incorporate IP-based technologies. This will enable the public safety community to focus on future needs rather than requiring more from legacy systems, offer more redundancy and flexibility, and contribute greatly to improving compatibility between public safety systems that operate using different proprietary standards.
- 82. Grant Eligibility. We agree with the recommendation of the Katrina Panel that the FCC urge federal grant programs to permit state or local 911 commissions or emergency communications districts that provide 911 or public safety communications services to be eligible to apply for 911 enhancement and communications enhancement/interoperability grants. This recommendation also received strong support from APCO and NENA. We, therefore, direct PSHSB to consult with DHS and administrators of other applicable federal grant programs to explore this possibility. We caution, however, that PSHSB refrain from advocating any particular funding approach for state, tribal or local 911 commissions. Our goal is to support state, tribal and local 911 commissions in their efforts to enhance the redundancy, interoperability, and resiliency of their operations.
- 83. Secondary Back-Up PSAPS. The Katrina Panel also stated that the Commission should recommend the designation of a secondary back-up PSAP that is more than 200 miles away to answer calls when the primary and secondary PSAPs are disabled.¹⁰⁸ Most commenters, including APCO and NENA, did not support this

¹⁰⁴ See NRIC VII Recommendations 7-7-0571.

¹⁰⁵ AT&T Comments at 12-14; Cisco Comments at 4-7.

¹⁰⁶ NENA Comments at 4-5.

¹⁰⁷ AT&T Comments at 12-14; Cisco Comments at 4-7; NENA Comments at 3-5; St. Tammany Parish Communications District 1 Comments at 3; Texas Commission on State Emergency Communications and the Texas 9-1-1 Alliance (Texas 9-1-1 Entities) Comments at 2-5; TDI Reply Comment at 15-16.

¹⁰⁸ Katrina Panel Report at 39. The Panel noted that this "requires the FCC to eliminate any regulatory prohibition against the transport of 911 across LATA boundaries. As noted supra at ¶28 with respect to whether the Commission should grant carriers permanent relief from interLATA boundary restrictions as a way to enhance network resiliency, the BOCs have already raised the issue of relief from Section 272 and its implementing rules in a number of pending forbearance petitions and waiver requests. We will consider this issue in those proceedings as appropriate.

recommendation. APCO asserts that PSAPs 200 miles away would have difficulties with dispatch and that a better approach would be to have "mirrored" telephone central offices at remote locations. We decline to implement this Katrina Panel recommendation. Use of back-up PSAPs should be based on capabilities, common vulnerabilities and technical capabilities, not an arbitrary distance. Geographic remoteness is only one consideration; other considerations include the probability of disaster affecting both PSAPs, size of the PSAPs, the level of technology used at both PSAPs, radio interoperability, availability of operating support systems, and logistics for transporting and staffing PSAP personnel familiar with the geographic area covered by the disaster.

- 84. Other Recommendations Regarding First Responder Communications. Various commenters submitted additional recommendations for addressing first responder communications issues. We will address those issues below.
- 85. Relocation of Existing Licensees on Interoperability Channels. The Tennessee Statewide Interoperability Executive (the Tennessee SIEC) asserts that the Commission should move existing licensees on the VHF and UHF interoperability channels so that such channels are available for interoperability usage and do not have to compete with grandfathered dispatch operations or secondary telemetry, etc. The Tennessee SIEC also suggested that the Commission eliminate licensing of the interoperability channels for any purpose other than interoperability.
- 86. When the Commission designated the VHF and UHF interoperability channels, it sought to balance the need for improved interoperability capabilities below 512 MHz with the need to minimize the impact on incumbent licensees. The Commission therefore "grandfathered" incumbent licensees on a secondary basis only to interoperability communication rather than ordering them to vacate the channels or use them exclusively for interoperability purposes. With regard to new licenses, the rules provide that these frequencies will be available primarily for interoperability-only communications. We decline to amend our rules at this time to move existing licensees on the VHF and UHF interoperability channels. Instead, we find that a prudent approach would be first to consult with public safety coordinators. Accordingly, we direct PSHSB to consult the public safety frequency coordinator community through the Public Safety Communications Council to determine the extent of the problem, if any, and whether moving grandfathered licensees at this time would be feasible, and if so, how.
- 87. Use of a Standard Continuous Tone Coded Squelch System. The Tennessee SEIC suggested that the Commission mandate the use of a standard Continuous Tone Coded Squelch System ("CTCSS") to promote interoperability and

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¹⁰⁹ See, e.g., APCO comments at 5; NENA comments at 7-8.

¹¹⁰ The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, Establishment of Rules and Requirements For Priority Access Service, WT Docket No. 96-86, Third Memorandum Opinion and Order and Third Report and Order, 15 FCC Rcd 19844, 19844-45 (2000).

¹¹¹ 47 C.F.R. § 90.20 (d)(80).

minimize disruption at a disaster scene. We decline to initiate a rulemaking to implement Tennessee SEIC's suggestion at this time. The Commission has designated 5 VHF frequencies and 4 UHF channel pairs for interoperability use nationwide. Generally, VHF and UHF analog public safety radios include the CTCSS feature. Each radio "listens" for CTCSS tones transmitted by base stations, mobiles, or portables. If the tone is present, the user hears the communications directed to him/her, but other transmissions on the same frequency using a different CTCSS tone (or lacking a tone) are muted (squelched). Because these frequencies also have grandfathered, noninteroperable licensees, mandated use of a standard CTCSS on these channels would exclude (i.e., tune out) these incumbents. Use of different tone coded squelch frequencies on the interoperability channels could prohibit units from different jurisdictions from communicating at the scene of a disaster, which undermines the purpose of interoperability. Mandating a common CTCSS tone could impose unwarranted economic burdens by requiring the purchase of additional equipment or modification of existing equipment to employ such a tone. A mandated, common CTCSS also could adversely impact grandfathered licensees operating on the VHF and UHF interoperability channels.

- 88. There is not enough information in the record to recommend a rulemaking at this point. However, it would be prudent to consult with the public safety frequency coordinators to ascertain the scope of the problem and determine whether Commission action is warranted. We therefore direct PSHSB to consult with public safety frequency coordinators and ask them to study this proposal and provide further input to the Commission.
- 89. Statewide Channels. The Tennessee SIEC advocates that, in order to help states keep their statewide channels clear, the Commission should allow state agencies to provide FCC designated frequency coordinators with a list of FCC designated "Statewide" channels for protection within 35 to 50 miles of the state border depending upon terrain protection. We direct PSHSB to consult with public safety coordinators on the problem of keeping statewide channels clear.
- 90. Licensees Adjacent to Interoperability Channels. The Tennessee SIEC also advocates that the Commission mandate that the wideband licensees adjacent to the VHF/UHF interoperability channels move to narrowband emission to minimize interference to interoperability channels. We note our rules already require that this be done. Accordingly, no further action is necessary at this time.
- 91. Designation of 155.370 MHz as a Nationwide Inter-agency Channel. The Tennessee SIEC also advocates that the Commission designate 155.370 MHz as a nationwide inter-agency channel and implement a CTCSS tone to minimize interference. We refrain, at this time, from initiating a rulemaking to amend our rules

¹¹² See Tennessee SEIC Comments at 1 (July 31, 2006).

¹¹³ 47 C.F.R. § 90.209(b)(5) n.3, (b)(6); see also Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, WT Docket No. 99-87, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd. 3034 (2003).

¹¹⁴ See Tennessee SEIC Comments at 2 (July 21, 2006).

to designate 155.370 MHz as an inter-agency channel nationwide and implement a CTCSS tone to minimize interference. Designating this public safety frequency as an inter-agency channel nationwide may have a significant impact on existing incumbents on this frequency and adjacent channel incumbents. Overcoming interference concerns, particularly since VHF spectrum is traditionally congested, may prove challenging. The potential impact on existing licensees, including increased equipment costs, outweighs any benefits of designating a sixth VHF frequency for interoperability. We also note that the existing nationwide inter-agency channels were recommended by the four public safety coordinators and were adopted by the Commission partly because these were the "least licensed."

- 92. Common Nomenclature. The Tennessee Statewide Interoperability Executive and others recommend that the Commission mandate a common nomenclature for the designated interoperability channels and require each state to have a functional Statewide Interoperability Executive Council. These issues were raised in the 7th NPRM in WT Docket No. 96-86 and we will address them in that proceeding. The second statewise is the second statewise in the 7th NPRM in WT Docket No. 96-86 and we will address them in that proceeding.
- 93. *Mutual Aid Channels*. The Tennessee SIEC also stated that the Commission should encourage public safety frequency coordinators to keep designated Fire mutual aid channels (*i.e.* 154.265, 154.280, 154.295 MHz) and their narrowband counterparts and the National Law Enforcement Channel (*i.e.* 155.475 MHz) for mutual aid only. We refrain from concluding that the Commission should encourage public safety frequency coordinators to keep designated mutual aid channels for aid only, until the Commission can engage the public safety frequency coordinator community further on this issue. These frequencies have special limitations that make them available for specified mutual aid purposes, but the Tennessee SIEC suggests that the public safety frequency coordinators currently approve the use of these frequencies for non-mutual aid purposes. In order to evaluate the merits of this proposal, the Commission should consult with the public safety frequency coordinator community through the Public Safety Communications Council. Accordingly, we direct PSHSB to engage in such consultation and provide a recommendation on this issue.
- 94. 911 Analysis. NENA asserts that the Commission should require all 911 system service providers (SSPs) to analyze and provide detailed information on the redundancy, resiliency, and dependability of 911 networks and to provide detailed information to the Commission on areas where these issues are treated in the network and areas where there are gaps. NENA states that all 9-1-1 SSPs should be required to submit a plan to the Commission outlining this information and steps they intend to

¹¹⁵ Tennessee State Interoperability Executive Committee Comments at 2 (July 21, 2006).

¹¹⁶ See Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Fifth Memorandum Opinion and Order, Sixth Report and Order and Seventh Notice of Proposed Rulemaking, 20 FCC Rcd 831, 854-58, ¶¶ 57-61, 64-68 (2005).

¹¹⁷ Tennessee State Interoperability Executive Committee Reply Comments at 1 (July 31, 2006).

¹¹⁸ NENA Comments at 5-6; St. Tammany Parish Communications District 1 Comments at 2.

take to ensure diversity and dependability in the network, including any plans they have to migrate their network to an IP-based platform that will enable the migration from the existing 911 system to next generation 911 architecture. NENA also argues that these plans should be made available to leading public safety organizations.¹¹⁹

- AT&T asserts that NENA's proposal is misdirected because it is the PSAP, not the service provider, that must determine the best way to mitigate single points of failure within its 911 network in a cost effective manner. 120 Similarly, the United States Telecom Association (US Telecom) argues that ILECs do not own 911 networks, but merely provide inputs for them and should not, therefore, be required to report to the Commission regarding the dependability of these networks. 121 US Telecom argues that ILECs do not need to be burdened with additional reporting requirements and regulatory mandates, but rather need flexibility to create redundancies in their networks not mandates requiring them to do so where it is unnecessary. 122 AT&T also asserts that the NENA fails to explain how the Commission could make use of such detailed information in any manner that does not duplicate how 911 service providers already interact with PSAPs and state regulatory authorities. 123 AT&T and US Telecom assert that requiring the unnecessary further dissemination of this information could have serious adverse consequences for service providers, for whom those proprietary data have substantial competitive value, and for the general public if that information is compromised and comes into possession of persons and groups with criminal intentions. 124
- 96. We agree that the Commission should require the analysis of 911 and E911 networks and the submission of reports regarding the status of these networks. Although NENA's proposal appears to be limited to 911 SSPs, which are typically incumbent local exchange carriers (ILECs), we believe that, with the exceptions described below, this requirement should apply all LECs, including ILECs and CLECs, CMRS providers required to comply with the wireless 911 rules 125 and interconnected Voice over Internet Protocol (VoIP) service providers. It is critical that Americans

¹¹⁹ *Id*.

¹²⁰ AT&T Reply Comments at 3-4. AT&T recommends that PSAPs "routinely review their 911 networks with the service providers and identify points where facilities are not diverse." AT&T Comments at 12-13; AT&T Reply Comments at 3-4.

¹²¹ US Telecom Reply Comments at 8-9.

¹²² US Telecom Reply Comments at 8-9.

¹²³ In support of this assertion, AT&T cites Public Utility Commission of Texas Rules, Section 26.433, *available at* www.puc.state.tx.us/rules/subrules/telecom/26.433/26.433.pdf.

¹²⁴ AT&T Reply Comments at 3-4; US Telecom Reply Comments at 8-9.

¹²⁵ See 47 C.F.R. § 20.18.

^{126 &}quot;Interconnected VoIP services" are services that (1) enable real-time, two-way voice communications; (2) require a broadband connection from the user's location; (3) require IP-compatible customer premises equipment; and (4) permit users to receive calls from and terminate calls to the public switched telephone network. See IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers, WC Docket No. 06-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10257-58 ¶ 24 (2005), aff'd, Nuvio Corp v. FCC, 473 F.3d 302 (D.C. Cir. 2006) (VoIP 911 Order).

have access to a resilient and reliable 911 system irrespective of the technology used to provide the service. Therefore, we will require LECs, including both ILECs and CLECs, CMRS providers required to comply with the wireless 911 rules and interconnected VoIP service providers analyze and provide detailed reports on the redundancy, resiliency, and dependability of their 911 and E911 networks and systems. Where relevant, the reports should include steps the service provider intends to take to ensure diversity and dependability in the network and/or system, including any plans they have to migrate their network to a next generation IP-based E911 platform. This requirement will serve the public interest and further the Commission's statutory mandate to promote the safety of life and property through the use of wire and radio communication. 127

- We are mindful that this requirement may cause a financial burden to certain small carriers. Accordingly, we will not impose this reporting requirement on LECs, including ILECs and CLECs, that meet the definition of a Class B company set forth in Section 32.11(b)(2) of the Commission's rules. 128 We will also not impose this reporting requirement on Tier III CMRS carriers. 129 Interconnected VoIP service providers will be exempt from this requirement if their annual revenues fall below the revenue threshold established pursuant to Section 32.11 of the Commission's rules. NENA recommends that these reports be shared with "leading public safety organizations." Although we believe there is some benefit to sharing these reports with certain public safety organizations, we also understand that these reports will likely contain competitive and other information that should be accorded confidential treatment under our rules. To balance these concerns, we will share these reports with NENA, APCO, and The National Association of State 9-1-1 Administrators, the public safety organizations that previously have been provided copies of 911-related reports, but only pursuant to a protective order consistent with the model protective order previously adopted by the Commission. 130 We delegate authority to PSHSB to issue such protective orders.
- 98. AT&T and US Telecom argue that this should not be the duty of SSPs which are typically ILECs, suggesting that PSAPs are better situated to perform such an analysis. PSAPs know whether they have alternative facilities into their buildings and whether they have backup/alternative PSAP sites. However, carriers, not PSAPs, know about the selective routers, the routing between selective routers and the central offices

¹²⁷ See 47 U.S.C. § 151.

¹²⁸ Section 32.11 of the Commission's rules defines Class B companies as "[c]ompanies having annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold." 47 C.F.R. § 32.11 (b)(2). The Wireline Competition Bureau recently announced that the 2006 revenue threshold for Class A to Class B companies is \$134 million. Annual Adjustment of Revenue Thresholds, Public Notice, DA 07-1706 (WCB, April 12, 2007). Although Section 32.11, by its terms, applies only to ILECs, we are applying the same revenue categories to CLECs for the purpose of the exception to this requirement.

Tier III carriers are non-nationwide CMRS providers with no more than 500,000 subscribers at the end of 2001. See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Phase II Compliance Deadlines for Non-Nationwide Carriers, CC Docket No. 97-102, Order to Stay, 17 FCC Rcd 14841, 14848 ¶ 22 (2002).

¹³⁰ See In the Matter of Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission, Report and Order, GC Docket No. 96-55, 13 FCC Rcd 24816 (1998).

from which customers may call, and the diversity in the interoffice facilities between the selective router and the central office serving the PSAP. PSAPs should know whether they ordered facility diversity, but they do not have insight regarding how, or even if, this was provisioned. US Telecom also argued that ILECs should not be subject to mandates requiring them to create redundancies in their networks; however, the rule we adopt requires only an analysis and report, it does not require carriers to create additional network redundancies.

- 99. Accordingly, pursuant to our authority under Section 403 of the Communications Act, as amended, ¹³¹ we will require LECs, CMRS providers required to comply with the wireless 911 rules and interconnected VoIP service providers, except those exempted above, to conduct an analysis of the resiliency and reliability of their 911 networks or systems and to submit a report to the Commission. We delegate to PSHSB the authority to implement and activate a process through which these reports will be submitted, including the authority to establish the specific data that will be required from each category of communications provider. We also direct PSHSB to make efforts to ensure that carriers subject to state regulations requiring the reporting of similar information are afforded the opportunity to meet this requirement by submitting the state report. The report will be due 120 days from the date that the Commission or its staff announces activation of the 911 network and system reporting process.
- 100. We also note that NRIC VII developed best practices that could address this issue. Accordingly, we direct PSHSB to continue to encourage industry to implement NRIC's best practices in this area, to continue to encourage industry to develop best practices in this area specific to their locale, and to continue to work to see that such recommendations, and any resulting adopted best practices, are made available on the Commission's website.
- 101. Two-Way Paging Initiative. Commenters recommended that the Commission permit the use of 900 MHz B/ILT pool of spectrum for two-way paging systems either owned by public safety users or dedicated to the provision of emergency communications. We direct PSHSB, in coordination with WTB, to consider this issue and to determine what action, if any, should be implemented.
- 102. *McVey Petition for Rulemaking*. In his comments, W. Lee McVey requests that the Commission initiate a rulemaking to create a new radio service in the 148-150 MHz band "to facilitate interoperability between different first responders during and following a national emergency." We note that the 148-149.9 band is allocated on a primary basis for federal Fixed, Mobile and Mobile Satellite (Earth-to-Space) service and the 149-150.05 MHz segment is allocated on a co-primary basis for federal and non-federal Mobile Satellite (Earth-to-space) and Radio navigation Satellite Services, and that the petition does not address this use nor does it explain what rules would be necessary to govern access to this spectrum. Given the potential impact of

¹³² See e.g., AAPC Comments.

¹³¹ 47 U.S.C. § 403.

¹³³ McVey Petition at 22.

McVev's proposal to spectrum allocated for federal use, we direct PSHSB, together with OET, to seek feedback from NTIA on this petition. Upon receiving such feedback, we direct PSHSB and OET to make a determination on the appropriate action to be taken on this petition.

D. **Emergency Communications to the Public**

- Revitalize and Publicize the Emergency Alert System. The Katrina Panel suggests a number of recommendations to revitalize and publicize the existing Emergency Alert System ("EAS"). To facilitate and complement the use of the existing EAS, the Katrina Panel recommends that the Commission should: (a) educate state and local officials about EAS, its benefits, and how it can be best utilized; (b) develop a program for educating the public about the EAS and promote community awareness of potential mechanisms for accessing those alerts sent during power outages or broadcast transmission failures; (c) move expeditiously to complete its proceeding to explore the technical and financial viability of expanding the EAS to other technologies, such as wireless services and the Internet, recognizing that changes to communications networks and equipment take time to implement; (d) consistent with proposed legislation, work with Congress and other appropriate federal departments and agencies to explore the technical and financial viability of establishing a comprehensive national warning system that complements existing systems and allows local officials to increase the penetration of warnings to the public as well as target, when necessary, alerts to a particular area; (e) work with the DHS and other appropriate federal agencies on pilot programs that would allow more immediate evaluation and testing of new notification technologies; and (f) work with the Department of Commerce to expand the distribution of certain critical non-weather emergency warnings over National Oceanic and Atmospheric Administration (NOAA) weather radios to supplement the EAS. 134
- 104. We agree that we should encourage state, tribal and local governments to use EAS as a mechanism to deliver emergency alerts. Accordingly, we direct PSHSB to engage in outreach efforts to educate state, tribal and local governments about the EAS. In addition, we direct PSHSB to take steps to educate the public about EAS. We also note that PSHSB has coordinated with DHS on EAS issues, including issues related to the development of a state-of-the-art public alert and warning system. We direct PSHSB to continue those efforts.
- 105. Finally, on the issue of expanding the scope of EAS to include new technologies, as the Katrina Panel acknowledges, this issue is already the subject of our ongoing EAS rulemaking proceeding. 135 In addition, pursuant to the recently enacted WARN Act, 136 the Commission established an advisory committee -- the

134 Katrina Panel Report at 40.

¹³⁵ Review of the Emergency Alert System, First Report and Order and Further Notice of Proposed Rulemaking, EB Docket No. 04-296, 20 FCC Rcd 18625 (2005). We note that, in a separate action on May 31, 2007, the Commission adopted a Second Report and Order and Further Notice of Proposed Rulemaking in the EAS proceeding that addresses some of the Katrina Panel's recommendations. See FCC Takes Action To Further Strengthen Nation's Emergency Alert System, News Release, (May 31, 2007) ("EAS News Release").

¹³⁶ The Warn Act establishes a framework by which commercial mobile service providers may voluntarily transmit emergency alerts.

Commercial Mobile Service Alert Advisory Committee – to develop and recommend technical standards and protocols by which commercial mobile service (CMS) providers may voluntarily transmit emergency alerts. The Committee has a diverse membership, including over forty representatives from the wireless and broadcast industries, public safety, equipment manufacturers, organizations representing people with disabilities and the elderly, FEMA and NOAA. Thus far, the Committee has held three full Committee meetings and a number of informal working group meetings. The Commission expects that the Committee will meet its statutory deadline of submitting recommendations to the Commission by October 12, 2007.

- 106. Ensuring that People with Disabilities and Non-English Speaking Persons Receive Alerts. The Katrina Panel recommended that the Commission promptly find a mechanism to resolve technical and financial hurdles in the EAS system to ensure that non-English speaking people or people with disabilities have access to public warnings, if readily achievable. The Panel also recommended that the Commission work with trade associations and the disability community to create and publicize best practices for serving persons with disabilities and non-English-speaking Americans and encourage state and local government agencies that provide emergency information to take steps to make this information accessible to persons with disabilities and non-English speaking Americans. 138
- 107. We note that the issue of making EAS alerts accessible to people with disabilities and to those who do not speak English is already the subject of the EAS rulemaking proceeding. Moreover, the Commercial Mobile Service Alert Advisory Committee will consider these issues in the context of wireless carriers' participation in emergency alerts. On the broader issue of ensuring that emergency information reaches people with disabilities and non-English speaking Americans, we direct PSHSB, along with Consumer & Government Affairs Bureau (CGB) as appropriate, to work with the industry, state, tribal and local governments and organizations representing people with disability and non-English speaking persons on these issues. In the context of wireless carriers and organizations representing people with disability and non-English speaking persons on these issues.
- 108. Ensuring Consistent and Reliable Emergency Information Through a Consolidated and Coordinated Public Information Program. The Katrina Panel recommended that public information functions should be coordinated and integrated across jurisdictions and across functional agencies, among federal state, local and tribal partners, and with private sector and non-governmental organizations. The Panel recommended that the Commission work with involved parties to facilitate the

¹³⁹ We note that, in the Further Notice of Proposed Rulemaking adopted in the EAS proceeding on May 31, 2007, the Commission sought further comment on these issues. *See EAS News Release, supra*.

¹³⁷ Katrina Panel Report at 41.

 $^{^{138}}$ Id

¹⁴⁰ In addition, in the EAS Second Report and Order, the Commission directed PSHSB to convene a meeting, or a series of meetings, as soon as possible to address providing emergency information to non-English speakers. *See EAS News Release, supra*.

¹⁴¹ Katrina Panel Report at 41.

integration of media representatives into the development of disaster communications plans (Emergency Support Function #2). The Panel also urged the designation of a public information officer at each Emergency Operations Center to handle media and public inquiries, emergency public information and warning, and other functions. The Panel advocates the formation of a Joint Information Center ("JIC") during large scale disasters. The JIC would collocate representatives from federal, regional, state, local and/or tribal EOCs responsible for primary incident coordination responsibilities. The JIC would provide a mechanism to integrate public information activities from various jurisdictions and organizations and would include media operations.

- 109. We believe this issue is thoroughly addressed by the National Response Plan under Emergency Support Function #15—External Affairs and the Public Affairs Support Annex. ESF #15 ensures that sufficient federal assets are deployed to the field during a potential or actual Incident of National Significance to provide accurate, coordinated, and timely information to government, media, the private section and the local populace. This provides the resource support and mechanisms to implement the NRP Incident Communications Emergency Policy and Procedures described in the NRP Public Affairs Support Annex. The NRP Public Support Annex describes the interagency policies and procedures used to rapidly mobilize federal assets to prepare and deliver coordinated and sustained messages to the public in response to Incidents of National significance and other major domestic emergencies. In addition, the NRP Public Affairs Support Annex specifically addresses the formation of JICs.
- 110. The Katrina Panel recommended that the Commission should work with federal, state, and local agencies to ensure consistent and reliable emergency information through a consolidated and coordinated public information program. We note that state, tribal and local officials play a key role in forming messages as they are sent to the public. Nonetheless, we direct PSHSB to continue to work with DHS and state, tribal and local governments on the consolidation and coordination of public information as part of its supporting role under the NRP's ESF #15 and the Public Affairs Annex.¹⁴⁴

E. Other Recommendations

111. <u>Amateur Initiatives</u>. Several amateur radio operators recommended changes to Part 97 of the Commission's rules which govern amateur radio. Many of the changes have already been implemented and thus require no further action. For example, the Commission recently eliminated Morse Code proficiency as a license

¹⁴³ *Id*. at 41-42.

¹⁴² *Id*.

¹⁴⁴ The Commission is a Support Agency for the NRP's ESF #2 which addresses communications. ESF #2 ensures the provision of Federal communications support to Federal, State, local, tribal and private-sector response efforts during an Incident of National Significance. This Emergency Support Function supplements the provisions of the National Plan for Telecommunications Support in On-Wartime Emergencies. Coordination of public information is not a function assigned to ESF #2.

qualification requirement,¹⁴⁵ an action supported by several commenters in this proceeding.¹⁴⁶ The Commission also previously decided to phase out RACES station licenses, ¹⁴⁷ making proposed changes to rules relevant to these licenses moot. Finally, the Commission previously clarified that Part 97 does not prohibit amateur radio operators who are emergency personnel engaged in disaster relief from using their amateur radio bands while in a paid duty status.¹⁴⁸ We also note that several recommendations made by amateur radio operators remain pending before the Commission and, accordingly, we take no action on those in this proceeding.¹⁴⁹ We do note that the amateur radio community played an important role in the aftermath of Hurricane Katrina and other disasters. Accordingly, we order PSHSB to include the amateur radio community in its outreach efforts.¹⁵⁰

- Amherst Alliance submitted a number of recommendations regarding the Low Power FM service as well as other low power broadcast services. Specifically, these commenters recommended that the Commission: (1) remind Congress that it has previously recommended that the statutory restrictions on adjacent channel spacing of Low Power FM stations should be repealed; (2) open a filing window for 10 watt LPFM license applications; (3) establish 250 watt LPFM stations; and (4) establish Low Power AM stations; and (5) resolve the LPFM rulemaking proceeding. We will refer these issues to the Media Bureau for handling as appropriate.
- 113. <u>Modification of "Substantial Service" Policies for NPCS Channels</u>. The American Association of Paging Carriers (AAPC) asserts that the Commission should "modify its 'substantial service' policies governing Part 24 NPCS channels so that licensees leasing, disaggregating or partitioning NPCS spectrum for use by two-way

¹⁴⁵ Amendment of Part 97 of the Commission's Rules to Implement WRC-03 Regulations Applicable to Requirements for Operator Licenses in the Amateur Radio Service, *Report and Order and Order on Reconsideration*, WT Docket No. 05-235, FCC 06-178 (released December 19, 2006).

¹⁴⁶ See e.g., Cline Comments at 1; Creal Comments, at 1; Walz Comments, at 1; Flynn Comments at 1; Wade Comments at 1-2; Sewell Comment at 1.

¹⁴⁷ 1998 Biennial Regulatory Review — Amendment of Part 97 of the Commission's Amateur Service Rules, Report and Order, WT Docket No. 98-143, 15 FCC Rcd 315, 351, ¶63 (1999).

Amendment of Part 97 of the Commission's Rules Governing the Amateur Radio Services, *Report and Order*, WT Docket No. 04-140, FCC 06-149 at para. 52 (released October 10, 2006).

¹⁴⁹ For example, we note that some commenters requested that the Commission adopt rules overriding bands of antennas used by amateur radio operators who are trained as emergency communicators. *See, e.g.*, Amherst Alliance Reply Comments at 8-11. We note that a petition for rulemaking has been filed separately on this issue and we will address this issue in the context of that filing. Other commenters raised issues that are part of the Commission's pending consideration of a Petition for Rulemaking filed by ARRL (RM 11306). Those issues will be addressed in that proceeding.

¹⁵⁰ We decline to take regulatory steps to protect the communications infrastructure from Electromagnetic Pulse ("EMP") attacks as recommended by amateur radio operators Nicholas Leggett and Donald Schellhardt. *See Leggett, et al. Comments*, at 1-12. The Commission has previously addressed and rejected such requests by Mr. Leggett and Mr. Schellhardt. Other government agencies, such as DHS and the National Institute of Standards and Technology are examining issues relating to EMP threats.

¹⁵¹ See e.g., Prometheus Radio Comments at 12-13; Amherst Alliance Reply Comments at 2-6.

paging systems for emergency communications, including leasing, disaggregating or partitioning spectrum for 'back haul' channels that can be paired with traditional 929/931 MHz paging channels, also will be deemed to be providing 'substantial service' on the spectrum retained by the NPCS licensee." Because this issue relates to general construction policy, we will refer this issue to the Wireless Telecommunications Bureau for appropriate handling.

- 114. <u>Designation of 700 MHz Spectrum for Critical Infrastructure.</u> Some commenters recommend that the Commission designate a portion of the 700 MHz band for use by critical infrastructure industry use.¹⁵³ We will address this issue in the context of our 700 MHz proceedings.
- 115. CALEA Exemption for Temporary Ad Hoc Networks. Charnpaign Urbana Wireless Network *et al* asks that the Commission clarify that volunteers who build ad hoc networks in response to an emergency need not comply with CALEA. They state that, in response to Hurricane Katrina, volunteers created numerous wireless networks to provide needed Internet connectivity for Red Cross shelters and others in areas where Katrina destroyed or substantially degraded existing infrastructure. On completing construction of these ad hoc networks, the volunteers turned these networks over to local operators and move on to help others.
- 116. Champaign Urbana *et al* states that many of these ad hoc networks remained in operation for months and may still remain in operation today. They state that volunteers who generally did not maintain contact or provide any services for these networks once they turn them over to local operators. They state that these volunteers are not telecommunications carriers to whom CALEA generally applies and that these volunteers do not provide these services for hire. In addition, they state that these volunteers do not fall under the "substantial replacement provision" of the Act.
- 117. They request that the Commission establish a blanket waiver for *ad hoc* wireless networks created in response to a state of emergency; and that any liability that might arise for failure to comply with CALEA if the networks remain in operation after the emergency would not lie with those who created the network so long as they turned control over the network to others. To the extent the Commission determines that these volunteers are subject to CALEA, Champaign Urbana *et al* requests that the Commission provide a general waiver pursuant to its authority to exempt any "class or category of telecommunications carrier."
- 118. We do not have sufficient information in the record to justify grant of a blanket waiver as Champaign Urbana suggests. First it is not clear whether Champaign Urbana's request is for a blanket waiver of ad hoc temporary networks in all cases of emergencies, including those involving terrorist attacks. If so, such a waiver could actually impede law enforcement and thus hinder the purposes of CALEA. Moreover, we note that CALEA exemptions may only be granted after formal consultation with the U.S. Attorney General and that the Federal Bureau of Investigation (which formally has

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¹⁵² AAPC Comments at ii.

¹⁵³ UTC Reply Comments at 6.

been designated by the Attorney General to handle CALEA obligations) has previously opposed granting blanket CALEA exemptions. For these reasons, we decline to issue a blanket waiver for these types of networks. Rather, we think the appropriate approach would be to review requests for exemptions of these types of networks (and the volunteers who construct them) on a case-by-case basis.

- Telecommunications for the Deaf and Hard of Hearing (TDI) recommends that: (1) broadcasters establish contracts or cooperative agreements among captioning providers to ensure that broadcasts can be captioned in the event of emergencies regardless of the emergency's location;¹⁵⁴ (2) captioning services personnel should be designated as essential personnel;¹⁵⁵ (3) the Commission require all Telecommunications Relay Service ("TRS") providers to have back-up power ready to operate for a minimum of 72 hours;¹⁵⁶ (4) the Commission should require that all TRS providers have contingency plans for transfer of calls from TRS centers that may be unable to operate due to catastrophic damage or overwhelming volume of calls from other centers;¹⁵⁷ and (5) all TRS personnel should be deemed essential personnel during emergencies.¹⁵⁸
- 120. We direct CGB to consider these issues in an appropriate proceeding. In this regard, we note that, on December 29, 2006, the Commission released a Public Notice that provides steps that video programming distributors may take to obtain closed captioning services quickly in the event of an emergency. With respect to TDI items (2) and (5), we note that the FCC has no jurisdiction over who is declared an "essential service provider," nonetheless we will direct PSHSB to work with DHS on this issue.
- 121. The American Association of People with Disabilities (AAPD) suggests that the Commission consider encouraging IP Relay and Video Relay Service (VRS) providers to develop solutions for handling emergency calls through TRS. This issue was raised in the November 30, 2005 VRS 9-1-1 NPRM, the November 30 is a solution of People with Disabilities (AAPD) suggests that the Commission consider encouraging IP Relay and Video Relay Service (VRS) providers to develop solutions for handling emergency calls through TRS.

¹⁵⁴ Telecommunications for the Deaf and Hard of Hearing, Incorporated; American Association of People with Disabilities; Association of Late-Deafened Adults; California Coalition of Agencies Serving the Deaf and Hard of Hearing; Deaf & Hard of Hearing Consumer Advocacy Network; and National Association of the Deaf Reply Comments ("TDI Reply Comments") at 7.

¹⁵⁵ TDI Reply Comments at 14.

¹⁵⁶ The rules currently require that most TRS providers operate, 24 hours a day, seven days a week and that they have redundancy features similar to those in central offices, including uninterruptible power for emergency use. *See* 47 C.F.R. § 64.604(b)(4)(i-ii).

¹⁵⁷ TDI Comments at 14.

¹⁵⁸ *Id*.

¹⁵⁹ See Obligation Of Video Programming Distributors To Make Emergency Information Accessible To Persons With Hearing Disabilities Using Closed Captioning, DA 06-2627 (Public Notice) (released December 29, 2006).

¹⁶⁰ AAPD Comments at 2-3.

¹⁶¹ In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, (Notice of Proposed Rulemaking), CG Docket No. 03-123, 20 FCC Rcd 19476 (2005).

E9-1-1 Disability Access Summit held at the Commission on November 15, 2006, and is pending before the Commission. CGB's Disability Rights Office and PSHSB will continue to work with the disability community and Internet-based TRS providers on these issues.¹⁶²

IV. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Act Analysis

122. As required by Section 603 of the Regulatory Flexibility Act (RFA), 5 U.S.C. § 604, the Commission has prepared a Final Regulatory Flexibility Analysis of the possible impact of the rule changes contained in this Order on small entities. The Final Regulatory Flexibility Act analysis is set forth in Appendix C, *infra*. The Commission's Consumer & Government Affairs Bureau, Reference Information Center, will send a copy of this Order, including the Final Regulatory Flexibility Act Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

B. Final Paperwork Reduction Act of 1995 Analysis

This Order contains new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public, the Office of Management and Budget ("OMB") and other Federal agencies to comment on the information collection requirements contained in this Order, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due 60 days from date of publication of the Order in the Federal Register. 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 previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees." In this present document, we have assessed the effects of requiring the analysis of 911 and E911 networks and the submission of a report on the resiliency and reliability of those networks, by LECs, CMRS providers required to comply with the wireless 911 rules, and interconnected VoIP service providers. We have specifically exempt LECs that meet the definition of a Class B company set forth in Section 32.11(b)(2) of our rules, 163 Tier III CMRS carriers, and interconnected VoIP service providers with annual revenues below the revenue threshold established pursuant to Section 32.11 of our rules from these requirements. 164 We find that this imposes minimal regulation on small entities to the extent consistent with our goal of advancing our public safety mission.

¹⁶² Citing Section 255 of the Communications Act, AAPD urges the Commission to consider requiring captioning for PDAs, cell phones and other "converged" devices that have the ability to display text along with video. AAPD Comments at 2-3. Section 255, however, is restricted to "telecommunications service and equipment" devices, and not equipment such as televisions, iPods, etc. We also believe that extension of the closed captioning requirements to the types of devices mentioned by AAPD would require an amendment to the Television Decoder Circuitry Act of 1990, or other legislation by Congress.

¹⁶³ See supra n.102 and n.128.

¹⁶⁴ See supra n.103 and n.129.

C. Congressional Review Act Analysis

124. The Commission will send a copy of this Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

D. Alternative Formats

125. Alternative formats (computer diskette, large print, audio cassette, and Braille) are available to persons with disabilities by sending an e-mail to FCC504@fcc.gov or calling the Consumer and Governmental Affairs Bureau at (202) 418-0530, TTY (202) 418-0432.

V. ORDERING CLAUSES

- 126. Accordingly, IT IS ORDERED, pursuant to the authority contained in Sections 1, 4(i)-(k), 4(o), 5(c), 201, 214(a), 218, 219, 271, 272, 301, 303(g), 303(j), 303(r), 332, 403, 621(b)(3), and 621(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(k), 154(o), 155(c), 201, 214(a), 218, 219, 271, 272, 301, 303(g), 303(j), 303(r), 332, 403, 541(b)(3), and 541(d), that this Order in EB Docket No. 06-119 and WC Docket No. 06-63 IS ADOPTED and that the Commission's Rules are amended as set forth in Appendix B. The rules adopted in this Order shall become effective 30 days after publication in the Federal Register, except that the new information collection requirement contained in Appendix B will not become effective prior to OMB approval. The reports on the redundancy, resiliency and reliability of 911 and E911 networks are due 120 days from the date that the Commission or its staff announces activation of the OMB-approved reporting process. The remainder of this Order shall become effective upon the release date of this Order, except as noted in ¶ 128.
- 127. IT IS FURTHER ORDERED that the Commission's Public Safety and Homeland Security Bureau, Consumer and Governmental Affairs Bureau and Office of Engineering and Technology take action as directed in this Order. The Commission's Public Safety and Homeland Security Bureau shall report to the Commission on its efforts three months from the date of release of this Order and nine months from the date of release of this Order.
- 128. IT IS FURTHER ORDERED that the Special Temporary Authority and waiver of Section 272 of the Act and its implementing rules to allow AT&T, Verizon and Qwest to share non-public, Bell Operating Company (BOC) network information with their Section 272 and other affiliates, as necessary to engage in integrated disaster recovery planning, IS EXTENDED to a one year period ending April 20, 2008 for AT&T¹⁶⁵ and to June 9, 2008 for Verizon and Qwest, effective on the date of release of this Order.

¹⁶⁵ AT&T's relief was originally scheduled to expire on April 20, 2007, but was extended by PSHSB to April 27, 2007. In light of this, we grant AT&T's extension *nunc pro tunc* back to April 27, 2007.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene Dortch Secretary

APPENDIX A

List of Commenters

Comments in EB Docket No. 06-119

Comments

- 1. Agile Communications Group
- 2. Alabama Broadcasters Association, Florida Association of Broadcasters
- 3. Louisiana Association of Broadcasters and the Mississippi Association of Broadcasters
- 4. Alliance for Telecommunications Industry Solutions
- 5. American Association of Paging Carriers
- 6. American Association of People with Disabilities¹
- 7. American Association of State Highway and Transportation Officials
- 8. American Petroleum Institute
- 9. ARINC
- 10. Association of Public-Safety Communications Officials International, Inc.
- 11. Association of Public Television Stations
- 12.AT&T Inc.
- 13. Batteiger, Allan R.
- 14. Bechtel National Inc., Federal Telecoms
- 15. BellSouth Corporation
- 16. California Department of Transportation
- 17. Candell, Michael C.
- 18. Champaign Urbana Wireless Network, Texas ISP Association, Association for Community Networking & Acorn Active Media
- 19. Chandler, Charles
- 20. Cingular Wireless LLC
- 21. Cisco Systems, Inc.
- 22. Cleco Corporation
- 23. Cline, Michael
- 24. Comcare Emergency Response Alliance
- 25. Comcast Corporation
- 26. Consumer Electronics Association
- 27. Cox, Mickey D.
- 28. Creal, Robert R.
- 29. CTIA The Wireless Association
- 30. Cyren Call Communications Corporation
- 31. Delaware Emergency Management Agency
- 32. Dye, Brad and Mercer, Ron
- 33. Enhanced 911 Program of the State of Washington
- 34. Erickson, Ronald Dale
- 35. Finnstrom. Rick

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¹¹ These comments were filed on August 17, 2006, ten days after the August 7, 2006 comment due date.

- 36. First Response Coalition
- 37. Flynn, James C. Jr.
- 38. Francisco, Albert K.
- 39. Gorham, Gold, Greenwich and Associates, LLC
- 40. Hamel, Patrick E.
- 41. Hampton, Rickey L.²
- 42. Hams for Action
- 43. Headrick, Loyd C.
- 44. Hejl, Robert
- 45. Holmes, Adolph
- 46. Hunt, J. Kevin, Esq. (filed jointly with the Oregon City Disaster Services)
- 47. Independent Spanish Broadcasters Association, Office of Communications of the United Church of Church and the Minority Media and Telecommunications Council
- 48. Inmarsat Ventures Limited
- 49. International Association of Fire Chiefs, Inc. and the International Municipal Signal Association
- 50. Interstate Wireless. Inc.
- 51. Intrado, Inc.
- 52. Iridium Satellite LLC
- 53. Isaachsen, Alan
- 54. Keown, Malcolm P.
- 55. Leggett, Nicholas E and Shellhardt, Donald J.
- 56. Lowenthal, Joseph A.
- 57. Lucent Technologies, Inc.
- 58. M2Z Networks, Inc.
- 59. M/A-Com, Inc.
- 60. Maddocks, Hugh C.
- 61. Martin, Richard T.
- 62. McVey, W. Lee
- 63. Meinrath, Sascha D.
- 64. Merritt, Harold F.
- 65. Miller, Jeffrey
- 66. Mississippi Authority for Educational Television
- 67. Mobile Satellite Ventures Subsidiary LLC
- 68. Motorola, Inc.
- 69. Murray, Gerald W.
- 70. National Association of Broadcasters
- 71. National Association of State EMS Officials
- 72. National Cable & Telecommunications Association, Louisiana Cable & Telecommunications Association and the Mississippi Cable Telecommunications Association
- 73. National Emergency Number Association
- 74. National Public Safety Telecommunications Council
- 75. National Rural Electric Cooperative Association

 $^{^2}$ These comments were filed on August 8, 2006, one day after the August 7, 2006 comment due date.

- 76. National Sheriffs' Association
- 77. New York State Department of Public Service
- 78. Northeast Utilities
- 79. NTI Group, Inc.
- 80. PacketHop, Inc.
- 81. Plasters, Paul
- 82. Prometheus Radio Project
- 83. Public Service Commission of the State of Missouri
- 84. Puerto Rico Telephone Company, Inc.
- 85. Pulver.com/Evslin Consulting
- 86. Qwest Services Corporation
- 87. Randall, James L.
- 88. Redden, Clay
- 89. Rural Cellular Association
- 90. Russell, James
- 91. Sastry, Ambatipudi
- 92. Satellite Industry Association
- 93. Schellhardt, Don
- 94. Schumpert, Doug
- 95. Scott, Benson
- 96. Sewell, Alvain Dale
- 97. Sherman, Jared
- 98. Smith, Steven L.
- 99. Society for the Preservation of Amateur Radio
- 100. SouthernLINC Wireless
- 101. Sprint Nextel Corporation
- 102. SquareLoop, Inc.
- 103. St. Tammany Parish Communications District I
- 104. St. Tammany Parish Office of the President
- 105. Staats, Wayne P.
- 106. Tennessee Statewide Interoperability Executive
- 107. Texas Commission on State Emergency Communications and the Texas 9-1-1 Alliance
- 108. Tropos Networks
- 109. United States Telecom Association
- 110. Unrath, John
- 111. USA Mobility, Inc.
- 112. U.S. Department of Homeland Security
- 113. USMSS, Inc.
- 114. Verizon
- 115. Wade, Martin David
- 116. Walz. Danial L.
- 117. Whitman, Alan
- 118. Wooddell, Jim
- 119. Young, Charles³

³ These comments were filed one day after the August 7, 2006 initial comment deadline.

120. Young, Stan

Reply Comments

- 1. Alabama Power Company, Georgia Power Company, Gulf
- Power Company, Mississippi Power Company, SouthernLINC Wireless and Southern Company Services
- 3. Amherst Alliance
- 4. AT&T, Inc.
- Altaphon, Inc.⁴
- 6. BellSouth Corporation
- 7. Consumers Energy Company and Excel Energy Services, Inc.
- 8. Cox Enterprises, Inc.
- 9. Cyren Call Communications Corporation
- 10. Enterprise Wireless Alliance
- 11. GlobalStar. Inc.
- 12. Gorham, Gold, Greenwich & Associates, LLC
- 13. Hatch, Larry
- 14. Martin, Richard T.
- 15. M/A Com, Inc.5
- 16. McVey, W. Lee
- 17 Named State Broadcasters Association⁶
- 18. Space Data Corporation
- 19. TDS Telecommunications Corp.
- 20. Telecommunications for the Deaf and Hard of Hearing, Inc., American Association of People with Disabilities, Association of Late-Deafened Adults; California Coalition of Agencies Serving the Deaf

⁴ These reply comments were filed on August 23, 2006, two days following the August 21, 2006 reply comment filing deadline.

⁵ These reply comments were filed on August 22, 2006, one day following the August 21, 2006 reply comment filing deadline.

⁶ Commenters jointly expressing comments as the Named State Broadcasters Association: Alaska Broadcasters Association, Arizona Broadcasters Association, Arkansas Broadcasters Association, California Broadcasters Association, Colorado Broadcasters Association, Connecticut Broadcasters Association, Illinois Broadcasters Association, Indiana Broadcasters Association, Kansas Association of Broadcasters, Kentucky Broadcasters Association, Maine Association of Broadcasters, MD/DC/DE Broadcasters Association, Massachusetts Broadcasters Association, Michigan Association of Broadcasters, Nevada Broadcasters Association, New Hampshire Association of Broadcasters, New Jersey Broadcasters Association, New Mexico Broadcasters Association, The New York State Broadcasters Association, Inc., North Dakota Broadcasters Association, Oklahoma Association of Broadcasters, Oregon Association of Broadcasters, Pennsylvania Association of Broadcasters, Rhode Island Broadcasters Association, South Carolina Broadcasters Association, Tennessee Association of Broadcasters, Texas Association of Broadcasters, Utah Broadcasters Association, Vermont Association of Broadcasters, Washington State Association of Broadcasters, Wisconsin Broadcasters Association, and Wyoming Association of Broadcasters. In an August 28, 2006 letter, the Minnesota Broadcasters Association and Missouri Broadcasters Association expresses their support of the Reply Comments of the Named State Broadcasters Association and asks the Commission to add their names to the Comments of the Named State Broadcasters Association.

And Hard of Hearing; Deaf & Hard of Hearing Consumer Advocacy Network and National Association of the Deaf

- 21.T-Mobile USA, Inc.
- 22. Union Telephone Company
- 23. United States Telecom Association
- 24. United Telecom Council
- 25. Verizon

Ex Parte

- 1. Agile Communications Group
- 2. Alliance for Telecommunications Industry Solutions
- 3. AT&T. Inc.⁷
- 4. Austin Wireless/Campaign-Urbana Wireless Network/Media Access Project
- 5. CTIA The Wireless Association
- 6. Minnesota Broadcasters Association and Missouri Broadcasters Association
- 7. National Emergency Number Association
- 8. National Telecommunications and Information Administration
- 9. NTI Group⁸
- 10. Pinellas County Emergency Communications Department
- 11. Pittman Broadcasting Services, LLC
- 12. Pulver.com
- 13. Rosum Corporation
- 14. State of New York Department of Public Service, New Jersey Board of Public Utilities, Connecticut Department of Public Utility Control, Center for Technology in Government at the University of Albany, National Communications System and the National Coordinating Center.
- 15. New York State Department of Public Service, the Connecticut Department of Public Utility Control, the Center for Technology in Government at the University of Albany, New York Emergency Management Office, New York Office of Cyber Security and Critical Infrastructure, New York Office of Homeland Security, ChicagoFIRST, AT&T Communications of NY, Inc., and Sprint Nextel Corporation.
- 16. United Telecom Council
- 17. USA Mobility
- 18. Verizon⁹

⁷ AT&T Inc. filed separate ex parte filings on April 19, 2007 and April, 23, 2007, respectively.

⁸ NTI Group filed a total of five separate ex parte filings. NTI Group filed separate filings on October 30, 2006, May 21, 2007 and May 23, 2007, respectively; and NTI Group filed two separate filings on May 24, 2007.

⁹ Verizon filed two separate ex parte filings on April 30, 2007.

APPENDIX B

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission creates new Part 12 of Chapter I of Title 47 of the Code of Federal Regulations (C.F.R.) as follows:

PART 12 – REDUNDANCY OF COMMUNICATIONS SYSTEMS

- 12.1 Purpose.
- 12.2 Backup Power.
- 12.3 911 and E911 Analyses and Reports

Authority: Sections 1, 4(i), 4(j), 4(o), 5(c), 218, 219, 301, 303(g), 303(j), 303(r), 332, 403, 621(b)(3), and 621(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 154(o), 155(c), 218, 219, 301, 303(g), 303(j), 303(r), 332, 403, 621(b)(3), and 621(d), unless otherwise noted.

§ 12.1 Purpose.

These rules include requirements that will help ensure the resiliency, redundancy and reliability of communications systems, particularly 911 and E911 networks and/or systems.

§ 12.2 Backup Power.

Local exchange carriers (LECs), including incumbent LECS (ILECs) and competitive LECs (CLECs), and commercial mobile radio service (CMRS) providers must have an emergency backup power source for all assets that are normally powered from local AC commercial power, including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that are normally powered from local AC commercial power. LECs that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules and non-nationwide CMRS providers with no more than 500,000 subscribers are exempt from this rule.

§ 12.3 911 and E911 Analyses and Reports.

The following entities must analyze their 911 and E911 networks and/or systems and provide a detailed report to the Commission on the redundancy, resiliency, and reliability of those networks and/or systems: (1) local exchange carriers (LECs), including incumbent LECs (ILECS) and competitive LECs (CLECs); (2) commercial mobile radio service providers required to comply with the wireless 911 rules set forth in Section 20.18 of the Commission's rules; and (3) interconnected Voice over Internet Protocol (VoIP) service providers. LECs that meet the definition of a Class B company set forth in Section 32.11(b)(2) of the Commission's rules, non-nationwide commercial mobile radio service providers with no more than 500,000 subscribers at the end of 2001, and interconnected VoIP service providers with annual revenues below the

revenue threshold established pursuant to Section 32.11 of the Commission's rules are exempt from this rule.

- (a) The Public Safety and Homeland Security Bureau (PSHSB) has the delegated authority to implement and activate a process through which these reports will be submitted, including the authority to establish the specific data that will be required. Where relevant, these reports should include descriptions of the steps the service providers intend to take to ensure diversity and dependability in their 911 and E911 networks and/or systems, including any plans they have to migrate those networks and/or systems to a next generation Internet Protocol-based E911 platform.
- (b) These reports are due 120 days from the date that the Commission or its staff announces activation of the 911 network and system reporting process.
- (c) Reports filed under this Part will be presumed to be confidential. These reports will be shared with The National Emergency Number Association, The Association of Public Safety Communications Officials, and The National Association of State 9-1-1 Administrators only pursuant to a protective order. PSHSB has the delegated authority to issue such protective orders. All other access to these reports must be sought pursuant to procedures set forth in 47 C.F.R. § 0.461. Notice of any requests for inspection of these reports will be provided to the filers of the reports pursuant to 47 C.F.R. § 0.461(d)(3).

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking (*Notice*) in EB Docket No. 06-119.² The Commission sought written public comment on the proposals in this docket, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Rules

- In this Order, we adopt a rule that requires local exchange carriers (LECs), other than those that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules, 4 and commercial mobile radio service (CMRS) providers, other than non-nationwide CMRS providers with no more than 500,000 subscribers, to have an emergency backup power source for all assets that are normally powered from local AC commercial power, including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. We also adopt a rule that requires the analysis of 911 and E911 networks and systems and detailed reporting to the Commission of the redundancy, resiliency and reliability of those networks and systems by: (1) LECs, including incumbent LECs (ILECs) and competitive LECs (CLECs); (2) commercial wirelesss service providers required to comply with the wireless 911 rules set forth in Section 20.18 of the Commission's rules:5 and (3) interconnected Voice over Internet Protocol (VoIP) service providers. LECs that meet the definition of a Class B company set forth in Section 32.11(b)(2) of the Commission's rules, non-nationwide commercial mobile radio service providers with no more than 500,000 subscribers at the end of 2001, and interconnected VoIP service providers with annual revenues below the revenue threshold established pursuant to Section 32.11 of the Commission's rules are exempt from this rule.
- 3. These rules, which are part of a broader initiative taken with this Order to implement several of the recommendations made by the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (Katrina Panel), will promote communications readiness and preparedness for future natural disasters and

⁴ Section 32.11 provides that Class B companies are those companies that have annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold. 47 C.F.R. § 32.11(b)(2). The Wireline Competition Bureau recently announced that the 2006 revenue threshold for Class A to Class B companies is \$134 million. *Public Notice*, "Annual Adjustment of Revenue Thresholds," DA 07-1706 (WCB, April 12, 2007). Although Section 32.11, by its terms, applies only to ILECs, we are applying the same revenue categories to CLECs for the purpose of the exception to this requirement.

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, *Notice of Proposed Rulemaking*, 21 FCC Rcd 7320, 7330, Appendix A. (2006).

³ See 5 U.S.C. § 604.

⁵ 47 C.F.R. § 20.18.

other emergencies. The measures taken today will also facilitate more effective and efficient recovery efforts in the wake of such events. These actions will advance efforts to save lives and protect property in the event of a natural disaster or other emergency.

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

4. No comments specifically addressed the IRFA.

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

- 5. 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 Small Business Administration (SBA).
- 6. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data. A "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 2002, there were approximately 1.6 million small organizations. The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States. We

⁶ 5 U.S.C. § 604(a)(3).

⁷ 5 U.S.C. § 601(6).

⁸ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

⁹ 15 U.S.C. § 632.

¹⁰ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

¹¹ 5 U.S.C. § 601(4).

¹² Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

¹³ 5 U.S.C. § 601(5).

¹⁴ U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, page 272, Table 415.

estimate that, of this total, 84,377 entities were "small governmental jurisdictions," 15 Thus, we estimate that most governmental jurisdictions are small.

- 7. In the following paragraphs, the Commission further describes and estimates the number of small entity licensees that may be affected by the rules the Commission adopts in this Order. The rule changes affect LECs, including both incumbent LECs (ILECS) and competitive LECs (CLECs), CMRS providers, and interconnected VoIP service providers.
- 8. Since this Order applies to multiple services, this FRFA analyzes the number of small entities affected on a service-by-service basis. In the case of CMRS providers, when identifying small entities that could be affected by the Commission's new rules, this FRFA provides information that describes auctions results, including the number of small entities that were winning bidders. However, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily reflect the total number of small entities currently in a particular service. The Commission does not generally require that licensees later provide business size information, except in the context of an assignment or a transfer of control application that involves unjust enrichment issues.
- 9. Cellular Licensees. The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."16 Under that SBA category, a business is small if it has 1,500 or fewer employees.¹⁷ For the census category of "Cellular and Other Wireless Telecommunications," Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year. 18 Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more. 19 Thus, under this category and size standard, the majority of firms can be considered small.
- Broadband Personal Communications Service. The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F. and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar

¹⁵ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. Id.

¹⁶ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

¹⁷ *Id*.

¹⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization," Table 5, NAICS code 517212 (issued Nov. 2005).

¹⁹ Id. The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

years.²⁰ For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²¹ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.²² No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the C Block auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.²³ On March 23, 1999, the Commission reauctioned 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.²⁴ On January 26, 2001, the Commission completed the auction of 422 C and F PCS licenses in Auction 35.²⁵ Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

11. <u>Specialized Mobile Radio</u>. The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.²⁶ The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.²⁷ The SBA has approved these small business size standards for the 900 MHz Service.²⁸ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200

²⁰ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

²¹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, 11 FCC Rcd 7824, 7852 ¶ 60.

²² See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

²³ FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (rel. January 14, 1997).

²⁴ See "C, D, E, and F Block Broadband PCS Auction Closes," Public Notice, 14 FCC Rcd 6688 (WTB 1999).

²⁵ See "C and F Block Broadband PCS Auction Closes; Winning Bidders Announced," *Public Notice*, 16 FCC Rcd 2339 (2001).

²⁶ 47 C.F.R. § 90.814(b)(1).

²⁷ Id.

²⁸ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. The Commission notes that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.²⁹ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.³⁰

- 12. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed "small business" status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.
- 13. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$3 million or \$15 million (the special small business size standards), or have no more than 1,500 employees (the generic SBA standard for wireless entities, discussed, *supra*). One firm has over \$15 million in revenues. The Commission assumes, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities.
- 14. <u>Advanced Wireless Services</u>. In the AWS-1 Report and Order, the Commission adopted rules that affect applicants who wish to provide service in the 1710-1755 MHz and 2110-2155 MHz bands.³¹ The AWS-1 Report and Order defines a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. The AWS-1 Report and Order also provides small businesses with a bidding credit of 15 percent and very small businesses with a bidding credit of 25 percent.
- 15. <u>Incumbent Local Exchange Carriers (Incumbent LECs)</u>. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of

²⁹ See "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas," Public Notice, 18 FCC Rcd 18367 (WTB 1996).

³⁰ See "Multi-Radio Service Auction Closes," Public Notice, 17 FCC Rcd 1446 (WTB 2002).

³¹ Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, Report and Order, 18 FCC Rcd 25162 (2003) (AWS-1 Report and Order).

³² 15 U.S.C. § 632.

Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.³³ We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁴ According to Commission data,³⁵ 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our proposed rules.

- Competitive Local Exchange Carriers (Competitive LECs). Competitive 16. Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers." Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁶ According to Commission data, 37 769 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 769 carriers, an estimated 676 have 1,500 or fewer employees and 93 have more than 1,500 employees. In addition, 12 carriers have reported that they are "Shared-Tenant Service Providers," and all 12 are estimated to have 1,500 or fewer employees. In addition, 39 carriers have reported that they are "Other Local Service Providers." Of the 39, an estimated 38 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities that may be affected by our proposed rules.
- 17. <u>Cable and Other Program Distribution.</u> The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged as third-party distribution systems for broadcast programming. The establishments of this industry deliver visual, aural, or textual programming received from cable networks,

³³ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. *See* 13 C.F.R. § 121.102(b).

³⁴ 13 C.F.R. § 121.201, NAICS code 517110.

³⁵ Trends in Telephone Service, Table 5.3.

³⁶ 13 C.F.R. § 121.201, NAICS code 517110.

³⁷ Trends in Telephone Service, Table 5.3.

local television stations, or radio networks to consumers via cable or direct-to-home satellite systems on a subscription or fee basis. These establishments do not generally originate programming material."³⁸ The SBA has developed a small business size standard for Cable and Other Program Distribution, which is: all such firms having \$13.5 million or less in annual receipts.³⁹ According to Census Bureau data for 2002, there were a total of 1,191 firms in this category that operated for the entire year.⁴⁰ Of this total, 1,087 firms had annual receipts of under \$10 million, and 43 firms had receipts of \$10 million or more but less than \$25 million.⁴¹ Thus, under this size standard, the majority of firms can be considered small.

- 18. <u>Cable Companies and Systems.</u> The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide. Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers. Thus, under this second size standard, most cable systems are small.
- 19. <u>Cable System Operators.</u> The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000." The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total

³⁸ U.S. Census Bureau, 2002 NAICS Definitions, "517510 Cable and Other Program Distribution"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.

³⁹ 13 C.F.R. § 121.201, NAICS code 517510.

⁴⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

⁴¹ Id. An additional 61 firms had annual receipts of \$25 million or more.

⁴² 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

⁴³ These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

⁴⁴ 47 C.F.R. § 76.901(c).

⁴⁵ Warren Communications News, *Television & Cable Factbook 2006*, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

⁴⁶ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.

annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.⁴⁷ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.⁴⁸ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,⁴⁹ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

- 20. Internet Service Providers. The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs "provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity." Under the SBA size standard, such a business is small if it has average annual receipts of \$23 million or less. According to Census Bureau data for 2002, there were 2,529 firms in this category that operated for the entire year. Df these, 2,437 firms had annual receipts of under \$10 million, and an additional 47 firms had receipts of between \$10 million and \$24, 999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.
- 21. Web Search Portals. Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that "operate web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users." The SBA has developed a small business size standard for this category; that size standard is \$6.5 million or less in average annual

⁴⁷ 47 C.F.R. § 76.901(f); see Public Notice, FCC Announces New Subscriber Count for the Definition of Small Cable Operator, DA 01-158 (Cable Services Bureau, Jan. 24, 2001).

⁴⁸ These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

⁴⁹ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. See 47 C.F.R. § 76.909(b).

⁵⁰ U.S. Census Bureau, "2002 NAICS Definitions: 518111 Internet Service Providers"; http://www.census.gov/epcd/naics02/def/NDEF518.HTM.

⁵¹ 13 C.F.R. § 121.201, NAICS code 518111.

⁵² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518111 (issued Nov. 2005).

⁵³ U.S. Census Bureau, "2002 NAICS Definitions: 518112 Web Search Portals"; http://www.census.gov/epcd/naics02/def/NDEF518.HTM.

receipts.⁵⁴ According to Census Bureau data for 2002, there were 342 firms in this category that operated for the entire year.⁵⁵ Of these, 303 had annual receipts of under \$5 million, and an additional 15 firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

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

- 22. 911 System Information Collection. The rules adopted in this Order require certain specified communications providers to analyze their 911 and E911 networks and systems and provide one-time detailed reports to the Commission regarding the redundancy, resiliency and reliability of those networks and systems. The communications providers subject to this rule are: (1) LECs, including ILECs and CLECs; (2) commercial wirelesss service providers required to comply with the wireless 911 rules set forth in Section 20.18 of the Commission's rules; and (3) interconnected Voice over Internet Protocol (VoIP) service providers. The Commission has delegated to the Chief, Public Safety and Homeland Security Bureau, the authority to implement and activate a process through which these reports will be submitted, including the authority to establish the specific data that will be required.
- 23. The reports required by this Order will be filed one time only and are due 120 days from the date that the Commission or its staff announces activation of the 911 network and system reporting process. Since most companies can be expected to have knowledge of their network and/or system architecture, we estimate that for the great majority of entities the total time required to complete a filing with the Commission will be approximately eight to 24 hours, depending on the size and type of entity. In making our time estimate, we have taken into account that this report must be filed only once and that the report will likely be made electronically, through a "fill in the blank" template, thereby minimizing the burden on all reporting entities. Finally, in order to avoid imposing financial burden on small carriers, the Commission exempt the following from this rule: (1) LECs that meet the definition of a Class B company set forth in Section 32.11(b)(2) of the Commission's rules; (2) non-nationwide commercial mobile radio service providers with no more than 500,000 subscribers at the end of 2001; and (3) interconnected VoIP service providers with annual revenues below the revenue threshold established pursuant to Section 32.11 of the Commission's rules.
- 24. Back-Up Power Supply. The Order also adopts a rule that requires LECs and CMRS providers to have an emergency back-up power source for all assets that

13 C.F.R. § 121.201, NAICS code 518112

⁵⁴ 13 C.F.R. § 121.201, NAICS code 518112.

⁵⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518112 (issued Nov. 2005).

⁵⁶ Section 32.11 provides that Class B companies are those companies that have annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold. 47 C.F.R. § 32.11(b)(2). The Wireline Competition Bureau recently announced that the 2006 revenue threshold for Class A to Class B companies is \$134 million. *Public Notice*, "Annual Adjustment of Revenue Thresholds," DA 07-1706 (WCB, April 12, 2007). Although Section 32.11, by its terms, applies only to ILECs, we are applying the same revenue categories to CLECs for the purpose of the exception to this requirement.

are normally powered from local AC commercial power, including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. The rule adopted provides that LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that normally are powered from local AC commercial power. Our expectation is that this requirement will not create an undue burden since several communications providers reported in their comments that they already maintain emergency back-up power. Additionally, LECs that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules and non-nationwide CMRS providers with no more than 500,000 subscribers are exempt from this rule.

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

- The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.57
- 26. 911 System Information Collection. In order to minimize any adverse impact of the 911 system information collection on small entities, we have exempted LECs (both ILECs and CLECs) that meet the definition of a Class B company that is set forth in Section 32.11(b)(2) of the Commission's rules.⁵⁸ We will also not impose this reporting requirement on Tier III CMRS carriers. 59 Finally, interconnected VoIP service providers will be exempt from this requirement if their annual revenues fall below the revenue threshold established pursuant to Section 32.11 of the Commission's rules.
- Back-Up Power Supply. We recognize that the provision of a backup power supply as directed by the rule adopted in this Order may be a significant financial hardship for certain small businesses. Accordingly, we will not impose this requirement on LECs (both ILECs and CLECs) that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules. We will also not apply this

⁵⁷ 5 U.S.C. § 603(c).

⁵⁹ Tier III carriers are non-nationwide CMRS providers with no more than 500,000 subscribers at the end of 2001. See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Phase II Compliance Deadlines for Non-Nationwide Carriers, CC Docket No. 97-102, Order to Stay, 17 FCC Rcd 14841, 14848 ¶ 22 (2002).

requirement to non-nationwide CMRS providers with no more than 500,000 subscribers.⁶⁰

Report to Congress: The Commission will send a copy of the Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Order and FRFA (or summaries thereof) will also be published in the Federal Register. 62

Although this standard is based on the Tier III CMRS definition which is defined as non-nationwide CMRS providers with no more than 500,000 subscribers as of the end of 2001, we note that we are not exempting from this requirement those non-nationwide CMRS providers that have grown to exceed the 500,000 subscriber threshold since 2001 as we believe that such providers are at a size where they should be able to comply with the emergency back-up power rule.

⁶¹ See 5 U.S.C. § 801(a)(1)(A).

⁶² See 5 U.S.C. § 604(b).

STATEMENT OF CHAIRMAN KEVIN J. MARTIN

Re: Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket No. 06-119 and Docket No. 06-63.

Today, the Commission takes action to implement the recommendations of the Independent Katrina panel. Experts on the panel from all sectors of the communications industry and leading public safety organizations worked hard to study the impact of the disaster and focus the Commission's attention on proposals that would improve our response and recovery efforts for the future.

The recommendations we adopt today address a wide range of initiatives designed to improve disaster preparedness, network reliability and resilience, and communications among emergency responders. In particular, we require local exchange carriers and CMRS providers to have an emergency back-up power source for certain critical network facilities and we also require these service providers and VoIP providers file a report with the Commission on the resiliency and reliability of their 911 networks or systems.

I am pleased that, upon release of the Panel's final recommendations, the Public Safety Bureau moved quickly to begin the process of implementing many of these recommendations. I look forward to receiving the Bureau's first full progress report this fall, and commit to continue to work with my colleagues to ensure that this Commission remains vigilant to improve communications for the needs of emergency preparedness and response.

I would again like to thank all the members of the Katrina panel for their public service and dedication. The American public has benefited greatly from the thoughtful contributions made by all the industry and public safety participants who gave their time and effort in this endeavor.

I would also like to thank Nancy Victory for her leadership as Chair of the panel. Her knowledge and expertise helped guide the panel and ensure that it would deliver a quality work product within a very tight timeframe. Finally, I would also like to express my appreciation to my fellow Commissioners for their continued support of the work of the Panel, and the efforts of our Public Safety Bureau as it enacts the improvements we adopt today.

STATEMENT OF COMMISSIONER MICHAEL J. COPPS

Re: Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket No. 06-119 and WC Docket No. 06-63.

Hurricane season begins anew tomorrow. News programs are filled with predictions of how many and how intense this year's storms may be; stories about the extent of preparations that are being made to cope with the disruptions that might once again befall New Orleans, the Gulf Coast and other hurricane-prone areas of the country; and stories chronicling the thus-far disappointing reconstruction of the areas hit so hard by Hurricane Katrina. Our nation was a nation scarred by the images of suffering and destruction that were broadcast into our homes in the days and weeks following Katrina and also Hurricane Rita. I visited the Gulf Coast with Chairman Martin and other communications leaders in the days following the catastrophe, and I know that I will never forget the searing images of devastation we witnessed there.

The region's suffering was severely compounded by the almost total failure of public safety and commercial communications networks. For a week or more, more often than not, 911 calls went unanswered, broadcast stations were dark, public safety radio systems were seriously compromised, wireless phones were inoperable, and wireline phones had no dial tone. Most painful of all was that a significant portion of this failure was unnecessary and could have been prevented, or at least seriously ameliorated, by better pre-disaster planning and more coordinated public sector-private sector teamwork. I say this not to point fingers, but to point up our local, regional and national shortfalls in public safety and disaster preparedness. Part of our problem today, as a country, is our failure to come to grips with how much work remains to be done to build effective public safety communications. It is huge, it is expensive and it is totally necessary.

The Gulf Coast tragedy presented us with a solemn duty to sift through the shortfalls, in both the private and the public sectors; to grasp the harsh lessons that needed to be learned; and to enhance our preparedness for the next major cataclysm. As I hope we are all aware, there *will* be a next one—certainly other natural disasters or, even more terrifying if that is possible, more terrorist attacks.

The FCC undertook an active role in the days following the big storm. The Commission team, under Chairman Martin's leadership, worked around the clock, for days and weeks, to restore communications and provide assistance all along the Gulf Coast. Communications industries likewise worked long and hard to restore critical services and we owe them a large measure of gratitude, too. Subsequently an Independent Panel was established under former NTIA Administrator Nancy Victory to review thoroughly what had happened, what systems had worked and which had not, and to provide recommendations for the road ahead. Today, after putting these recommendations out for comment, the Commission takes a step forward.

But it is only that—another step forward. This is not a Report and Order that brings a proceeding to a close. It is an incremental step against the backdrop of a

challenge that will continue to stalk us and might even get worse in coming years as climate changes suggest more frequent and more intense storms and disruptions across much of the country. There is so much left undone and so much yet to do.

I consider it a positive step that today's item announces two new regulations for carriers who fall under the Commission's jurisdiction. First, following the suggestion of the National Emergency Number Association (NENA), all carriers of a certain size must now ensure the availability of emergency/backup power in all their central offices. Second, they must file with the Commission an analysis of the redundancy, resiliency, and dependability of their 911 facilities.

These requirements will help improve the nation's readiness for the next disaster and I appreciate my colleagues' willingness to make these measures mandatory. Their adoption represents recognition by this Commission that we cannot rely exclusively on the workings of the free market and the sometimes-too-sanguine assurances of industry when it comes to assuring public safety. I am pleased that we seem to be on the cusp of realizing that a more proactive approach may be necessary. As Justice Frankfurter once observed, "Wisdom too often never comes, and so one ought not to reject it merely because it comes late." It is important that the Commission is taking this up.

But I also think that record that was developed was too heavily skewed by the belief—I think the pernicious belief—that the FCC either *will not* or *should not* take a lead role in mandating network resiliency standards. I simply cannot accept this view. The nation's experience with 9/11 and Hurricane Katrina indicates to me that industry best practices and voluntary best efforts are not by themselves always going to get the job done. You don't have to take my word for it. The comments filed in this docket by St. Tammany Parish, one of the Louisiana areas most devastated by Hurricane Katrina, put it well: "Regarding the question of whether to 'rely on voluntary consensus or other measures for enhancing readiness and promoting more effective response efforts' we encourage the Commission to actively pursue positive results to the extent permitted. Voluntary consensus measures, while well intended, have fallen short many times."

I can't put it any better than that. The individual citizens who bore the brunt of Katrina's fury and the PSAPs who tried to cope with it certainly understand that some things need to be done, and done soon, and done on a mandatory basis if they are not going to be voluntarily implemented. These are the times when the Commission needs to step in and make it happen. Otherwise an effective system of public safety will never be achieved. So I hope that our willingness today to implement mandatory actions will be the beginning of a broader and more general reorientation of our approach to public safety issues. I am pleased we are beginning down this road and I hope we stay on it. I also hope and trust that the private sector realizes the public trust it has been given to aid in the protection of our citizens. The private sector played a critical role in the aftermath of Katrina and Rita, and still does, as it rebuilds the network infrastructure in that devastated region. The industry's continuing involvement in these efforts is essential if government and industry together are going to be successful next time. Our

¹ Henslee v. Union Planters Nat. Bank & Trust Co., 335 U.S. 595, 600 (1949) (Frankfurter, J., dissenting).

nation's citizens deserve, and expect, no less. Public safety is not something nice to have—it is a national imperative and the first obligation of all of us in this room as public servants.

Another role that I suggested for the Commission was to act as a clearinghouse for ideas that can better prepare organizations of all sizes for the next disaster. I am talking here about the hundreds of thousands of public safety agencies, hospitals, nursing homes, charities, small businesses, and other organizations that lack the resources to come up with self-generated, custom-built and fully-tested disaster readiness plans. Why should each of these groups have to start from scratch and reinvent the public safety wheel? Wouldn't it be far better if they could come to the FCC to learn about what has worked for other organizations and what hasn't? After all, learning that your disaster plan doesn't work in the middle of a disaster is emphatically **not** the right time to make that discovery. The technologies and protocols that organizations rely upon in a crisis need to work every time.

Today's item instructs the Commission's new Public Safety and Homeland Security Bureau—under its new Bureau Chief, Derek Poarch—to take the lead role in building such a clearinghouse. As I have noted many times before, this is where the Commission should have gone six years ago, right after 9/11. I commend Chairman Martin's willingness to take a leadership role in this critically important area and I applaud his efforts to initiate processes that will hopefully put this agency in the forefront of communications readiness planning, exactly where it belongs.

As with all public safety initiatives, the proof will be in the pudding. In the weeks and months ahead, our new Bureau and Chief are tasked with developing readiness checklists for each industry sector; awareness programs on alternative technologies such as satellite and paging systems, Wi-Fi, and WiMAX; and outreach programs for emergency medical and other communities. It will require significant resources to realize these and many other objectives, such as developing and publicizing a first-rate website that communicates the Commission's latest learning on how to prepare for disasters. Commission outreach is so central to all this and I am pleased that the Bureau will issue regular reports detailing our outreach activities. I, for one, will be monitoring these reports closely to assure myself that the Bureau is doing everything that it can to reach those who can benefit from the FCC's research, experience and programs. I urge Chief Poarch to be aggressive in this task—to become a tireless advocate and proselytizer on this issue. It was never my idea that we would settle for rebuilding a communications system that was taken down by Katrina—a terrible storm, to be sure, but far less devastating than a direct hit from a Category 5 hurricane would have been. The good citizens of New Orleans and the Gulf Coast have a right to expect, and should settle for no less, than the best and most up-to-date communications systems that our country can provide.

So I vote to approve this item as a step along the way, but just a step, holding out the prospect of continuing commitment to see the job through and to deploy the full decision-making authority of this Commission to make it happen. Thanks to the Bureau, all the commenters, our hard-working bureau and staffs, and my colleagues for their efforts here.

STATEMENT OF COMMISSIONER JONATHAN S. ADELSTEIN

Re: Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks; EB Docket No. 06-119 and WC Docket No. 06-63.

Hurricane Katrina and the 2005 hurricane season represented one of the most challenging times our country has seen in recent years. Its memory should serve as ample reminder of the commitment that will be necessary to achieve disaster readiness and preparedness. All aspects of daily life in the Gulf Coast region were severely impacted by the devastation caused by these storms – telecommunications and media services were no exception. With such destruction of our communications infrastructure, Hurricane Katrina demonstrates in stark relief the essential role of communications during emergencies, whether citizens are trying to find out what is happening with their families, officials are trying to disseminate critical information, or emergency personnel are responding to an urgent situation.

The Katrina Panel Report confirmed that our nation's communications systems and our government's response capabilities were put to the test, with very mixed results. While our Order today achieves some limited gains, there is still much to be done before we face our next national test.

The Commission can and must play a key role in improving our nation's disaster preparedness, network reliability, and communications among first responders. Through our Public Safety and Homeland Security Bureau, the Commission must take a more active lead in coordinating with state, local and Tribal governments, public safety answering points (PSAPs), and first responders in advance of future disasters; in providing important outreach to our nation's emergency medical communities; and in working with other federal agencies to ensure that credentialing procedures and other requirements are developed in advance to ensure access by communications workers to affected areas post-disaster. This item sets out several important directives to our staff to meet these worthwhile objectives. These efforts are critical if the Commission is to establish and maintain a position of leadership. Many of these proposed outreach efforts were specifically recommended by the Hurricane Katrina Panel, so I want to extend again my thanks to Nancy Victory and the members of the Panel for investing their time and effort to draw out lessons from this disaster and to better prepare our communities for the future.

Unfortunately, we still have much work remaining to improve the country's communications preparedness in light of the events of 20 months ago. As the Order and the Hurricane Katrina Panel Report each point out, Hurricane Katrina knocked out more than three million customer phones in the region and more than a thousand cell sites. More than 35 PSAPs were off-line and unable to provide 911 or enhanced 911 services. The Katrina Panel Report identified three main problems that caused the majority of communications network interruptions: flooding; lack of power and/or fuel;

and failure of redundant pathways. 1 I am pleased that we were able to improve the item by addressing these concerns through two modest provisions dealing with (1) emergency back-up power requirements, and (2) an obligation on service providers to file 911 analysis reports. These are worthwhile efforts, but they alone will not be sufficient to ensure that our communications systems are ready to handle the high hurdles that disasters can bring.

Indeed, the larger focus of the item is on a series of aspirational objectives for our new Bureau rather than more concrete assurances for our nation's citizens and first responders. For example, one of the key findings in the Katrina Panel Report was the widespread damage caused by unprecedented flooding: "While communications infrastructure had been hardened to prepare against strong winds from a hurricane, the widespread flooding of long duration associated with Katrina destroyed or disabled substantial portions of the communications networks and impeded trained personnel from reaching and operating the facilities."² There may be no silver bullets to address the widespread flooding caused by a disaster such as Hurricane Katrina; yet, this Order does not in itself require any concrete actions to address this very real problem. The Commission needs to initiate a discussion of hardening the network to address flood related issues. While the Order directs the Bureau to encourage the development of voluntary checklists, it still leaves work to be done. Although outreach and voluntary measures can play a critical role, we must continue to push communications providers to go the extra mile to achieve a true level of preparedness. Without firm commitments. can we seriously tell the people of the Gulf Coast region that this Commission has taken all of the necessary steps to ensure that such a communications disaster will never happen again?

Similarly, the Katrina Panel Report analyzed extensively the problem of the failure of redundant pathways and the impact on communications networks throughout the region from the loss of switches, T1s, and other leased lines. "As an example, a major tandem switch in New Orleans was isolated, which meant that no communications from parts of New Orleans to outside the region could occur."³ Once again, the Commission offers little in the way of solutions for a serious network shortfall that may well be present in many other communities. Rather, the item encourages carriers to adopt voluntary readiness checklists based on best practices advanced by the Network Reliability and Interoperability Council (NRIC) and the Media Security and Reliability Council (MSRC), our recently-terminated Federal Advisory Committees. I understand that neither group has met in well over a year, with NRIC VII holding its last meeting on December 16, 2005, just a couple of months after the hurricane season ended. Now that these committees have been replaced with a new combined reliability council, we will need to seek input more regularly if we are going to rely on a system of carrier commitments and best practices to effectuate network reliability changes.

¹ See Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, Report and Recommendations to the Federal Communications Commission (Katrina Panel Report) at 13.

² *Id*.

³ *Id*. at 14.

To all of the affected citizens in the Gulf Coast area – and to the many diverse communities at risk for future catastrophic events – we owe an honest assessment of the performance of the telecommunications and media infrastructure during Hurricane Katrina and of our strengths, weaknesses, and commitment to preparedness going forward. Shortly after the storm, I had an opportunity to witness first hand some of the widespread destruction and personal loss in the Gulf Coast and to meet with communications workers and first responders, who labored around the clock to restore connectivity to the Gulf Coast, often at great personal sacrifice. It was humbling to see Americans act so selflessly when others are in need, particularly when so many were themselves suffering the loss of homes, communities, or loved ones. We owe them not only deep gratitude but also a serious effort to develop real solutions to address identified weaknesses and holes in the preparation process. While we have made some limited advances in this Order, I believe our work is still far from over.

STATEMENT OF COMMISSIONER DEBORAH TAYLOR TATE

Re: Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket No. 06-119 and WC Docket No. 06-63.

Today's item marks an important step towards ensuring that the Commission and the industries it is responsible for are better prepared to respond in the face of natural disasters and other types of incidents, such as a pandemic, industrial accident, environmental incident, or terrorist attack. I am proud to vote in support of an item which, I believe, reflects the best aspects of the Independent Panel's report and the subsequent input from a diverse array of commenters.

When we released the Notice of Proposed Rulemaking that led to today's order, I specifically asked and encouraged industry to develop and share their thoughts, strategies and ideas on disaster preparedness and emergency system interoperability. While the industry certainly stepped to the plate, they were matched in their expertise, passion, and innovation by a diverse array of public safety agencies, federal and state government agencies, equipment manufacturers, and concerned citizens. This diversity and depth of participation in this proceeding created a record which led to an item which I think everyone should be proud of, and marks a standard which we should strive to achieve across the board.

Finally, I would like to again thank Nancy Victory and the members of the Independent Panel for all of their efforts. I hope and trust that they will take pride and, to some extent, comfort in the fact that they have played such a key role in helping to prepare our Nation for whatever challenge it faces next.

STATEMENT OF COMMISSIONER ROBERT M. McDOWELL

Re: Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket No. 06-119 and WC Docket No. 06-63.

I support our action today to move forward on a number of the recommendations made by the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (Hurricane Katrina Panel). Our work is particularly timely, given that the Atlantic Hurricane season begins tomorrow, June 1, and scientists at the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center are projecting a 75 percent chance that hurricane activity will be above normal this year.

Moreover, it is particularly helpful that our efforts regarding emergency preparedness have broad applicability, given the need to plan for not only natural disasters such as hurricanes, but also for incidents like terrorist attacks, influenza pandemic outbreaks and industrial accidents. Any of these emergencies could result in sudden and significant shortages of personnel, a surge in communications traffic, possible disruptions to communications networks (due to increased telecommuting during an influenza pandemic, for example), and lack of manpower to immediately repair affected communications networks. I am pleased that we have built upon the lessons learned from the Hurricane Katrina disaster to promote more effective, efficient response and recovery efforts, as well as heightened readiness and preparedness. Thank you to all involved.