

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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

To: The Commission

**COMMENTS  
OF  
CYREN CALL COMMUNICATIONS CORPORATION**

Cyren Call Communications Corporation (“Cyren”), in accordance with Section 1.415 of the Federal Communications Commission (“FCC” or “Commission”) Rules and Regulations, respectfully submits its Comments in the above-entitled proceeding.<sup>1</sup> In the *NPR*, the Commission has requested public input on the FCC’s effort to address and implement the recommendations of the Independent Panel that investigated the impact of Hurricane Katrina on communications networks.

The *NPR* seeks comments on four inter-related areas: (1) pre-positioning to achieve greater network reliability and resilience; (2) improving recovery coordination; (3) improving the operability and interoperability of public safety and 911 communications during crises; and (4) improving communication of emergency information to the public. Each of these elements is of critical importance, yet timely delivery of effective disaster relief rests, as it always has, on the shoulders of the nation’s emergency responders. If members of this front guard of the public safety community are not able to communicate with one another and coordinate their efforts in moments of crisis, maintaining warehouses full of equipment, credentialing appropriate recovery

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<sup>1</sup> *Notice of Proposed Rulemaking*, EB Docket No. 06-119, FCC 06-83 (rel. June 19, 2006) (“*NPR*” or “*Notice*”)

personnel, and more effectively advising the public about the scope of the emergency will leave the nation still woefully unprepared when – not if -- the next disaster strikes.

As described herein, the solution that will deliver essential operability and interoperability capability to the public safety community and those industries with which it needs to communicate during times of crisis already is before the Commission. The Petition for Rule Making filed by Cyren more than three months ago<sup>2</sup> describes an approach whereby public safety would be granted the additional spectrum it needs to deploy a state-of-the-art, routinely refreshed, nationwide, broadband communications network designed to public safety specifications with all facilities' costs underwritten by commercial service providers. In light of the recommendations of the Independent Panel, it is evident that the FCC should move immediately to seek comment on the Cyren Petition as part of this proceeding, the 700 MHz public safety proceeding,<sup>3</sup> or as an independent matter.

**I. THE INDEPENDENT PANEL DETERMINED THAT LACK OF OPERABILITY AND INTEROPERABILITY AMONG PUBLIC SAFETY USERS CONTRIBUTED SIGNIFICANTLY TO THE DEVASTATING IMPACT OF THE STORM**

In the wake of the most catastrophic natural disaster in the nation's history, the Commission properly established a panel of industry experts to investigate the impact of Hurricane Katrina on communications networks and to recommend to the FCC methods by which to improve, among other matters, "communications among first responders such as police, fire fighters, and emergency medical personnel."<sup>4</sup> The Report produced by that Panel forms the

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<sup>2</sup> *In the Matter of Reallocation of 30 MHz of 700 MHz Spectrum (747-762/777-792 MHz) from Commercial Use and Assignment of 30 MHz of 700 MHz Spectrum (747-762/777-792 MHz) to the Public Safety Broadband Trust for Deployment of a Shared Public Safety/Commercial Next Generation Wireless Network, Petition for Rule Making*, filed by Cyren Call Communications Corporation (Apr. 27, 2006) ("Cyren Petition").

<sup>3</sup> See *Eighth Notice of Proposed Rulemaking*, WT Docket No. 96-86, FCC 06-34 (rel. Mar. 21, 2006).

<sup>4</sup> NPR at ¶ 3. See also, the Independent Panel Charter available at <http://www.fcc.gov/eb/HKIPCharter.pdf> and the Notice of Establishment of the Commission's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, 71 Fed. Reg. 933 (2006).

basis for the instant *NPR*.<sup>5</sup> The Independent Panel found that in the hardest hit areas, “the disruption of public safety communications operability, as well as a lack of interoperability, frustrated the response effort and caused tremendous confusion among official personnel and the general public.<sup>6</sup> Further, it concluded that the hurricane “highlighted the long-standing problem of interoperability among public safety communications systems operating in different frequency bands and with different technical standards.”<sup>7</sup> The Katrina Report noted that the lack of interoperability between federal military and local government entities reduced the nation’s armed forces to reliance on human runners to carry messages between deployed federal personnel and local emergency responders in certain instances.<sup>8</sup>

In addition to describing the problem, the Katrina Report also identified a number of steps the Independent Panel considers essential for addressing lessons learned from the storm. It recommended improving operability by encouraging pre-positioning of equipment, supplies and personnel and by familiarizing emergency responders with alternative technologies equipment on a regular basis.<sup>9</sup> It suggested that emergency responder interoperability could be improved by certain complementary actions. These include distribution among the public safety community of the \$1 Billion Dollars earmarked for interoperability activities that is to be collected from the auction of 700 MHz Commercial Mobile Radio Service (“CMRS”) spectrum scheduled to begin in January 2008;<sup>10</sup> expeditious FCC action on development of 700 MHz regional plans as well as

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<sup>5</sup> Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks: Report and Recommendation to the Federal Communications Commission (June 12, 2006) (“Katrina Report”).

<sup>6</sup> *Id.* at ii.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.* at 26.

<sup>9</sup> *Id.* at 37-8.

<sup>10</sup> When distributed among the tens of thousands of public safety entities in the nation, this funding source would be woefully short of what would be needed to achieve any measurable interoperability improvement even on a local basis. This is no assurance that it would lead to anything approximating the type of nationwide interoperability solution the Cyren Petition offers.

on accelerated, voluntary broadcast relocation from the 700 MHz band; and promotion of further spectrum sharing among local, state and federal public safety users.<sup>11</sup>

Cyren respectfully submits that these recommendations, while responsive to the specific task with which the Independent Panel was charged, fail to address the fundamental issue faced by the entire emergency responder community of local, state and federal agencies.<sup>12</sup> That community lacks both the appropriate spectrum and the sustained funding source that would permit it to deploy and continuously refresh an interoperable, advanced technology, nationwide, broadband network designed to public safety specifications. The Katrina Report recommendations, if implemented, likely would have some salutary effect in certain instances. Yet they promise only the same type of piecemeal approach toward public safety communications that, to date, has failed to produce reliably robust facilities or interoperability capability in other than isolated situations.

Moreover, the Commission is correct to demand that parties not limit their comments to the Katrina situation, but instead “address the applicability of the Panel’s recommendations to all types of natural disasters (*e.g.*, earthquakes, tornados, hurricanes, forest fires) as well as to other types of incidents (*e.g.*, terrorist attack, flu pandemic, industrial accidents, *etc*)” with a scope that is “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.”<sup>13</sup> Katrina was a singular incident, but one that mirrored previous national disasters and undoubtedly presages future catastrophes. Yet each time an emergency response

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<sup>11</sup> Katrina Report at 38-9.

<sup>12</sup> Adoption of an accelerated 700 MHz CMRS auction schedule, as suggested in the Katrina Report, could eliminate the possibility that this spectrum would instead be allocated for the nationwide, interoperable public safety network, proposed in the Cyren Petition, a result contrary to the best interests of the nation’s first responders and its citizenry.

<sup>13</sup> *Public Notice, In the Matter of Recommendation of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, Notice of Proposed Rulemaking*, DA 06-1524, (rel. July 26, 2006).

requires broad scale support from a variety of governmental entities the lack of public safety access to truly advanced technology and the absence of meaningful interoperability capabilities again is manifest. To the extent the Katrina Report becomes a catalyst for addressing that problem by prompting the Commission to give thoughtful consideration to the Cyren Petition, the Independent Panel will have made a significant contribution to the future well-being of this Nation and its citizens.

## **II. THE CYREN PETITION PROPOSES AN INNOVATIVE, YET ACHIEVABLE, SOLUTION FOR PUBLIC SAFETY OPERABILITY AND INTEROPERABILITY NEEDS**

The operability and interoperability deficiencies in public safety communications identified in the Katrina Report are precisely the problems that prompted Cyren to submit its Petition to the Commission. Cyren agrees with the Independent Panel that lack of spare equipment, redundant systems, and training on alternative, back-up communications equipment all contributed to public safety's operability problems during Hurricane Katrina.<sup>14</sup> It certainly concurs that an "increased ability to interoperate with other agencies would have provided greater redundant communications paths and a more coordinated response."<sup>15</sup> The issue is how to address those needs in light of the chronic funding problems faced by governmental entities and how to do so on a national scale.

The Cyren Petition proposes just such a solution. It urges the FCC to provide an additional 700 MHz public safety allocation of 30 MHz, using spectrum at 747-762/777-792 MHz currently earmarked for commercial service, with a single authorization issued to a Public Safety Broadband Trust (the "Trust") for deployment of a nationwide, interoperable, "evergreen," network funded through a public/private partnership and built to meet public

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<sup>14</sup> Katrina Report at 23-5.

<sup>15</sup> *Id.* at 26.

safety's stringent specifications. Key to the Cyren Petition is the requirement that the Trust lease capacity on this spectrum to commercial operators who will fund nationwide deployment of the network infrastructure in exchange for the opportunity to serve commercial subscribers on network capacity not being used for public safety communications.

Cyren described in its Petition the important capabilities that deployment of such a system would make available to the emergency responder community. It would provide, for the first time, a technically advanced, broadband data network with voice capability that would be available to local, state and federal agencies. Users operating on the network would have intrinsic interoperability capability with a common frequency plan, a common technology platform, compatible equipment and consistent network functionality and performance. Those on existing systems still could use the network's IP backbone as an interoperability bridge. Critically, because the system infrastructure also would support commercial operations, it necessarily would be kept technically "evergreen," a luxury that generally is beyond the economic capability of the public safety community, but that should be a given for the communications facilities of the nation's most critical users.

Because the network will be built to public safety specifications, but funded by commercial providers, it can enjoy the redundancy and robustness needed to withstand extreme natural disasters. Subscriber equipment costs will be driven by economies-of-scale in the commercial marketplace, thereby permitting agencies to maintain a greater inventory of spares. The Cyren proposal even includes a satellite component for remote areas and in those, hopefully rare, instances, such as Katrina, when there is widespread destruction of terrestrial facilities. Because the handsets on the Cyren network will switch automatically to satellite coverage if terrestrial service is unavailable, users will not need to be trained, and periodically retrained, on

the use of alternative equipment. Instead, they will be using the same radios during an emergency that they use for day-to-day activities, thereby allowing them to concentrate on fulfilling their emergency service responsibilities rather than fumbling with unfamiliar gear. This inherent redundancy also will simplify and reduce the cost of pre-staging as only peripherals, such as batteries and solar chargers will need to be maintained, not full backup, and often unfamiliar, radio systems.

In sum, the Cyren Petition presents a workable solution for each emergency responder concern identified in the Katrina Report – and more. It even will help address the highly critical issue of reliability and robustness of 911 and E911 services, a key consideration in the Report.<sup>16</sup> The Commission already is aware of the challenges these services are facing with the accelerating migration to IP-based and broadband infrastructure. Based on recent conversations with NENA, Cyren understands that its broadband network may provide the only cost-effective solution for handling these emergency calls based on NENA’s next generation platform planning. It unquestionably will ensure a level of robust interoperability that would not be available on any other network. The Commission should move expeditiously to consider the Cyren Petition in conjunction with this proceeding and, more critically, its ongoing investigation of public safety operations in the 700 MHz band.

### **III. CONSIDERATION OF THE CYREN PETITION IS FULLY CONSISTENT WITH THE COMMISSION’S AUTHORITY AND STATUTORY OBLIGATIONS**

Cyren recognizes that its Petition proposes to reallocate to the Trust spectrum that has been earmarked by Congress for CMRS auction no later than January 2008.<sup>17</sup> However, the FCC clearly has the authority to recommend legislative changes to Congress, in particular when the communications requirements of public safety providers are at issue. The FCC was created

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<sup>16</sup> *Id.* at 27.

<sup>17</sup> See Pub. L. No. 108-458, 118 Stat. 3638 (2004), codified at 6 U.S.C. § 413.

for the “purpose of regulating interstate and foreign commerce in communication by wire or radio so as to make available, so far as possible, to all the people of the United States ... a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities ... for the purpose of the national defense, [and] for the purpose of promoting safety of life and property through the use of wire and radio communication.”<sup>18</sup> “For the purpose of obtaining maximum effectiveness from the use of radio and wire communications in connection with safety of life and property,” the FCC is authorized to “investigate and study all phases of the problem and the best methods of obtaining the cooperation and coordination of these systems.”<sup>19</sup> Indeed, to assist Congress in performing its normal oversight responsibilities, the Act long required the FCC to “make an annual report to Congress” containing “specific recommendations ... as to additional legislation which the Commission deems necessary or desirable.”<sup>20</sup>

The requirement that the FCC report annually to Congress terminated in 2000, pursuant to the Federal Reports Elimination and Sunset Act of 1995. Nevertheless, the FCC continues to employ the analysis set forth above, including its reliance on § 4(k) of the Act. It did so recently to establish its authority to initiate rulemakings affecting homeland security, as well as public health and safety.<sup>21</sup> When it issued a notice of proposed rulemaking in 2004 to revamp the Emergency Alert System, the national public warning system, the FCC stated that it might adopt new rules, issue a report summarizing the record and its policy perspectives, and/or “make legislative recommendations to Congress.”<sup>22</sup> Thus, the FCC could move forward with a rulemaking to reallocate 30 MHz of commercial 700 MHz spectrum for a nationwide public

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<sup>18</sup> 47 U.S.C. § 151.

<sup>19</sup> *Id.* § 154(o).

<sup>20</sup> *Id.* § 154(k)(4).

<sup>21</sup> See *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, 19 FCC Rcd 16830, 16837-38 (2004); *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, 19 FCC Rcd 3373, 3376-77 (2004).

<sup>22</sup> *Review of the Emergency Alert System*, 19 FCC Rcd 15775, 15792-93 (2004).

safety network with the expectation that it may need to recommend conforming legislation to Congress.

The FCC'S authority to conduct rulemakings that require or cause it to recommend conforming legislation to Congress is beyond question. For example, in 1981, Congress added § 309(i) to the Act to give the FCC authority to employ lotteries to select among competing applications. The statutory provision did not require the Commission to use lotteries in all instances, but at least arguably dictated that the agency adopt rules and policies consistent with the legislative directive to be used in conducting lotteries in appropriate circumstances. The FCC declined to implement the statutorily defined lottery process because it believed certain of its provisions to be legally unsustainable, in particular the requirement to award lottery preferences, and instead proposed that Congress reconsider legislative proposals that it already had rejected.<sup>23</sup>

Similarly, the FCC issued a Further Notice of Inquiry and Notice of Proposed Rulemaking in 1988 in which it tentatively concluded that it should recommend to Congress that the telephone-cable cross-ownership ban of § 613(b) of the Cable Communications Act of 1984 be repealed or modified to permit telephone companies to provide video programming within their local service areas.<sup>24</sup> The FCC subsequently modified its rules to enable local telephone companies to participate in the video marketplace through "video dialtone" and submitted its recommendation to Congress that the Cable Act be amended to permit local telephone companies to provide video programming directly to their subscribers.<sup>25</sup> The Commission explained its decision to recommend changes to the Act consistent with the agency's own public interest findings in language that could apply equally to the public/private broadband network proposed by Cyren:

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<sup>23</sup> See *Random Selection/Lottery Systems*, 89 F.C.C. 2d 257, 283-84 (1982).

<sup>24</sup> See *Telephone Company-Cable Television Cross-Ownership Rules*, 3 FCC Rcd 5849, 5865-66 (1988).

<sup>25</sup> See *Telephone Company-Cable Television Cross-Ownership Rules*, 7 FCC Rcd 5781, 5847-51 (1992)

We find that such an amendment [to the Cable Act] would further promote our overarching goals in this proceeding by increasing competition in the...marketplace, spurring the investment necessary to deploy an advanced infrastructure, and increasing the diversity of services made available to the public.<sup>26</sup>

There is no legal or other statutory bar to the Commission's initiation of a proceeding to consider the Cyren Petition and the public interest supports it doing so as promptly as possible.

#### **IV. CONCLUSION**

The instant proceeding is described by the Commission as a comprehensive rulemaking to address and implement the recommendations of the Independent Panel in respect to the impact of Hurricane Katrina on telecommunications and media infrastructure. Cyren urges the FCC to expand its vision to include consideration of the Cyren Petition, a truly comprehensive approach to public safety operability and interoperability in the 21<sup>st</sup> century.

Respectfully submitted,

**CYREN CALL COMMUNICATIONS  
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<sup>26</sup> *Id* at 5847