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November 24, 2015

Ms. Marlene H. Dortch,  
Secretary Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

VIA ELECTRONIC

FILING

Re: Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, FCC 15-97 (rel. Aug. 7, 2015).

Dear Ms. Dortch:

The Industry Council for Emergency Response Technologies (“iCERT” or “Industry Council”)<sup>i</sup> respectfully submits the following Reply in connection with the Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking (“FNPRM”) released by the Federal Communications Commission (“FCC” or “Commission”)<sup>ii</sup>. In the FNPRM, the FCC seeks comment on numerous topics pertaining to the continuing transition of legacy communications networks and services from their traditional time-division multiplex (“TDM”) basis using primarily a copper infrastructure to all Internet Protocol-enabled (“IP-enabled”) networks and services using copper, co-axial cable, wireless, and fiber physical infrastructure.

In its opening paragraph the Commission acknowledges, “the importance of speeding market-driven technological transitions and innovations while preserving the core statutory values as codified by Congress: competition, consumer protection, universal service, and public safety.”<sup>iii</sup> The Commission continues by recounting the aggressive multi-billion dollar investments being made by carriers and others in fiber, training, and related elements in support of network transitions.<sup>iv</sup> In summary, the Commission proposes to:

“. . . adopt clear “rules of the road” to ensure that all consumers will enjoy the benefits of two distinct but related kinds of technology transitions: (1) changes in network *facilities*, and in particular, retirement of copper facilities; and (2) changes that involve the discontinuance, impairment, or reduction of legacy *services*, irrespective of the network facility used to deliver those services.”<sup>v</sup>

Consumers, businesses, and public safety agencies are rapidly adopting new communications technologies, including Internet Protocol based technologies. iCERT believes that the widespread adoption of these advanced technologies and the transition to an all IP network will yield numerous benefits for public safety. This includes increased reliability, flexibility, and resiliency.

In addition, an all IP network will open the door to the development and deployment of new voice, video, and data applications and services. While the transition to new technologies will yield significant benefits, as this docket recognizes this transition presents certain challenges to public safety and the telecommunications industry that need to be addressed. In order to ensure that these challenges are addressed effectively, iCERT supports the following principles:

- A) Public policies should promote increased reliability and resiliency of 911 systems. When architected with these principles in mind, IP-based technologies can provide lower cost, highly distributed solutions that support these principles while providing other benefits to public safety. A transition to such technologies should not be viewed as reducing reliability, and education should be provided where such misconceptions exist.
- B) Providing accurate location information remains critical, and a transition to new technology (including IP-based Next Generation 911) should not result in a loss of 911 accuracy capability. Consequently, any telecommunications service intended to replace wireline voice service should be investigating a technological path towards delivering a dispatchable address to the PSAP.
- C) The transition to new technologies (e.g., wireless or VoIP) has shifted some of the responsibility for providing back-up power to the consumer, especially at the device level. This shift is expected, but education is needed to ensure that consumers understand that using such devices as a wireline replacement will have different power requirements than the equipment used for traditional telephone services.
- D) The transition to IP-based networks introduces new risks related to cyber security. Public Safety, Service providers and consumers each have a role to play in ensuring online safety and privacy<sup>vi</sup>.

iCERT generally supports all efforts to promote 911 services, and it looks forward to all opportunities to work with the FCC and others to achieve that goal. However, the Industry Council’s members are concerned with a number of the proposals outlined in this FNPRM and believe, if adopted, they might have a negative impact on the velocity of network transitions and 911-related deployments, including Next Generation 911 (“NG911”), because of NG911’s dependency upon IP-based services.

As iCERT noted in its 911 Reliability Comments regarding the Commission’s parallel regulatory proposals in that docket:

While ensuring reliable and resilient 911 services is paramount, the Commission should consider the impacts of its regulations on innovation and competition, especially where benefit of improved reliability and resiliency is not clear or even doubtful. . . . This kind of regulatory overhang stagnated 911 technology in the 1980’s and 1990’s which in turn played a major role in broadening the technology gap between advanced products and services brought to commercial markets and those that were brought to the 911 market under a heavily regulated regime. With IP-based (next generation) 911, the public safety industry is beginning to close that gap, resulting in increased competition and innovation. However, if imposing the kind of regulations proposed in the NPRM has the chilling effects described above, then they will cause a gap to reoccur – where public safety will be technologically left behind once again.<sup>vii</sup>

Instead of gathering only preliminary comments in one proceeding, iCERT recommends the FCC engage the industry in a series of collaborative dialogues (ex., CSRIC, workshops, or other initiatives)<sup>viii</sup> to explore alternative approaches to invasive regulation that would yield creative incentives to encourage seamless network transitions. Modernizing our nation’s network infrastructure is in everyone’s best interests, and our public safety system deserves no less than our fullest collaborative efforts towards this goal.

The primary authority that the FCC cites is section 215 of the Communications Act.<sup>ix</sup> While iCERT applauds efforts to support modernization of our communications networks, especially those that will hasten the development and introduction of NG911 services, we reiterate our long-standing objection to assertion of the FCC’s authority without plausible legal or statutory justification.<sup>x</sup> The services discussed in this docket, especially 911 services, are *intrastate* in nature and thus not subject to section 214. In a highly competitive landscape, no provider has an incentive to reduce adequacy or quality.

iCERT observes that many of the commenters cite (often using the Commission’s own records) the fact that network evolution is inevitable because consumers, even disabled or other populations that deserve special attention, are already choosing IP-enabled services over legacy services.<sup>xi</sup> TIA also notes that obsolescence may, in fact, be the most significant transition driver.<sup>xii</sup> Yet, the Commission’s vehicle for enabling its decision to “ensure that all consumers will enjoy the benefits” of network transitions is not the marketplace (as it previously claimed), but to establish a new Section 63.602 of its rules imposing a certification of “adequate substitute” services on the carrier seeking the network change.<sup>xiii</sup>

Setting aside for the moment the absence of support in the Commission's record for a new gating process and/or criteria, the substitution of an "adequacy" certification appears simultaneously to be both an impossible standard to meet and no less murky than the "public interest, convenience, and necessity"<sup>xiv</sup> criteria it would supplant. The Commission's proposal neither advances the process nor provides the clarity it seeks. In fact, there is a real danger that the FCC's proposal could significantly delay the introduction of new IP-based networks and services, as noted above.

Consumers already make an adequacy determination when they decide to purchase alternative services. iCERT respectfully suggests that contractual and market incentives exist today to ensure that new network products and services are highly reliable and resilient, and meet customers' needs. Also, there is no requirement that competitors certify the "adequacy" of their services before *entering* a market. Therefore, the FNPRM may set the stage for the absurd result where new entrants (especially intermodal entrants) can bring (untested) services to market and successfully siphon market share, yet the incumbent carrier is unable to compete because it cannot satisfy an ethereal regulatory network transition standard.

As to 911 / public safety services, the forte of iCERT's members, the introduction of IP-enabled networks is a key to the deployment of universal NG911. iCERT supports the trend toward IP-enabled network deployment, with the caveat that 911/NG911 represents one of the highest and best uses of that network, and therefore deserves special attention. On this point, commenters generally agree.<sup>xv</sup> The Commission has already established defined quantitative and qualitative standards for 911 services and it can be argued that these would serve as a superior de facto "adequacy" test as opposed to the criteria the Commission has proposed in the FNPRM for network transitions. In any case, the need to preserve and even strengthen 911/NG911 reliability is without question.

iCERT commends the Commission for its diligence in advancing reliable state-of-the-art communications for the nation's citizens, residents and visitors, and offers its expertise should the Commission seek it.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "George Rice", written in a cursive style.

George Rice  
Executive Director

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<sup>i</sup> Established by a group of prominent business leaders in December, 2005 originally as the 911 Industry Alliance, iCERT plays an important role as the voice of commercial public safety companies, wireless carriers, and related vendors on public policy issues impacting 911 and the emergency response system. iCERT’s membership is diverse, and many of its members not only have differing business objectives, they may be direct competitors. All of iCERT’s members agree that an invigorated vendor community engaged in frequent two-way dialog with public safety officials, regulators and policy makers is indispensable to creating the highest quality emergency services for all Americans. Industry Council members believe history has demonstrated that business leaders’ expertise can assist public policy makers and government emergency communications professionals as they address complex choices regarding advanced communications technologies. See, <http://www.theindustrycouncil.org/index.cfm>

<sup>ii</sup> *Technology Transitions, Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers, Special Access for Price Cap Local Exchange, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593, FCC 15-97 (rel. Aug. 7, 2015). (“FNPRM”)

<sup>iii</sup> FNPRM at p.2

<sup>iv</sup> *Id.*

<sup>v</sup> *Ibid.* p 4.

<sup>vi</sup> iCERT Position on Technology Transition, [http://www.theindustrycouncil.org/policystatements/iCERT\\_Technology\\_Transition\\_Policy\\_Statement.pdf](http://www.theindustrycouncil.org/policystatements/iCERT_Technology_Transition_Policy_Statement.pdf)

<sup>vii</sup> In the Matters of 911 Governance and Accountability, PS Docket No. 14-193 and Improving 911 Reliability, PS Docket No. 13-75, iCERT Comments at p. 2.

<sup>viii</sup> The Communications Security, Reliability and Interoperability Council's (CSRIC) mission is to provide recommendations to the FCC to ensure, among other things, optimal security and reliability of communications systems, including telecommunications, media, and public safety. CSRIC’s members focus on a range of public safety and homeland security-related communications matters, including: (1) the reliability and security of communications systems and infrastructure, particularly mobile systems; (2) 911, Enhanced 911 (E911), and Next Generation 911 (NG911); and (3) emergency alerting. <https://www.fcc.gov/encyclopedia/communications-security-reliability-and-interoperability-council>.

<sup>ix</sup> See 47 U.S.C. § 214(a). Quoted in part: “No carrier shall discontinue, reduce, or impair service to a community, or part of a community, unless and until there shall first have been obtained from the Commission a certificate that neither the present nor future public convenience and necessity will be adversely affected thereby; except that the Commission may, upon appropriate request being made, authorize temporary or emergency discontinuance, reduction, or impairment of service, or partial discontinuance, reduction, or impairment of service, without regard to the provisions of this section. As used in this section the term “line” means any channel of communication established by the use of appropriate equipment, other than a channel of communication established by the interconnection of two or more existing channels: *Provided, however*, That nothing in this section shall be construed to require a certificate or other authorization from the Commission for any installation, replacement, or other changes in plant, operation, or equipment, other than new construction, which will not impair the adequacy or quality of service provided.”

<sup>x</sup> iCERT incorporates by reference its arguments regarding the FCC’s unsubstantiated exercise of authority over intrastate 911 services as contained in its March 23, 2015 Comments, *In the Matters of 911 Governance and Accountability, PS Docket No. 14-193 and Improving 911 Reliability, PS Docket No. 13-75*.

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<sup>xi</sup> All references are to the commenters' respective filings in the FNPRM: "The numbers are significant. For residential customers, for example, government data indicate that by the end of 2013; only 27 percent of U.S. households opted for legacy voice service from a traditional provider and trends indicate that this figure had fallen to 16 percent by the end of 2015.<sup>10</sup> Approximately half of U.S. households will have "cut the cord" and gone wireless-only for voice service by the end of 2015, and among the remaining households using landlines, almost two-thirds will have moved from a legacy to a VoIP service.<sup>11</sup> This voluntary migration to new technologies is proof positive that consumers want what technology transitions offer." [Comments of The United States Telecom Association at p. 5]; "The paradigm shift away from reliance on legacy PSTN-based services offered by ILECs to IP-enabled platforms and applications for the delivery of voice services is well documented. As the Commission observed in the *Technology Transitions Order*, 30 percent of all residential customers choose IP-based voice services from cable, fiber, and other providers as alternatives to legacy voice services.<sup>6</sup> Furthermore, 44 percent of households have "cut the cord" and rely entirely on mobile wireless for their voice service.<sup>7</sup> Overall, almost 75 percent of U.S. residential voice customers (approximately 88 million households) no longer receive telephone service over traditional copper facilities.<sup>8</sup>" [Comments of ITTA-The Voice of Mid-Size Communications Companies at p. 3]; "By the end of this year, AT&T estimates that *only 14%* of the housing units in the states in which AT&T is deemed the incumbent LEC will purchase residential TDM voice service from an incumbent LEC.<sup>1</sup>" (see also Attachment A) [Comments of AT&T at p. 2]; "This data confirms the speed with which the network transition is taking place and underscores the benefits associated with enabling the network transition, as reflected by rapid customer adoption. 4

- In the voice services market, circuit-switched spending fell 6.7 percent in 2013. (TIA MR&F 3-3)
  - Circuit switched spending will decrease from \$111.6 billion in 2013 to \$95.4 billion in 2017, a 3.8 percent decline compounded annually. VoIP spending will rise from \$20.6 billion to \$30.9 billion, a 10.7 percent compound annual increase.
  - In 2013, there were 79 percent as many residential VoIP subscribers as circuit switched subscribers, triple the 28 percent share in 2009.
  - By 2017, the VoIP residential subscriber base will be nearly 25 percent larger than the circuit-switched subscriber base. (TIA MR&F 3-0)
- These findings are mirrored by other data:
- By 2015, the market share for ILEC switched landline will have only 16 percent of US households, as contrasted with a 93 percent market share in 2003. <sup>5</sup> [Comments of the Telecommunications Industry Association at p.2]; "This undisputed evidence demonstrates irrefutably that consumers view interconnected VoIP and 3G/4G wireless voice services to be "reasonable substitute[s]"<sup>5</sup> for traditional telephone service.<sup>6</sup> The Commission itself has come to a similar conclusion with regard to facilities-based VoIP in a series of merger and forbearance orders,<sup>7</sup> and, more recently, for both interconnected VoIP and fixed wireless service meeting its standards for "voice telephony service" in the Connect America Fund (CAF) proceeding.<sup>8</sup> [Comments of CenturyLink at p. 2]; and "Like the *NPRM*, the *FNPRM* fails to provide any explanation of why today's technology transitions are different and require the point-by-point analysis outlined in the *FNPRM*— particularly given that the choices made by more than three-quarters of consumers already confirm the general availability of sufficient alternatives." [Comments of CenturyLink at p. 4].

<sup>xii</sup> As TIA previously noted, "obsolescence continues to be a major driver of the transition. Legacy TDM platforms are typically already approaching a 40 year plus lifespan. Essential expertise and equipment spares are becoming scarce. Should an original vendor no longer be in business and if no alternative support or spares are available, then carriers can be forced to migrate from their legacy silo model to a new voice platform." (Comments of the Telecommunications Industry Association at p.3)

<sup>xiii</sup> FNPRM at Appendix B.

2. Add new § 63.602 to read as follows:

**§63.602 Additional contents of applications to discontinue, reduce, or impair an existing retail service in favor of a retail service based on a newer technology.**

(a) In order to remain eligible for automatic grant, any domestic carrier that seeks to discontinue, reduce, or impair an existing retail service in favor of a retail service based on a newer technology shall include with its application, in addition to

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any other information required, a certification that there is an adequate substitute service available for the service to be discontinued, reduced, or impaired and that the substitute service provides adequate:

- (1) Network capacity and reliability;
- (2) Service quality;
- (3) Device and service interoperability, including interoperability with vital third-party services and devices;
- (4) Service for individuals with disabilities, including compatibility with assistive technologies;
- (5) PSAP and 9-1-1 service;
- (6) Cybersecurity;
- (7) Service functionality; and
- (8) Coverage.

(b) Any domestic carrier that seeks to discontinue, reduce, or impair an existing retail service in favor of a retail service based on a newer technology that does not file the certification described in paragraph (a) of this section shall include with its application, in addition to any other information required, supporting evidence regarding the degree to which there is an adequate substitute or substitutes available for the service to be discontinued, reduced, or impaired, and supporting evidence regarding the degree to which the substitute service(s) provide adequate:

- (1) Network capacity and reliability;
- (2) Service quality;
- (3) Device and service interoperability, including interoperability with vital third-party services and devices;
- (4) Service for individuals with disabilities, including compatibility with assistive technologies;
- (5) PSAP and 9-1-1 service;
- (6) Cybersecurity;
- (7) Service functionality; and
- (8) Coverage.

(c) A certification pursuant to paragraph (a) of this section must: (1) set forth a detailed statement explaining the basis for such certification; (2) be executed by an officer or other authorized representative of the applicant; and (3) meet the requirements of §1.16 of this chapter.

<sup>xiv</sup> 47 U.S.C. § 214(a).

<sup>xv</sup> Some examples, all from the FNPRM: “Finally, emergency services and service for individuals with disabilities raise regulatory issues that should be dealt with directly and in a manner that will address the issues uniformly across the industry.” (Comments of AT&T at p 13); “CenturyLink wholeheartedly agrees that any substitute service should comply with key public interest obligations, such as access to emergency service and disability services, which the Commission has already extended to VoIP and wireless services.” (Comments CenturyLink at p. 3); and “AARP supports the tentative conclusion that any substitute service should comply with applicable state, Tribal, and federal regulations regarding the availability, reliability, and functionality of 911 service.” (Comments of AARP at p. vi).