

SUMMARY

HyperCube applauds the Commission for initiating this proceeding and shares its concerns regarding rural call completion rates. As discussed in HyperCube's Comments, there are several measures that the Commission can take now in this and other pending proceedings that should reduce call-completion problems. For example, HyperCube wholly supports the proposal in the Notice of Proposed Rulemaking ("NPRM") to adopt call signaling integrity requirements. Concomitantly, the Commission should take action in its *USF/ICC Transformation* proceeding to enable providers, including competitive tandem providers such as HyperCube, to connect directly with terminating incumbent local exchange carriers ("ILECs"), including rural ILECs, when traffic volumes warrant, thereby establishing alternative call-completion paths. In addition, the Commission should adopt regulatory measures to support effective call signaling across mixed networks using diverse technologies, which will have a positive effect on all call completion. Finally, in the instant proceeding the Commission should encourage rural ILECs to take actions to identify and take any appropriate action against off-access toll termination arrangements that contravene access tariff requirements and likely contribute materially to the rural call completion problems that exist today, unconventional toll termination arrangements established by others that the rural ILECs may not be able to recognize within their networks without effective study.

At the same time, HyperCube submits that the case has not been made for broad ongoing reporting requirements as proposed in the *NPRM*. Any benefit from such measures is uncertain, particularly if the Commission takes the foregoing steps advocated by HyperCube. Therefore, the Commission should hold any action on its reporting proposals in abeyance while it undertakes other actions to improve rural call completion. The Commission should continue to police unreasonable call completion practices in the meantime through exercise of its

enforcement powers. Such actions will not only correct the practices of particular providers in question, but will provide guidance to other providers of what network and system modifications they should institute to improve call completion rates and avoid similar enforcement actions.

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warrant, thereby establishing alternative call-completion paths. Further, the Commission should adopt regulatory measures to support effective call signaling across mixed networks using diverse technologies, which will have a positive effect on all call completion. Finally, the Commission should encourage rural ILECs to take actions to identify and take any appropriate action against off-access toll termination arrangements that contravene tariff requirements and likely contribute materially to rural call completion problems that exist today, unconventional toll termination arrangements established by others that the rural ILECs may not be able to recognize within their networks without effective study.

At the same time, the case has not been made for broad ongoing reporting requirements as proposed in the *NPRM*. Any benefit from such measures is uncertain, particularly if the Commission takes the foregoing steps advocated by HyperCube. Therefore, the Commission should hold any action on its reporting proposals in abeyance while it undertakes other actions to improve rural call completion. The Commission should continue to police unreasonable call completion practices in the meantime through exercise of its enforcement powers. Such actions will not only correct the practices of particular providers in question, but will provide guidance to other providers of what network and system modifications they should institute to improve call completion rates and avoid similar enforcement actions.

II. BACKGROUND AND INTRODUCTION

HyperCube, headquartered near Dallas, Texas, is a premier provider of wholesale local and national tandem switching and transport services – including switching, transport, signaling, database queries, and media conversion – using a next generation infrastructure which HyperCube makes available to the entire spectrum of traditional and next generation service

providers.³ HyperCube’s network carries billions of minutes per month for a wide range of providers, including wireless carriers, wireline competitive local exchange carriers (“CLECs”), interexchange carriers (“IXCs”), cable telephony providers, and Voice over Internet Protocol (“VoIP”) providers.

HyperCube’s services support both Time-Division Multiplexing (“TDM”) and Internet Protocol (“IP”) interconnection, allowing it to bridge emerging and traditional networks. These services allow emerging providers and traditional providers to seamlessly interconnect their respective networks and to exchange traffic with one another as well as complete calls more effectively and efficiently. By translating calls to and from TDM and IP formats, HyperCube performs a key function in the nation’s evolution toward IP networks.

HyperCube, and other intermediate providers, offer competitive options for IP-based service providers that are not always available through traditional providers. HyperCube’s IP-ready network is capable of effectively moving high volumes of any type of traffic across any network element while maintaining routing, jurisdiction, and critical call information intact all the way to the call destination – including to rural areas – regardless of originating or terminating technologies. HyperCube’s network interconnection alternatives offer significant cost advantages over many traditional carrier offerings and provide a modern web-based customer portal for traffic reporting, data enhancement, and service management. HyperCube’s network, in short, provides an important competitive alternative to the legacy call completion networks. Policies that promote HyperCube’s competitive alternatives, and those of similar providers, will reduce the potential need for the Commission to adopt a regulatory framework that would micromanage the nation’s communications networks.

³ In 2012, HyperCube was acquired by West Corporation, a leading provider of technology-driven voice and data solutions, headquartered in Omaha, Nebraska.

As detailed herein, HyperCube urges the Commission to take a targeted approach to identifying and addressing problems concerning rural call completion rather than adopt wide-ranging and potentially costly and burdensome rules for continual data submission and analysis proposed in the *NPRM*. In addition, the Commission should address a number of other issues for which a record has already been developed that hold the promise to impact call completion rates positively, such as ring signaling integrity, direct interconnection with ILECs when traffic volumes warrant, and improved call signaling rules to improve traffic exchange across diverse networks.

III. THE COMMISSION SHOULD TAKE SEVERAL STEPS NOW TO ADVANCE THE EFFICIENT TRANSPORT OF TRAFFIC BETWEEN NETWORKS AND PROVIDERS AND IMPROVE CALL COMPLETION RATES

HyperCube commends the Commission on its initiative to examine ways to improve rural call completion. The traditional standard for call completion in the industry, known as the P.01 Grade of Service standard, is that there should be no more than one failed call per 100 attempted calls. As technologies have evolved and the array of providers has expanded, less industry attention has been placed on this important historical benchmark. HyperCube submits that there is no need for a regulator to impose this standard as a regulatory obligation; however, the interdependence of networks often makes it impossible for providers who aspire to P.01 to succeed. This is why it is important that the Commission address key components of the underlying problem, including those pertaining to direct interconnection, those pertaining to call signaling, and those pertaining to unconventional toll termination arrangements within LEC networks that are most often encountering call completion problems.

To promote competition and the interoperability of diverse network platforms as technologies and the marketplace continue to evolve, the Commission should proceed to address

expeditiously several matters. The *NPRM* proposes to adopt ring signaling integrity requirements, which HyperCube asserts the Commission should adopt without delay. Further, fully developed records in other proceedings support regulations promoting direct interconnection when traffic volumes warrant. In addition, HyperCube urges the Commission to encourage broader signaling standards than currently exist. Commission action on these matters would promise to minimize, if not effectively eliminate, many of the rural call completion problems that currently exist by both providing an effective tool for their identification and by removing some of the ability for access bypass attempts to go unchecked.

A. The Commission Should Adopt the Proposed Call Signaling Integrity Requirements

The *NPRM* proposes to adopt a call signaling integrity requirement.⁴ HyperCube supports the Commission's proposal to prohibit anyone in the call path from causing audible ringing (or other false progress messages) to be sent to the calling party before the terminating provider affirmatively signals that the called line is free and the called party's device is being alerted to the incoming call attempt. HyperCube also agrees that originating and intermediate providers should convey upstream all audible tones, messages and any announcements sent by the terminating provider and intended for the calling party. These measures concerning call signaling, as the *NPRM* suggests, will codify existing industry practices and help reinforce the expectations of both calling and called parties about the operation of their equipment which they use to make and receive voice calls. This rule should be applied across all providers that allow end users to make voice calls regardless of license, function, or authority.

⁴ *NPRM*, ¶ 41.

B. The Commission Should Require ILECs to Interconnect Directly When Traffic Volumes Warrant

The efficient transmission and completion of calls often depends on the effectiveness of interconnection arrangements. The ability of intermediate providers to direct connect on competitively neutral terms would better promote more efficient interconnection between diverse networks. Where intermediate providers carry a substantial amount of traffic, direct connection rights would improve the efficiency, rate, and quality of rural call completion.

In HyperCube's experience, it has been exceedingly difficult, on the whole, for HyperCube to obtain satisfactory interconnection with some LECs when exchanged traffic volumes justify direct interconnection, including some rural ILECs. This is an ongoing problem. The absence of direct connections when traffic volumes warrant directly and adversely impacts call completion rates. As a practical matter, direct interconnection has been offered to HyperCube in very limited circumstances. HyperCube has previously briefed the Commission on its concerns in this regard, and incorporates those comments herein.⁵ Refusals to directly interconnect adversely affects rural call completion in some areas because direct connections, if permitted, would provide an alternative path through which otherwise blocked calls could complete. The Commission should therefore make addressing this problem a very high priority.

Even when interconnection requests are reasonable and economically supportable, *i.e.*, there are sufficient traffic volumes to make direct interconnection more cost efficient than indirect connections, many ILECs, including rural ILECs, have been reluctant to exchange traffic directly with any LECs other than the large incumbent carriers. This reluctance presents a major obstacle to greater efficiency in traffic transmission which, if overcome in appropriate

⁵ See, e.g., Comments of HyperCube Telecom, LLC on *USF/ICC Transformation FNPRM*, filed in WC Docket No. 10-90 (Feb. 24, 2012) ("*HyperCube FNPRM Comments*").

circumstances, would improve call completion rates to rural providers' customers. This is especially the case for subscribers of new market entrants, such as IP-based service providers that utilize competitive intermediate providers like HyperCube. End users on both ends of calls would benefit tremendously if HyperCube could readily obtain competitively neutral direct interconnection with terminating providers rather than having to rely on costly indirect interconnection, for example through the tandems of the legacy ILECs.⁶ Call completion problems should decline and the costs of service for HyperCube's customer providers should decrease, leading to lower end user rates.

In WC Docket No. 10-90, *et al.*, HyperCube, in its comments on the *USF/ICC Transformation FNPRM*, urged the Commission to require that all ILECs, including rural ILECs, enter into good faith negotiations for direct interconnection with requesting CLECs and IXC, including intermediate providers, when providers make a *bona fide* request for such interconnection.⁷ Specifically, a *bona fide* request would include a showing that the provider seeking direct interconnection has simultaneous traffic to exchange that would require minimum facilities equivalent to four T-1s, regardless of underlying technology.⁸ The interconnection

⁶ Costs of service would be reduced through direct interconnection because ILECs' tandem/transiting rates are not affected by the transitions to bill and keep adopted in the *USF/ICC Transformation Order See Connect America Fund*, WC Docket No. 10-90, *et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, ¶¶ 1297-1314 (2011) ("*USF/ICC Transformation Order*" and "*USF/ICC Transformation FNPRM*," respectively), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir. filed Dec. 8, 2011). The *USF/ICC Transformation Order* did not address such rate elements as "dedicated transport, tandem switching and tandem transport in some circumstances, and other charges, including dedicated transport signaling and signaling for tandem switching." *Id.* ¶ 1297.

⁷ *HyperCube FNPRM Comments*, at 2-9. Such a rule, clearly articulated, would establish a standard for state regulators to apply in making decisions as to whether an ILEC was entitled to an exemption under Section 251(f) from its obligation to negotiate interconnection in good faith. *See id.* at 5.

⁸ The four T-1s threshold has become a *de facto* industry standard when direct connections make economic sense for both parties. *See id.* at 5-6. *See also Comments of HyperCube Telecom, LLC on the Public Notice of Pleading Cycle Established On AT&T and NTCA*

arrangement could be traditional TDM or IP as the rural ILEC requires, with a preference for next generation technologies such as IP, but HyperCube recognizes that, at present, some carriers are not yet prepared to invest in IP.⁹ Requiring negotiation of direct interconnection arrangements in such circumstances also would minimize the impact of transport rate structure incentives to favor network designs based on a multiplicity of circuit switches over more efficient network topologies relying on long loops and dedicated transport facilities. Among other benefits, implementation of HyperCube’s proposed direct interconnection standard would be cost-efficient for providers, promote network diversity and resiliency, encourage development of a competitive marketplace, and avoid the need for Commission micromanagement of transport rate elements unaffected by the *USF/ICC Transformation Order*.¹⁰ By promoting more efficient and cost effective direct interconnection with rural and other ILECs, the Commission would lessen any economic incentives that may exist on the part of providers to thwart rural call completion.

C. The Commission Should Take Additional Steps to Facilitate Interconnection of Diverse Networks as Technologies Evolve

HyperCube, as explained in Section I, provides competitive transport of switched access traffic, as well as local traffic, from the technologically diverse networks of its customers to those of wireless carriers, IXCs, CLECs, ILECs, and other providers. As such, it and other

Petitions, filed in WC Docket No. 10-90, GN Docket No. 12-353 (Jan. 28, 2013) (“*AT&T and NTCA Petition Comments*”), at 14. *HyperCube FNPRM Comments*, at 3, n. 7.

HyperCube’s proposed “four T-1s” direct interconnection standard should be considered in conjunction with HyperCube’s support for mandatory indirect interconnection of networks for termination of IP voice traffic. *See id.* at 4 n. 9.

⁹ ILECs receiving a *bona fide* request would have the burden of avoiding negotiations by offering persuasive evidence that honoring the request would be “unduly economically burdensome.” *Id.* at 7-8.

¹⁰ *See, e.g.*, Reply Comments of HyperCube Telecom, LLC on *USF/ICC Transformation FNPRM*, filed in WC Docket No. 10-90 (Mar. 30, 2012) at 6 n. 20-23 (“*HyperCube FNPRM Reply Comments*”).

intermediate providers that offer comparable services would benefit from clear federal interconnection and signaling requirements that would enable them to transport traffic between diverse networks more effectively. In turn, such clear requirements will facilitate higher rates of call completion. These issues are of critical importance as networks in today's competitive marketplace undergo technological transitions, for example transitioning from TDM-format circuit-switched networks to IP-based networks.

HyperCube has urged the Commission in other dockets to implement IP interconnection obligations and signaling requirements that ensure that consumers are protected from the loss of essential services as networks evolve and new service innovations are introduced.¹¹ In particular, the Commission should focus on resolving critical technical issues that challenge the achievement of efficient interconnection and traffic delivery in a mixed TDM/IP environment that will persist for many years to come. Regulations promoting the interconnection of traffic originating and terminating in different formats, regardless of the format that calls originate and terminate in, will improve the efficiency of call routing and therefore call completion rates. The interconnection regulatory requirements and principles applicable to TDM interconnection should apply in the context of mixed TDM/IP-based interconnection as well.¹²

A critical element to successful interconnection and call delivery and completion in a mixed-networks environment is clear and ubiquitous standardized call signaling rules that keep pace with the transformation of networks. While the steps taken in the *USF/ICC Transformation Order* to eliminate phantom traffic were certainly in the right direction, the

¹¹ See, e.g., *AT&T and NTCA Petition Comments* at 8.

¹² See *HyperCube FNPRM Comments* at 12-13 for a full discussion on the principles that should apply to IP-based interconnection.

Commission must go further as networks continue to evolve to IP-based technologies. As HyperCube argued in its comments on the *USF/ICC Transformation FNPRM*, with respect to IP and SIP signaling, there remains no industry consensus on standards for the interface between TDM-based and IP-based services, or even between different IP-based services.¹³ Standardization is critical to ensure interoperability and meaningful interconnection arrangements for the exchange of traffic between carriers and service providers. Such standards are also necessary to ensure that end users will continue to receive high quality voice services. Progress toward standards in the IP environment, including the technical feasibility of transmitting call signaling data in the context of new and emerging technologies, have not gained momentum.¹⁴ HyperCube urges the Commission to monitor these tentative developments and, if necessary, to step in and expeditiously adopt regulatory measures to support effective call signaling across mixed networks using diverse technologies.¹⁵

¹³ See, e.g., *AT&T and NTCA Petition Comments*, at 9.

¹⁴ As HyperCube observed in its Comments to the Commission earlier this year, there are no standards-setting bodies addressing the VoIP environment as counterparts to the Alliance for Telecommunications Industry Solutions (“ATIS”) in the circuit-switched environment, and dominant players in ATIS and similar organizations, such as AT&T, no longer seemed interested in seeing any initiatives regarding signaling in an IP-based environment through. *Id.*

¹⁵ Moreover, because the signaling information required under the signaling rules adopted in the *USF/ICC Transformation Order* is sometimes unavailable from upstream providers, it may be appropriate in certain circumstances for intermediate providers to populate other optional parameters such as the JIP (Jurisdictional Information Parameter) and OLI (Originating Line Information) to support the better flow of traffic. This would be consistent with ATIS recommendations. See *AT&T and NTCA Petition Comments*, at 20-22. See also Comments of HyperCube Telecom LLC, filed in WC Docket No. 10-90 *et al.* (Apr. 1, 2011), at 20. The Commission’s rules at all times should provide that, so long as an intermediate provider passes along billing message data fields unchanged from what is provided to it, or populates data fields in accordance with industry recommendations and not inconsistent with the Commission’s rules, the intermediate provider would not have any liability or involvement in intercarrier compensation disputes between originating and terminating providers.

D. The Commission Should Encourage Rural ILECs to Investigate Improperly Routed Terminated Traffic as a Source of Rural Call Completion Issues

HyperCube believes that a significant portion of rural call completion issues arise as a result of unconventional, low-quality, or limited-capacity arrangements utilized by some entities to complete traffic to the terminating rural ILECs, especially those that may rely on use of local interconnection arrangements to complete toll calls. HyperCube is concerned that, rather than using access trunks or comparable facilities to deliver traffic directly or indirectly to terminating rural ILECs, some entities attempt to complete long-distance traffic destined for customers or rural ILECs through facilities or services designed for different purposes, such as PRI, SIM boxes or even the rural ILECs' own cable modem facilities. Any such unconventional, non-access based toll termination arrangements would essentially be re-origination schemes with limited capacity and would likely be incapable, in many cases, of handling the traffic the operators promise to deliver. Not surprisingly, such practices could be expected to frequently degrade the quality of calls and also would often lead to calls not being completed in the first instance. Further, any such routing schemes would be contrary to terminating LEC tariffs and may be deployed without the consent or knowledge of the LECs involved regarding the purposes to which they are being put. These issues would likely remain invisible even if the proposed data collection requirements in the *NPRM* were adopted which would put the burden wholly on the originating facilities-based long distance provider. The false assumption within this proposed collection effort is that there is a one-to-one relationship between originating and terminating routes, something in today's mixed technology networks that is no longer valid.

HyperCube submits that any practices such as these could generally be detected through typical telecommunications industry audit practices, such as examination of traffic volumes and patterns over retail services. LECs whose services and facilities are being used for

such off-tariff toll termination arrangements are in the best position to identify the traffic patterns associated with these practices, undertake an investigation, and act to ensure adherence to their access tariffs. Accordingly, HyperCube urges the Commission as a key component of its efforts to improve rural call completion rates to encourage rural ILECs to investigate the traffic completed on their networks for evidence of such practices and to address situations that indicate that their access tariffs are being circumvented. Where such practices are uncovered and brought to the Commission's attention, the Commission should take prompt action to investigate and initiate enforcement proceedings where the Act or the Commission's rules have been violated.

IV. THE COMMISSION SHOULD DECLINE TO IMPOSE REPORTING REQUIREMENTS AT THIS TIME

The *NPRM* proposes an across-the-board reporting regime on all originating facilities-based providers for an extended period with the twin objectives of monitoring rural call completion and aiding enforcement. Although a better understanding of the root causes of call completion rates is necessary, the Commission should decline to adopt a reporting framework at this time. The reporting regime proposed in the *NPRM* would be overly broad, and it is unclear from the *NPRM* exactly how the data sought by the Commission would, in any event, help isolate the root causes of deficient rural call completion where it is occurring.

Rather than adopt any such reporting requirement, the Commission should take the steps discussed in the previous section. These actions promise to improve the overall efficiency of traffic exchange between networks and have a positive and potentially dramatic impact on rural call completion. HyperCube encourages the Commission to move forward on these matters expeditiously. Nonetheless, the Commission should continue to be ready to investigate instances where apparent call completion problems manifest themselves and take actions, as appropriate, to enforce its rules and regulations where they are being violated.

A. The Commission Should, at Least for the Present, Decline to Adopt Ubiquitous Long-Term Reporting Obligations

The *NPRM* suggests a burdensome reporting framework as a tool to help it monitor rural call competition and address call completion issues that arise. The *NPRM*'s proposed rules would require originating facilities-based long-distance providers with at least 100,000 subscriber lines to submit quarterly reports to the Commission, detailing monthly call answer rates for traffic delivered to rural OCNs with a minimum of 100 attempts and aggregate nonrural monthly call answer rates on a quarterly basis.¹⁶ The proposed rules would also require the reporting providers to retain detailed backup information for six calendar months.¹⁷

The *NPRM* proposes these reporting and record retention rules for originating long-distance voice service providers to achieve its goals of increased call completion rates.¹⁸ The *NPRM* contends, without detailed explanation, that the Commission would use the proposed reporting information to assist it in enforcement actions and in analyzing rural call performance.¹⁹

HyperCube submits that the proposed rules, which would affect nearly all providers originating voice calls, and perhaps other providers, would be unduly burdensome. There is no evidence that the vast majority of providers that would be subject to the proposed reporting rules contribute in any meaningful way to any call completion issues that exist, or that such a broad form of reporting would reveal the key contributing factors to rural call completion

¹⁶ *Id.* at ¶¶ 20, 31.

¹⁷ *Id.* at ¶ 22; *NPRM*, proposed Rule § 64.2103. Proposed Rule § 64.2103 lists the required backup information that providers would have to retain for each call: the calling party number, the called party number, data, time, whether the call was handed off to an intermediate provider and if so, who, whether the call was assigned to a rural telephone company and the telephone company's OCN, whether the call was interstate or intrastate, and whether the call was answered or not.

¹⁸ *NPRM*, ¶¶ 17, 20-30.

¹⁹ *Id.* at ¶ 16.

problems. The proposed rules would seek an enormous amount of information on a periodic basis over an extended period. Moreover, it is currently unclear how the data would be used, making it questionable whether the burden on providers would be offset by any resulting benefits.

Furthermore, many providers under the Commission's proposal would have to purchase, deploy and maintain new data retrieval and storage systems to adhere to these proposed rules.²⁰ Providers obligated to submit reports would likely face other data collection (and retention) issues to accommodate the information collection obligations that would arise under the proposed rules. For example, the proposed rules are burdensome because they require providers to differentiate between rural and nonrural OCNs. This differentiation is difficult to make, and may vary between providers because a service provider may operate with multiple rural and nonrural OCNs under a single parent OCN. And providers do not currently distinguish other providers by OCN. The proposed rules will therefore require the development of costly new processes by affected providers to categorize each long distance call by rural and nonrural OCN.²¹

The *NPRM* provides little analysis of the reasons for lower-than-desirable rural call completion rates, which explains its focus on call monitoring rather than remedies to a

²⁰ The *NPRM* acknowledges that "some long-distance providers do not collect and retain information on failed calls." *Id.* at ¶ 16.

²¹ HyperCube acknowledges that the Commission's April 18, 2013 Public Notice proposes that, for purposes of the proposed rules, rural OCNs could be identified by NECA's rural ILEC OCN list. *Wireline Competition Bureau Announces Deadlines For Comments On Rural Call Completion Notice Of Proposed Rulemaking, Invites Comments On List Of Rural Operating Carrier Numbers*, Public Notice, WC Docket No. 13-39 (rel. April 18, 2013) (citing <http://www.neca.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=8874&libID=8894>). However, to the extent the list of OCNs changes over time, even if the Commission adopts the NECA's rural ILEC OCN list for purposes of the proposed rules providers will be required to modify their systems to reflect each change to properly report under the proposed rules.

problem. But the lack of analysis also raises serious questions about the potential effectiveness of the proposed reporting requirements to identify and help address the true sources of the problems. The *NPRM* appears to assume that many of call completion issues are the result of intermediate provider practices, such as least cost routing, that try to minimize average call completion costs, by preventing calls from being completed to end users served by rural ILECs. The *NPRM* states that “retail long-distance providers may not be adequately examining the resultant rural call completion performance,”²² and further states that “[c]all completion problems appear to occur particularly in rural areas served by rate-of-return carriers, where costs that long-distance providers incur to complete calls are generally higher than in nonrural areas.”²³

To the extent the *NPRM* implies that rural call completion issues occur because of least cost routing performed by intermediate providers, HyperCube generally disagrees. Least cost routing is a common industry technique and, in the abstract, is a positive for consumers. There are myriad potential reasons why rural call completion issues occur, including the lack of direct interconnection arrangements with rural ILECs even where traffic volumes warrant and unconventional off-access toll termination agreements, as described earlier. None of these reasons derives directly from least cost routing practices. Similarly, the anecdotes cited in the *NPRM* do not explain the root-causes for issues encountered by consumers, and there is evidence before the Commission that contradicts a conclusion that least cost routing is the unique source of call completion issues. For example, the Wireline Competition Bureau stated in a letter to ATIS that some call completion issues “may be attributable to the interworking of TDM- and IP-

²² *NPRM*, ¶ 1.

²³ *Id.* at ¶ 6.

based technologies in today's current generation network. . .”²⁴ Consequently, as discussed in the previous section of these comments, the Commission should address certain pending issues before it now, such as the need for direct interconnection where traffic volumes justify, which will provide alternative paths through which calls to rural ILECs can complete, and improved call signaling requirements, which will improve the interoperability of networks and the success of call completion.

Further, the Commission does not explain in detail how it will use providers’ periodic reporting. The *NPRM* states that the Commission will use the information to “monitor” and “aid enforcement action.”²⁵ HyperCube appreciates that the Commission is not proposing performance standards at this time, but the *NPRM*’s stated objective of “monitoring” and “aiding enforcement” does not justify placing an extraordinary and potentially costly reporting and recordkeeping burden on originating facilities-based providers. Indeed, providers that have little or no rural call completion issues would still be subject to the proposed rule’s burdensome ongoing reporting requirement. Further, the Commission’s lack of identifying the information’s purpose and likely uses further underscores the current lack of justification for the proposed burdens.

B. The Commission Should Continue to Use Its Existing Enforcement Powers While It Implements HyperCube’s Proposals

As the Commission implements the proposals HyperCube advocates as an alternative to the ongoing reporting requirements proposed in the *NPRM*, the Commission can continue to address specific call completion problems arising from violations of the Act and the agency’s regulations through enforcement actions and targeted inquiries to identify the source of

²⁴ Letter from Wireline Competition Bureau to Thomas Goode, General Counsel of ATIS, 26 FCC Rcd 16454 (Dec. 6, 2001).

²⁵ *NPRM*, ¶ 3.

call completion problems. The Commission already recognizes that failing to complete calls is a violation of the Commission's rules,²⁶ so new rules are not necessary to address call completion difficulties. Further, the recent *Level 3* enforcement action demonstrates that the exercise of the Commission's enforcement powers currently – without new reporting obligations – can effectively identify Act and rule violations associated with deficient call completion difficulties, as well as fashion remedial action to improve call completion rates where warranted.²⁷

Indeed, the Commission notes in the *NPRM* that it is conducting ongoing investigations of several other providers and has provided means by which rural end users and providers can bring specific problems to the Commission's individual attention.²⁸ Accordingly, the Commission has in place adequate tools to aid it in effective enforcement while it conducts a one-time data collection.

In HyperCube's view, the Commission's enforcement capabilities provide an additional reason the Commission should decline to institute an industry-wide ongoing reporting obligation at this time. The Commission should focus its efforts, through case-by-case investigations and the measures HyperCube proposes above, including encouraging rural ILECs to enforce adherence to their access tariffs for toll termination, on better understanding the root causes of any rural call completion problems that exist. Further, any enforcement decisions that the Commission issues, building on the order adopting the *Level 3 Consent Decree*, should in themselves reduce any extant call completion problems: enforcement decisions and consent

²⁶ *2012 Declaratory Ruling*, 27 FCC Rcd at 1355-56, ¶ 12 (“it is an unjust and unreasonable practice in violation of section 201 of the Act for a carrier that knows or should know that it is providing degraded service to certain areas to fail to correct the problem or to fail to ensure that intermediate providers, least-cost routes, or other entities acting for or employed by the carrier are performing adequately”); *see also id.* at 1357-58, ¶ 14.

²⁷ *In The Matter Of Level 3 Communications, LLC*, File No. EB-12-IH-0087, Order (rel. March 12, 2013), ¶9.

²⁸ *NPRM*, ¶ 11.

decrees will serve to instruct providers what steps they should consider instituting if they wish to avoid similar outcomes for failure to complete calls at acceptable rates.

V. CONCLUSION

HyperCube applauds the Commission for its initiative in examining rural call completion issues. For the reasons explained above, the Commission should take action in this and other pending proceedings to promote competitively neutral direct interconnection, where traffic volumes justify, across diverse networks, and improved call signaling which promise to reduce, perhaps significantly, call completion issues. The Commission should take these actions and give them time to take effect before considering whether and what broad and ongoing reporting or recordkeeping obligations may be appropriate. At present, HyperCube disagrees that the Commission should adopt the burdensome and potentially costly rules proposed in the *NPRM*, with the exception of the proposed call signaling integrity requirement, until it is in a better position to determine the root causes for rural call completion problems. In the interim, the Commission can address any specific matters that come to its attention regarding Act and rule violations that adversely impact rural call completion through provider-specific investigation and enforcement.

HyperCube accordingly urges the Commission to act swiftly in the more limited manner suggested in these Comments.

Respectfully submitted,

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