# Minnesota Public Utilities Commission Staff Briefing Paper

Meeting Date:	June 26, 2014 Agenda Item** # 7
Companies:	All Telephone Companies and Telecommunications Carriers
Docket No.	P999/CI-12-1329 In the Matter of the Commission Investigation of the Completion of Long-Distance Calls to Rural Areas in Minnesota
Issue:	What, if any, action should the Commission take regarding rural call termination problems?
Staff:	Ganesh Krishnan

### **Relevant Documents**

Department Petition Recommending Commission Investigation of Rural Call Completion	January 13, 2014
Commission Notice of Investigation and Solicitation of Comments	January 16, 2014
Sprint Comments	February 14, 2014
Sprint Comments Integra Comments	February 18, 2014
Minnesota Telecom Alliance Comments	February 18, 2014
Minnesota Cable Communications Association Comments	February 18, 2014
Department Comments	February 18, 2014
TW Telecom Comments	February 18, 2014
AT&T Comments	February 18, 2014
CenturyLink Comments	February 18, 2014
Minnesota Cable Communications Association Reply Comments	March 19, 2014
Verizon Reply Comments	
Department Reply Comments	
Sprint Reply Comments	
CenturyLink Reply Comments	March 19, 2014
State Representative Hon. Dan Fabian's Comments	February 10, 2014
State Representative Hon. Steve Drazkowski's Comments	May 1, 2014

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# Background

# **Rural Call Completion Problem**

Starting in early 2010, numerous rural customers complained to their rural local exchange companies that they were not receiving long distance telephone calls and facsimile transmissions.

The rural call completion issue had many characteristics. The Federal Communications Commission (FCC) noted that consumers reported significant problems when attempting to place calls to rural areas through their long distance providers, including excessive call setup delay and calls that fail to connect. In some cases, the caller reported hearing prolonged ringing either before the called phone had actually rung or when the called phone had never actually rung at all, causing the caller to think that no one was at the called location. In other cases where calls to rural customers were delayed or failed to connect, rural carriers stated that calls had failed to route properly and instead looped between providers, routing back to a provider that previously handed off the same call to another provider for completion. At other times, calling parties received false or misleading intercept messages that falsely indicated, for example, that the call could not be completed as dialed.<sup>1</sup>

Although some carriers have questioned whether the rural call completion issues are serious or widespread, the Federal Communications Commission (FCC) has indicated the problem is serious enough to proceed with a rule-making docket.<sup>2</sup> There is also the suggestion by some parties that the problem is "substantially related to interstate traffic."<sup>3</sup>

While some parties have maintained that the cause of rural call termination issues is yet to be identified, the FCC has noted that there are multiple factors underlying rural call completion problems. One key reason is said to be the involvement of multiple carriers in transporting and terminating long distance calls, especially to the rural areas.

The long distance (interexchange) carriers have a history of handing over calls to intermediate carriers for transporting and terminating calls especially where the interexchange carrier has not deployed its own facilities. There are advantages in utilizing intermediate carriers, for example, to buttress the reliability of the networks of long distance providers by supplying back-up facilities, and to handle overflow traffic in those instances where the capital investment for

<sup>&</sup>lt;sup>1</sup> FCC Declaratory Ruling, In the Matter of Developing an Unified Intercarrier Compensation Regime; Establishing Just and Reasonable Rates for Local Exchange Carriers, CC Docket No. 01-92, WC Docket No. 07-135, Released February 6, 2012, ¶6.

<sup>&</sup>lt;sup>2</sup> Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Rural Call Completion,

WC Docket No. 13-39, FCC 13-135, Released November 8, 2013, ¶15.

<sup>&</sup>lt;sup>3</sup> MTA Initial Comments, February 18, 2014, p. 3.

additional facilities cannot be justified because spikes in traffic volumes are either infrequent or unpredictable.<sup>4</sup>

Notwithstanding the advantages of intermediate carriers, rural local carriers have maintained that call completion problems may arise from the manner in which originating providers set up the signaling and routing of their calls, and that many of these call routing and termination problems can be attributed to intermediate providers. It has been claimed that "a call to a rural area is often handled by numerous providers in the call's path. Routing calls through multiple providers increases the chances that calls will be lost."<sup>5</sup> The FCC itself has suggested that "[o]ur experience in investigating and resolving rural call completion complaints suggests that problems with routing calls to rural areas typically arise where more than two intermediate providers are involved in transmitting a call."<sup>6</sup>

Contrary to this impression, it has been asserted that that not all call completion problems are due to the use of intermediate provider and that, in a call path, network equipment, equipment components, transport facilities and customer owned/controlled equipment can impact the characteristics of a call and its ability to complete.<sup>7</sup>

Another reason cited by the FCC for the rural call completion problem is the "particularly high rates long distance providers incur to terminate long-distance calls to rural rate-of-return carriers." The FCC observed that because of high access charges "there is a greater incentive for the long-distance provider to hand off the call to an intermediate provider that is offering to deliver it cheaply --- and potentially less incentive to ensure that calls to rural areas are actually completed properly."<sup>8</sup>

The rural local carriers note that intermediate carriers act as least-cost routing carriers by offering terminating services at low rates, and that some least cost routing carriers may provide inferior service for a low rate.<sup>9</sup>

Information on the intermediate carriers<sup>10</sup> is extremely scarce and the FCC's Rural Call Completion Order has declined, for the moment any way, to impose any rules on intermediate providers. The intermediate carriers are not interexchange carriers "because they do not have any direct relationship with either the originating or terminating end user on a toll call."

<sup>&</sup>lt;sup>4</sup> CenturyLink Comments, February 18, 2014, p. 2.

<sup>&</sup>lt;sup>5</sup> MTA Initial Comments, February 18, 2014, p. 3.

<sup>&</sup>lt;sup>6</sup> Report and order and Further Notice of Proposed Rulemaking, In the Matter if Rural Call Completion, WC Docket No. 13-39, FCC 13-135, Released November 8, 2013, ¶87.

<sup>&</sup>lt;sup>7</sup> CenturyLink Comments, February 18, 2014, p. 10.

<sup>&</sup>lt;sup>8</sup> Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Rural Call Completion,

WC Docket No. 13-39, FCC 13-135, Released November 8, 2013, ¶17.

<sup>&</sup>lt;sup>9</sup> Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Rural Call Completion,

WC Docket No. 13-39, FCC 13-135, Released November 8, 2013, ¶16.

<sup>&</sup>lt;sup>10</sup> The FCC has defined the intermediate provider as any entity that carries or processes traffic that traverses the public network at any point insofar as that entity neither originates nor terminates that traffic. MCCA Comments, p. 4.

The FCC is currently addressing its own jurisdiction over intermediate providers and whether they should be subject to the reporting requirements.<sup>11</sup>

# FCC's Investigation of Rural Call Completion Problem

The FCC indicated that, as of September 30, 2013, it had received 728 consumer complaints related to rural call completion problems in 2013, many involving multiple originating providers.<sup>12</sup>

The FCC has undertaken numerous measures and initiatives with a view to addressing the rural call termination problem.

In the November 18, 2011 USF/ICC Transformation Order,<sup>13</sup> the FCC instituted a number of new rules requiring carriers to adjust, over a period of years, many of their terminating switched access charges as part of a transition to a bill-and-keep mechanism. The USF/ICC Transformation Order also re-emphasized the FCC's longstanding prohibition on call blocking. Further, the FCC found that service providers in the call path were intentionally removing or altering identifying information to avoid paying the terminating rates that would apply if the call were accurately signaled and billed. The FCC adopted rules requiring telecommunications carriers and providers of interconnected VoIP service to include the calling party's telephone number in all call signaling, and required intermediate providers to pass this signaling information, unaltered, to the next provider in a call path.

The FCC has created a Rural Call Completion Task Force to address call routing and termination problems in rural America. The Task Force has been investigating call completion issues since its formation, identifying specific issues and making sure that they are resolved.

On February 6, 2012, the FCC released its Declaratory Ruling<sup>14</sup> to clarify the scope of its existing rules prohibiting the blocking, choking, reducing or restricting of telephone traffic. The FCC made it clear that "practices such as those . . . that lead to call termination and call quality problems may constitute unjust and unreasonable practices in violation of section 201 of Communications Act of 1934, . . . and/or may violate a carrier's section 202 duty to refrain from unjust or unreasonable discrimination in practices, facilities, or services." The FCC also

<sup>&</sup>lt;sup>11</sup> TWTC Comments, February 18, 2014 p. 5.

<sup>&</sup>lt;sup>12</sup> FCC's Rural Call Completion Order, ¶15, footnote 47.

<sup>&</sup>lt;sup>13</sup> Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform-Mobility Fund, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-32, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Red 17663 (2011) (USF/ICC Transformation Order).

<sup>&</sup>lt;sup>14</sup> In the Matter of Developing an Unified Intercarrier Compensation Regime; Establishing Just and Reasonable Rates for Local Exchange Carriers, CC Docket No. 01-92, WC Docket No. 07-135.

emphasized that, under section 217 of the Act, carriers are responsible for the actions of their agents or other persons acting for or employed by the carriers.

On November 8, 2013, the FCC released its Report and Order and Further Notice of Proposed Rulemaking, In the Matter if Rural Call Completion, WC Docket No. 13-39, FCC 13-135 (Rural Call Completion Order). In this order, the FCC has adopted extensive data collection, retention and reporting obligations for a wide array of long distance service providers in order to address problems associated with the completion of calls to rural wireline numbers.

In order to address and redress call completion problems, both interstate and intrastate, the November 8, 2013, the Rural Call Completion Order requires covered providers (discussed below) to record and retain the following data, among a host of other information to be recorded and retained, for each long-distance call attempt: calling party number; called party number; date; time of day; whether the call is handed off to an intermediate provider and, if so, which intermediate provider; whether the call is going to a rural carrier and, if so, which rural carrier, as identified by its OCN (rural operating company number); whether the call is interstate; and whether the call attempt was answered.<sup>15</sup>

The Rural Call Completion Order requires the covered providers to report, on a quarterly basis, (1) for each rural OCN, the OCN, the state, the total number of attempted interstate calls, the number of attempted interstate calls that were answered, and the number of attempted interstate calls that were answered, and the number of attempted interstate calls that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number; (2) the same information described in (1), but for intrastate calls; (3) the same information regarding attempted interstate calls described in (1), but for non-rural OCNs in the aggregate; and (4) the same information regarding attempted intrastate calls described in (2), but for non-rural OCNs in the aggregate.

The data recording, retention, and reporting requirements set forth in the Rural Call Completion Order apply to providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines.<sup>16</sup> The FCC also concluded that long-distance voice service providers, including LECs, IXCs, CMRS providers, and interconnected and one-way VoIP service providers (these are the covered providers), must comply with the recording, retention, and reporting rules when they make the initial long-distance call path choice.

It is expected that the FCC's rules will be approved by the Office of Management and

<sup>&</sup>lt;sup>15</sup> Using these data, the FCC will calculate the percentage of calls answered (the call answer rate) and the percentage of calls completed to the terminating provider regardless of whether answered or unanswered by the user (the network effectiveness ratio).

<sup>&</sup>lt;sup>16</sup> Originating long-distance voice service providers that do not make the initial long-distance call path decision for more than 100,000 domestic retail subscriber lines are not required to comply with these recording and reporting requirements. Rather, the entity or entities that make the initial long-distance call path decision for calls from those providers' end-user customers must record and report data for those calls.

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Budget and that all affected carriers will be filing their first reports with the FCC starting September, 2014.<sup>17</sup>

The FCC is in the process of taking comments on further rules that it should adopt related to call completion. Specific topics it has raised include (1) whether it should impose reporting or certification requirements on intermediate carriers; (2) whether it should adopt specific rules related to call blocking or choking; and (3) whether it should impose reporting or other requirements on rural local companies that terminate calls.

Further, the FCC's Enforcement Bureau has been responding to rural call completion problems. In March 2013, Level 3 Communications, LLC (Level 3) entered into a consent decree terminating the Enforcement Bureau's investigations into possible violations of sections 201(b) and 202(a) of the Act with respect to Level 3's call completion practices to rural areas, including its use and monitoring of intermediate providers. In the consent Decree, Level 3 agreed to, among other things, make a voluntary contribution to the U.S. Treasury in the amount of \$975,000.<sup>18</sup> On June 4, 2014, the FCC settle allegations that Matrix Telecom, Inc. (Matrix) violated federal laws by failing to complete long distance calls to rural areas on a just, reasonable, and non-discriminatory basis.<sup>19</sup> The FCC noted that the FCC's Rural Call Completion Task Force received and investigated information that Matrix failed to ensure adequate long-distance call completion to rural areas for its retail and wholesale customers. For purposes of the settlement, Matrix agreed to make a voluntary contribution to the U.S. Treasury in the amount of \$875,000 to resolve the allegations and to implement a three-year compliance plan.

# **Department's Petition for a Commission Investigation**

On January 13, 2014, the Department of Commerce (Department) filed a petition in recommending that the Commission open an investigation of rural call completion issue.

The Department indicated that it does not believe that the FCC's actions will fully resolve the rural intrastate call completion problems and, therefore, it was appropriate for state regulators to consider what, if any, actions are appropriate to minimize rural call completion problems within their jurisdiction.<sup>20</sup> The Department petitioned the Commission to consider any action it could take to reduce the occurrences of calls failing to terminate in rural areas of Minnesota, or, better enable carriers to trouble shoot and resolve rural call completion issues in a timely manner. The

<sup>&</sup>lt;sup>17</sup> TWTC Comments, February 18, 2014, p. 2.

<sup>&</sup>lt;sup>18</sup> CenturyLink Comments, February 18, 2014, p. 5.

<sup>&</sup>lt;sup>19</sup> FCC Order, In the Matter of Matrix Telecom, File No.: EB-IHD-13-00011204, Acct. No.: 201432080032, FRN: 0004333068, June 4, 2014.

<sup>&</sup>lt;sup>20</sup> Department Comments, January 13, 2014, p. 2.

Department proposed that the Commission initiate the investigation by soliciting answers to a host of questions.

The central issue raised in the Department's petition was whether the intermediate carriers, to the extent they are engaged in the provision of a telecommunications service, could be brought under the Commission's jurisdiction by the operation of Minn. Stat. § 237.74, Subd. 12, which states, in part, that no telecommunications carrier may construct or operate any line, or comparable facility, without the Commission's approval. The Department acknowledged that the "intermediate" carriers do not have any direct relationship with either the originating or terminating end-users on a toll call. Even so, the Department added that when an interexchange carrier sends interexchange telecommunications calls to an intermediate transport provider, the intermediate provider is performing the same function as the interexchange carrier, which has the responsibility to ensure that its calls are completed.

The DOC argued that although an intermediate provider is only providing service to other carriers, Minn. Stat. 237 makes no distinction between retail and wholesale telecommunications service. The Department noted that other wholesale services are clearly within the Commission's jurisdiction, such as switched access service, the provision of unbundled network elements, and the resale of telecommunications services. According to the Department, because it is clear that intermediate providers have been responsible, at least in part, for the failure of calls to terminate in rural areas, asserting jurisdiction over these intermediate providers would enable the Commission to establish regulatory parameters to better ensure appropriate behavior.

Accordingly, the DOC recommended that the Commission launch an investigation by asking fourteen questions, the first nine of which addressed the Commission's jurisdiction over the intermediate providers, and the remainder addressing issues related to monitoring of call completion problem, including data collection, and the contracts between intermediate carriers and interexchange carriers.

# **Commission Notice Soliciting Comments and Reply Comments**

On January 16, 2014, the Commission issued a notice adopting the Department's petition and solicited comments on fourteen questions.

# Parties' Comments and Reply Comments<sup>21</sup>

On February 14, 2014, Sprint filed its comments expressing its concerns that the FCC's reporting requirements have already imposed significant costs and burdens on covered carriers such as Sprint. As a result, Sprint asked that the Commission decline to impose additional state-specific data collection and reporting requirements that would add yet another layer of costs and burdens upon carriers.

On February 18, 2014, Integra, Minnesota Telecom Alliance (MTA), Minnesota Cable Communications Association (MCCA), the Department, tw telecom (TWTC), AT&T, and CenturyLink filed their respective comments.

Integra indicated that although the FCC is currently investigating rural call completion issues, "there does not appear to be a clear definition of what constitutes a true rural call completion problem, as opposed to an unanswered call or a network completion problem." Integra added that "it is incorrect to presume that every unanswered call to a rural area is a result of a rural call completion problem, or that all declining terminating access minutes to rural areas is a result of a rural call completion problem."

The MTA suggested that the Commission defer to the FCC's actions and facilitate application of the requirements adopted in the FCC's Report and Order and allow them to operate for a reasonable time period before applying additional regulatory requirements. The MTA noted that the Commission's jurisdiction is limited to calls originating and terminating in Minnesota which is only a portion of the overall calls.

The MCCA noted that the FCC has already initiated a variety of action, including injunction against call blocking, lowering access charges, and data collection and reporting on a quarterly basis. The MCCA recommended that the Commission refrain from promulgating any new rules or taking any "generic" enforcement action against broad segments of intrastate telecommunications service providers.

The Department noted that the more relevant question with respect to rural call completion may be the Commission's jurisdiction over those intermediate providers that are not already certified in Minnesota. The Department indicated that the Commission has broad authority to regulate intrastate end to end telephone services and investigate any matter relating to telephone service in the state of Minnesota. The Department suggested that the Commission may require all originating interexchange carriers to report each call completion complaint it receives to the

<sup>&</sup>lt;sup>21</sup> Not all parties responding to the Commission's Notice answered all questions individually. The Department, CenturyLink, and tw telecom answered all the fourteen questions individually; Sprint and Verizon did not answer any of the questions; Integra did not take a position on many of the questions; AT&T, Minnesota Cable Communications Association, and MTA addressed some questions individually and answered the other questions by grouping them as they saw fit.

Commission and Department on a monthly basis, until such time that the Commission determines that the data are no longer needed

TWTC indicated that the causes of rural call completion problem are not yet clear and that the intermediate carriers may fall outside the jurisdiction of the Commission. TWTC indicated that the Commission's first action should be to review and evaluate the data collected under the FCC's rules and help identify and isolate the causes.

AT&T concluded that there is no need for the Commission to adopt Minnesota-specific rules.

CenturyLink's comments acknowledged the focus on the intermediate providers in the Department's petition as well as in the Commission's notice and noted that any efforts by the Commission to assert jurisdiction over intermediate carriers is likely to be overturned by the courts as, in most cases, they do not offer services to the public. CenturyLink also noted that many commentators suspect high access rates to be an underlying cause of call completion issues. Those rates are in the process of modification and therefore that potential economic cause of call completion issues should be reduced over time. CenturyLink suggested that the Commission give the mechanisms adopted by the FCC the opportunity to address the issues, but noted that the Commission should address individual cases that arise with the interexchange carriers.

On March 19, 2014, the MCCA, Verizon, the Department, Sprint, and CenturyLink filed their respective reply comments.

In its reply comments, MCCA argued that the instant proceeding lacked substantial evidence of rural call completion with respect to intrastate calls. Accordingly, MCCA suggested that the most reasonable action for the Commission to take at this time is to investigate rural call completion complaints on a case by case basis and to consider individual enforcement action as necessary. The FCC's measures to collect data and investigate and resolve this problem should be given time to work.

Verizon noted that adopting state-specific call completion rules is unnecessary in light of the FCC's actions and would actually be counterproductive and create potential conflict with national standards and that resolving call completion/call termination issues on a carrier-to-carrier basis was more efficient and effective than trying to accomplish the same result through a set of new administrative rules or requirements.

In its reply comments, the Department acknowledged that the parties in general had asked the Commission to wait for the FCC's initiatives and measures to work themselves out, but pointed out that FCC has contemplated that states may investigate and take action regarding rural call completion and that the data collection, reporting and retention efforts initiated by the FCC were not in lieu of state action but in order to assist the states in investigation rural call completion

issues. The Department noted that because there is no dispute on the seriousness of the problem, the Commission should take actions it deems reasonable and within its jurisdiction to provide relief to rural customers.

The Department was skeptical of the FCC's actions because the FCC's November 8, 2013 Report and Order stated that the FCC began taking actions on rural call completion issues in 2007 (seven years ago), many of which merely reemphasized and clarified rules that had been in place for years. These early actions/clarifications did not prevent calls to rural areas from failing to complete and the most recent actions should help, but it is less than clear that they will prevent call failures. It simply will take time to see what relief occurs as a result of FCC actions. The Department maintained that the FCC's actions like, for example, "Prohibition of False Audible Ringing," will serve to alert the caller that there is a problem and report it, but will not resolve the call completion problem "if no process is in place to address reports and resolve the underlying problem."

The Department argued that while the FCC's action to move some intrastate switched access rates to the same level as interstate rates, and to reduce terminating access charges generally may help rural call completion problems by removing the incentive to avoid higher access costs, and may help rural call completion problems in the coming years, but the Department cautioned that the reductions have been scheduled to occur over a period of several years

In its reply comments, Sprint objected to the Department's proposal that interexchange carriers report each call completion complaint to the Commission and Department on a monthly basis as wholly unnecessary. Sprint noted that poor quality service can lead to requests for billing credit or service cancellation as a remedy as the long distance market is competitive. Thus, Sprint argued that it should not bear the burden of monthly complaint reporting. Sprint indicated that its arrangements with intermediate carriers included the following provisions: defined performance and call quality metrics (multiple categories); provisions to allow for corrective action (including contract termination) if the intermediate carrier is paid only for completed calls; prohibition on any form of call looping; prohibition on the use of "play early" or "false ringback" tones; and prohibition on any practice that seeks to improperly classify the jurisdiction of a call, or that alters calling party information or other signaling parameters.

CenturyLink, in its reply comments, reiterated its earlier position that the FCC has already taken significant action which will impose burden on affected carriers, and that issuing new requirements and/or carry potential for harm. If the commission contemplated taking action, such action should wait until the FCC rules have been implemented.

On February 14, 2013, Hon. Dan Fabian, State Representative (District 1A), filed public comments noting that although a number of factors contribute to the call completion issue, many local carriers believe that the main problem lies with the "least cost routing" mechanism

employed by contractors engaged by some carriers. He noted that carriers who hire firms that use this method should be obligated to ensure that the intermediate router(s) comply with all applicable federal and state regulations. He asked that the commission and the Department use their authority to regulate such practices to ensure that carriers are following all applicable rules and regulations.

On May 1, 2014, Hon. Steve Drazkowski, State Representative (District 21B), filed public comments noting the commission and the Department should ensure that carriers which use "least cost routing" carriers are in compliance with all applicable federal and state regulations.

# **Processes Currently in Place to Monitor Call Completion Problems**

In their comments, the parties outlined the following processes currently in place to address the call completion problems.

# AT&T

AT&T constantly monitors network performance through its Global Network Operations Center. Where AT&T uses intermediate providers, the contracts with those providers include performance and reporting requirements. Finally, AT&T has a dedicated email box for rural carriers to use if they encounter call completion issues for fast track resolution.

# CenturyLink

CenturyLink has regularly scheduled meetings with its intermediate providers to review quality measures, completion issues, trouble tickets, etc. CenturyLink also has a well-documented process to address call completion issues which is described below:

• Where there is an issue with the performance of a CenturyLink customer's long distance service, and the customer contacts CenturyLink, CenturyLink opens a trouble report ticket, the issue is identified and documented, and troubleshooting takes place.

• If the issue is related to routing, the route path is reviewed and may be changed and tested for efficacy to allow the customer's traffic to properly flow.

• If an underlying carrier is involved in the problem, it is removed from the path (NPA/NXX) and a trouble report ticket is opened with the underlying carrier. That carrier must conduct a root cause analysis, address the issue to resolution, take corrective action, test its fix, notify CenturyLink, and test with CenturyLink before CenturyLink will re-instate it to be used for processing calls and close the trouble report ticket.

• The original customer issue is worked, its resolution tested and confirmed, and it is closed with the customer.

### Minnesota Cable Communications Association

As a "covered provider," member companies will be required to gather, retain, and report data as expected by the FCC.

### Department

The Department is not aware of a defined process that is required by all originating long distance carriers. Responses by the carriers may help serve to establish appropriate processes and/or monitoring of call completion problems.

### Integra

Integra routinely monitors its network, but call termination problems are difficult to isolate and identify without notice from the originating or terminating customer (or terminating carrier on behalf of the terminating customer).

# MTA

The MTA believes that it would be more efficient and likely more effective for the FCC process to be allowed a chance to succeed before any additional Minnesota state requirements are considered.

### Sprint

Sprint's comments did not address this issue.

### tw telecom

tw noted that FCC's new rules require originating long-distance providers with more than 100,000 domestic retail subscriber lines to keep records required information.

### Verizon

Given the complex nature of network routing, modern telecommunications equipment and sophisticated software, the service providers themselves are best capable of troubleshooting specific situations and resolving them based on their knowledge of their own facilities, systems and operations. The carriers' cooperative efforts will resolve complex technical issues on a carrier-to-carrier basis.

# Issue: What, if any, action should the Commission take regarding rural call termination problems?

# **Party Positions**

# Department

At first, the Department suggested that the Commission may establish jurisdiction over intermediate carriers by virtue of Minn. Stats. §§ 237.01, Subd. 6, 237.081, Subds. 1 and 4, 237.121 in part, 237.16, Subd. 12, 237.46, 237.461, and 237.74, Subds. 2, 4, 11, and 12. However, the Department suggested, more broadly, that whether or not intermediate providers are determined to be within the Commission's jurisdiction, there is no dispute that the originating interexchange carrier has the responsibility to terminate calls and that the Commission may be able to do more to hold interexchange carriers accountable for call completion problems.

With that end in view, the Department suggested that the Commission may require all originating interexchange carriers to report each call completion complaint it receives to the Commission and Department on a monthly basis until such time that the Commission determines that the data are no longer needed.<sup>22</sup>

The Department suggested that the Commission order the provision that continued use of an intermediate carrier that is known to have poor call completion performance, or has been removed from a particular route by any originating interexchange carrier due to poor performance on more than one occasion, should no longer be allowed to carry any intrastate calls in Minnesota.

In the reply comments, the Department advised the Commission not to make a determination on whether it has jurisdiction over the intermediate carriers because information on who they are and what functions they perform are inadequate and noted that it was not providing any supplemental legal analysis to support the Commission's jurisdiction over intermediate providers. In the reply comments, the Department put the onus on the interexchange carriers for the termination of calls and noted that the long distance carriers "need to proactively ensure that any intermediate providers in the call paths used for the termination of calls they originate do not cause call failures," and that they need to ensure that any intermediate provider they contract with will use only those other intermediate providers that properly terminate calls.

The Department notes, however, that if the actions taken by the FCC and the Commission on rural call completion prove to be inadequate, the question of regulating intermediate providers can be addressed in the future.

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<sup>&</sup>lt;sup>22</sup> Department Comments, February 18, 2014, p. 5.

### Summary of the Department's Recommendation

In order for the long distance carriers to ensure that calls that originate with them are terminated properly, the Department recommends that the Commission:

- 1. find that interexchange carriers need to proactively ensure that any intermediate providers in the call paths used for the termination of calls they originate do not cause call failures to occur;
- 2. require that all originating interexchange carriers report each call completion complaint it receives to the Commission and the Department on a monthly basis, for some period of time, such as a year, or until the Commission determines that the data is no longer needed:

The report should include:

- a. root cause analysis on any call completion complaints for any intrastate call completion problem regardless of who reports the incident to the carrier;
- b. if an intermediate providers in the call path was responsible for call failure, the name of that intermediate provider and whether the intermediate provider was removed as a routing alternative;
- c. any past performance or call failure problems that the IXC has had with the intermediate provider (if not already reported via this process);
- d. an explanation of what steps the IXC has taken with the intermediate provider to ensure call completion problems do not occur in the future; and
- e. whether test lines were made available by the ILEC in the exchange where the call failed, and if so, the testing process used by the IXC.
- 3. require each interexchange carrier to supply the list of intermediate providers it routes intrastate calls to, the name of the contact person of the intermediate provider the interexchange carrier has on file to address any call completion problems, and the contact person's telephone number and find that the Department has agreed to maintain the list on its website;
- 4. require any new contracts entered for call routing/termination to contain the typical provisions found in legal contracts, such as the agreement to comply with legal and regulatory requirements;
- 5. encourage interexchange carriers to not include confidentiality provisions in call routing/termination contracts to avoid any delay in producing information deemed necessary by regulatory authorities;
- 6. express that the removal or altering of call signaling information to commit fraud is a serious offense in violation of federal and state law, and will not be tolerated; and
- 7. require rural incumbent carriers to make test lines available so that interexchange carriers have the opportunity and ability to test the effectiveness of their call routing.

### Integra

Integra asks that the Commission narrowly define the "rural call completion problem" and limit its intended action to "intentional behavior by providers that seek to avoid terminating calls to rural areas." Integra expresses its concern that state Commissions may order additional data collection and reporting procedures not in sync with the FCC's requirements, thereby adding to the cost of data collection. Integra argues that that not all call failures indicate a rural call completion problem and that call termination problems can be difficult to identify as calls may fail to complete for a number of reasons. Integra indicates that carriers need to collaborate to resolve rural call completion problems.

# Minnesota Telecom Alliance (MTA)

The MTA points out that the Commission's jurisdiction over the intermediate carriers is very likely subject to significant challenge. The MTA recommends that in light of the FCC action (which includes both interstate and intrastate traffic), the absence of Commission jurisdiction over interstate traffic, and the possibility of confusion between FCC and Commission actions, the most effective approach at this time would be to facilitate the FCC processes rather than for the Commission to take separate action with respect to Minnesota intrastate traffic. The MTA notes that the intermediate carriers may not meet the requirements of a telephone company or a telecommunications carrier because they do not serve the public directly.

# Minnesota Cable Communications Association (MCCA)

The MCCA notes in particular that the Commission should place no further regulatory obligations on originating local or interexchange companies. The MCCA also opposes any regulation of contracts between telephone and telecommunications companies and the intermediate carriers. However, the MCCA recommends that the Commission take action regarding specific complaints.

MCCA also argues that the record lacks evidence of rural call completion problems with respect to intrastate calls. Accordingly, MCCA suggests that the Commission take action on a complaint-basis and to consider individual enforcement action, in the meantime, allowing time for the FCC's measures to collect data and investigate and resolve this problem.

# Sprint

Sprint notes that at this time additional data were necessary. Sprint suggests that the Commission work cooperatively with the FCC to ensure that the relevant data collected by the FCC are made available to state commissions. This would allow the Commission to determine whether there is any need for information reporting beyond that already mandated by the FCC, and avoid imposing any duplicative (or worse, contradictory) obligations on carriers that would unnecessarily increase the already significant costs and administrative burdens of compliance with the new FCC requirements.

Sprint objects to the Department's proposal that interexchange carriers report each call completion complaint to the Commission and Department on a monthly basis as wholly unnecessary.

Sprint also objects to the Department's suggestion that the Commission require intermediate carriers—or the carriers that use intermediate carriers—to file point of contact information for the intermediate carrier with the Commission and Department. This would not aid in the resolution of call completion complaints, as it would promote approaching the intermediate carrier directly and individually to address an issue that cannot be resolved without the full participation of the service provider that is using the intermediate carrier.

Sprint concludes by noting that the Commission should allow time for the FCC's requirements to be implemented and analyzed, so that the Commission can fully assess what, if any, actions beyond those taken by the FCC are necessary.

### tw telecom (TWTC)

TWTC suggests that the Commission refrain from adopting any requirements that would be inconsistent with the new federal reporting requirements.

# AT&T

AT&T notes that the rural call completion problem is better addressed on a nationwide basis and that the FCC has taken "a significant step toward removing what the Department's Comments (p. 11) recognize as one of the root causes of call completion problems in rural areas, i.e., the use of least cost routers to minimize or avoid high terminating switched access rates charged by rural, rate of return local exchange carriers."

# CenturyLink

CenturyLink notes that intermediate carriers play a useful role and a failure to acknowledge that role may only exacerbate the rural call completion problem. CenturyLink remarks that the intermediate providers have long been of use to the interexchange companies when the latter had not deployed their own facilities; to buttress the reliability of the networks of long distance providers by supplying back-up facilities; and to handle overflow traffic in those instances where the capital investment for additional facilities cannot be justified because spikes in traffic volumes are either infrequent or unpredictable.

CenturyLink points out that while the reporting and data retention requirements of the FCC rules have not taken effect, they are designed to have the dual impact of identifying call completion issues and addressing problems when they arise. CenturyLink suggests that the Commission encourage rural incumbent carriers to make test lines available so that interexchange carriers have the opportunity and ability to test the effectiveness of their call routing. CenturyLink observes that the most effective method for the Commission to address issues associated with

intermediate carriers is through contacting the originating interexchange carrier, having the interexchange carrier investigate the issue and, if an intermediate carrier is the cause of the call completion issue, have the interexchange carrier resolve the issue and identify the intermediate carrier involved.

### Verizon

Verizon, like MCCA, notes that "other than a handful of isolated issues referenced second-hand in comments in this docket – cases that may or may not have anything to do with call routing practices and/or the use of intermediate carriers – there is no evidence of a widespread intrastate call completion problem in Minnesota."

Responding to the Department's charge that it "does not believe that the actions of the FCC will fully resolve the rural call completion problems," Verizon noted that the Department offers no support for this conclusion, other than to say that the FCC's efforts "will not prevent call failures from occurring until the cause of the problem is clearly identified and addressed." Verizon retorts that the same would be true of any state-initiated effort, which likewise cannot prevent particular issues until their cause is known. Verizon argues that the Department has proposed adoption of stringent requirements that would effectively require carriers to launch a full-scale investigation of every alleged incomplete interexchange call placed in Minnesota – regardless of the cause or whether an intermediate provider was even involved – and unobtainable omniscience of the performance of every intermediate carrier operating in the state, if not throughout the entire country.

### **Staff Analysis**

Staff supports the Department's call for some statewide action to limit the problem of rural call termination. The Department's final recommendation is not in any way in conflict with the FCC's measures, run counter to them, or cause significant additional gratuitous work on the part of the carriers.

The Department's recommendation does not entail data gathering and reporting requirements. The Department's recommendation is particularly necessary in light of the impression created by answers given by some of the parties to the issue of monitoring call termination issues currently in place on a voluntary basis.

The Department's recommendation is in line with the suggestions of CenturyLink, MTA and the Cable Association that the Commission investigate rural call termination problems on a case-bycase basis – the Department has recommended that all interexchange companies report on each call complaint they receive, the implication, as Staff understands it, being that those interexchange companies that do not receive a complaint need not file any report. Some parties have alleged that the Department has called for solution to an ill-defined problem and suggested that referring every call failure for investigation may be unwarranted and that only those failed calls which could be attributed to a narrowly defined rural call termination problem should be investigated. Staff disagrees.

A unique aspect of the rural call termination problem is that unless and until the calling party informs the called party of the potential problem, the called party is left wondering why the calling party was not calling. It takes two parties to come together to identify the problem. All non-terminating calls have to be analyzed in order to determine why a subset of calls which constitute the rural call termination problem is not terminating. It is not possible to identify this subset of calls without viewing all non-terminating calls.

Some parties have commented that the rural call termination is not a sizeable problem and that it is mostly inter-state in character. As was noted before, 728 consumer complaints were reported to the FCC in 2013 reflecting that the problem at hand represents a significant lapse of quality of service.

In Minnesota, the Commission's Consumer Affairs Office (CAO) compiled the following aggregate complaint statistics:

Table 1		
Year	No. of Complaints	
2011	25	
2012	6	
2013	0	
2014	2	
Total	33	

For the period noted above, there was a total of 33 complaints received by the CAO. The qualitative break-down of the 33 complaints is given below:

Table 2		
Issue	# of Complaints	
Not Receiving Calls	12	
Multiple Problems	11	
Unable to reach	6	
Poor Call Quality	2	
Unknown	2	
Total	33	

The two categories, "Not Receiving Calls" and "Multiple Problems," include rural call termination problems and were confined, to a large extent, to the Lakedale area.

The data reported here may not state the full extent of the call termination problem because of the nature of the problem – it is always difficult to report a problem that the customer is not aware of until, of course, the customer is told that someone has been trying in vain to reach the customer. There is, however, a substantial reduction in the reported complaints since 2011. The Commission may, in light of the trend in the data above, adjust the need for monthly reports in the Department's recommendation.

Staff would point to a few alterations to the Department's final recommendation for the Commission's consideration.

Inasmuch as a call termination complaint may originate with the customer of long-distance carrier or the customer of the local exchange company (which may also be reported to the CAO), Staff would recommend that these complaints be forwarded to the appropriate long-distance carriers to be included in its monthly report.

Staff recommends that this provision be accommodated in item 1. of the Department's recommendation:

direct the Consumer Affairs Office of the Commission and local exchange carriers to forward customer complaints of call termination to the appropriate originating interexchange carrier for inclusion in the reports discussed in item 2.

Staff recommends the following substantive and language changes to item 2. of the Department's recommendation:

2. require that all originating interexchange carriers report each call completion complaint it they receives to the Commission and the Department on a monthly quarterly basis, for some period of time, such as a year, or until the Commission determines that the data is no longer needed. Interexchange companies without a complaint need not file any reports.

Staff notes that item 3. of the Department's recommendation may not be necessary in light of the Department's recommendation that the Commission not address its jurisdiction over the intermediate carriers. The purpose of this section may well be already addressed through the provisions in item 1. and subdivisions, b. through d., of item 2.

Finally, the Department petitioned the Commission to consider, among other things, any action it could take to better enable carriers to trouble shoot and resolve rural call completion issues in a timely manner. Integra, in its comments, supported the notion of carriers working together to

The Commission expects all affected/involved carriers to work cooperatively in eliminating call termination problems.

# **Options**

# Issue I. A. What, if any, action should the Commission take regarding rural call termination problems?

# Options

- I. A. 1. Adopt all, or part, and/or amend, the Department's recommendations and proceed to Issue I. B. below.
- **I. A. 2.** Close the docket; wait for the FCC's initiatives to take effect; in the meantime, investigate complaints on a case-by-case basis.

# Issue I. B. 1

# I. B. 1. a. Department Recommendation

find that interexchange carriers need to proactively ensure that any intermediate providers in the call paths used for the termination of calls they originate do not cause call failures to occur;

# I. B. 1. b. Modified Department Recommendation

find that interexchange carriers need to proactively ensure that any intermediate providers in the call paths used for the termination of calls they originate do not cause call failures to occur; <u>the Commission expects all affected/involved carriers</u> to work cooperatively in eliminating call termination problems. Direct the Consumer Affairs Office of the Commission and local exchange carriers to forward customer complaints of call termination to the appropriate originating interexchange carrier for inclusion in the reports discussed in item 2.

# Options

- I. B. 1. a. Department Recommendation.
- I. B. 1. b. Modified Department Recommendation.
- **I. B. 1. c.** Other action by the Commission.

### Issue I. B. 2

### I. B. 2. a. Department Recommendation

require that all originating interexchange carriers report each call completion complaint it receives to the Commission and the Department on a monthly basis, for some period of time, such as a year, or until the Commission determines that the data is no longer needed<sup>23</sup>:

The report should include:

a. root cause analysis on any call completion complaints for any intrastate call completion problem regardless of who reports the incident to the carrier;

b. if an intermediate providers in the call path was responsible for call failure, the name of that intermediate provider and whether the intermediate provider was removed as a routing alternative;

c. any past performance or call failure problems that the IXC has had with the intermediate provider (if not already reported via this process);

d. an explanation of what steps the IXC has taken with the intermediate provider to ensure call completion problems do not occur in the future; and

e. whether test lines were made available by the ILEC (incumbent local exchange company)<sup>24</sup> in the exchange where the call failed, and if so, the testing process used by the IXC.

### I. B. 2. b. Modified Department Recommendation

require that all originating interexchange carriers report each call completion complaint <del>it</del> <u>they</u> receives to the Commission and the Department on a <u>monthly quarterly</u> basis, for <u>some</u> <u>period of time</u>, <u>such as</u> a year, <u>or until the Commission determines that the data is no longer</u> <u>needed</u>. <u>Interexchange companies without a complaint need not file any reports.</u>

Staff does not propose changes to the details (a. through e. above) of the report.

### Options

- I. B. 2. a. Department Recommendation.
- I. B. 2. b. Modified Department Recommendation.
- **I. B. 2. c.** Other action by the Commission.

<sup>&</sup>lt;sup>24</sup> Parenthetical remark included by Staff.

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# Issue I. B. 3

# I. B. 3. a. Department Recommendation

require each interexchange carrier to supply the list of intermediate providers it routes intrastate calls to, the name of the contact person of the intermediate provider the interexchange carrier has on file to address any call completion problems, and the contact person's telephone number and find that the Department has agreed to maintain the list on its website;

### I. B. 3. b. Staff Suggestion

Staff notes that item I. B. 3 of the Department's recommendation may not be necessary in light of the Department's recommendation that the Commission not address its jurisdiction over the intermediate carriers. The purpose of this section may well be already addressed through the provisions in item I. B. 1. and subdivisions, b. through d., of item I. B. 2.

### **Options**

I. B. 3. a.	Department Recommendation.
I. B. 3. b.	Determine that this element is not needed.
I. B. 3. c.	Other action by the Commission.

# Issue I. B. 4

### I. B. 4. a. Department Recommendation

require any new contracts entered for call routing/termination to contain the typical provisions found in legal contracts, such as the agreement to comply with legal and regulatory requirements;

### Options

I.	<b>B. 4.</b> a.	Department Recommendation.
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**I. B. 4. b.** Other action by the Commission.

### Issue I. B. 5

### I. B. 5. a. Department Recommendation

encourage interexchange carriers to not include confidentiality provisions in call routing/termination contracts to avoid any delay in producing information deemed necessary by regulatory authorities;

### **Options**

I. B. 5. a.	Department Recommendation.
I. B. 5. b.	Other action by the Commission

# Issue I. B. 6

### I. B. 6. a. Department Recommendation

express that the removal or altering of call signaling information to commit fraud is a serious offense in violation of federal and state law, and will not be tolerated;

### **Options**

- I. B. 6. a. Department Recommendation.
- **I. B. 6. b.** Other action by the Commission.

# Issue I. B. 7

### I. B. 7. a. Department Recommendation

require rural incumbent carriers to make test lines available so that interexchange carriers have the opportunity and ability to test the effectiveness of their call routing.

### **Options**

I.	B. 7. a.	Department Recommendation	1.
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**I. B. 7. b.** Other action by the Commission.