Minnesota Public Utilities Commission

Staff Briefing Paper

Meeting Date: May 6 & 8, 2015 ..... ** Agenda Item # _____

Companies:	Charter Fiberlink CCO, LLC; Charter Fiberlink CC VIII; Charter Advanced Services (MN), LLC and Charter Advanced Services VIII (MN), LLC
Docket No.	P-6716, 5615/C-14-383 In the Matter of the Complaint by the Minnesota Department of Commerce (DOC) against the Charter Affiliates regarding Transfer of Customers
Issues:	How should the Commission proceed regarding the Complaint?
Staff:	Kevin O'Grady.....651-201-2218

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Relevant Documents

DOC Complaint ..... September 26, 2014
DOC Complaint Supplement (Relief Requested) ..... October 22, 2014
Charter Petition for Dismissal of Complaint ..... October 22, 2014
Order Requiring Answer to Complaint and Setting Time Lines (*PUC Order*) ..... November 18, 2014
Charter Answer to Complaint ..... December 18, 2014
Comments: Attorney General (OAG-RUAD) ..... January 16, 2015
Comments: DOC ..... January 20, 2015
Comments: Comm. of Deaf, DeafBlind and Hard of Hearing Minnesotans ..... January 30, 2015
Comments: Charter ..... January 30, 2015
Comments: LSAP/MCAP ..... February 2, 2015

1.0 Outline of Briefing Paper

This Briefing Paper is organized into seven major sections and a number of subsections. The next section briefly outlines the major elements of the Complaint and responses to it:

The following section briefly summarizes the Commission's response to DOC's initial filing:

Section 4.0 provides a discussion of some useful technical terms and concepts to set the stage for the more substantive discussions to follow:

Subsequent to the review of basic terms in Section 4.0, Section 5.0 focuses on the main elements of two decisions related to the Minnesota Commission's 2003 decision to regulate the services of Vonage Holdings Corporation (Vonage). Section 5.0 also outlines the rationale for, and the approach taken by the FCC to, distinguishing between telecommunication services and information services:

The next section returns to the DOC Complaint to address the arguments made by the parties in some detail:

Following the discussion of the parties' arguments in Section 6.0 Staff offers some analysis in Section 7.0:

2.0 Complaint in Brief

A brief summary of the Complaint and the parties' arguments follows. A more detailed discussion will be presented in a subsequent section.

2.1 DOC Complaint

The Minnesota Department of Commerce (DOC) has named four companies in its Complaint, referring to the four companies as follows:

Charter Affiliates (or Charter) refers to all four companies collectively;

Charter Fiberlink Companies refers to **(1)** Charter Fiberlink CCO, LLC, and **(2)** Charter Fiberlink CC VIII. These companies have obtained authority from the Commission to operate in Minnesota as Competitive Local Exchange Carriers (CLECs); and

Charter Advanced Services Companies refers to **(3)** Charter Advanced Services (MN), LLC, and **(4)** Charter Advanced Services VIII (MN), LLC. Neither company holds a certificate of authority from the Commission.

DOC argues that:

(1) In March of 2013 the Commission-certified Charter Fiberlink Companies unlawfully transferred all of their residential customers to the non-Commission-certified Charter Advanced Services Companies;

(2) There has been no change in federal or state law to support Charter's claim that this Commission has no jurisdiction over the matter;

(3) The Charter Fiberlink Companies have previously acknowledged Commission authority in seeking and obtaining approval to operate as CLECs in Minnesota and in seeking this Commission's authority to arbitrate an interconnection agreement;

(4) This transfer has significantly and negatively affected two Minnesota programs designed to support eligible consumers: Telecommunications Access Minnesota (TAM – for communication impaired consumers) and the Telephone Assistance Program (TAP – for low-income consumers);

(5) Charter's claim regarding jurisdiction, if substantiated, would strip Minnesota consumers of numerous protections provided by Chapter 237; and

(6) The burden rests with Charter to prove that it is not subject to this Commission's authority.

With respect to procedure, DOC recommends the Commission find that Charter has violated Minnesota Rules and Statutes as stated in its Complaint, then initiate a contested case proceeding to determine: (1) whether the violations by Charter were knowing and intentional within the meaning of Minn. Stat. § 237.461; (2) the number of days of each knowing and intentional violation; and (3) recommendations on appropriate penalties or other relief.

2.2 Charter Response

Charter argues:

(1) The residential customers of the Charter Fiberlink Companies were lawfully transferred to the Charter Advanced Services Companies in March of 2013;

(2) The Commission has no jurisdiction under state law over Charter's interconnected VoIP service;

(3) Under the Telecommunications Act of 1996 Charter's interconnected VoIP service is an "information service" and, as such, beyond the reach of the Minnesota Commission;

(4) The Federal Communications Commission (FCC) has asserted its jurisdictional authority as if interconnected VoIP were an information service;

(5) The FCC warned this Commission and all other states that it is highly unlikely that it would fail to preempt state regulation of those services; and

(6) Charter has continued to provide TAP credits to numerous qualified Minnesota customers, although it is not obligated to do so.

Charter requests that the Commission find that federal law preempts DOC's allegations, or that the rules at issue in the DOC's Complaint do not apply to Charter's interconnected VoIP service under state law in the first instance. In the alternative, if the Commission believes that further proceedings are required to resolve those questions, Charter requests that the Commission bifurcate the proceeding and address the federal preemption and extent of state law authority prior to the alleged regulatory noncompliance issues raised in the Complaint.

2.3 Response by Other Parties

Minnesota's **Office of the Attorney General – Residential Utilities and Antitrust Division** (OAG-RUAD) – urges the Commission to address the important consumer protection and anticompetitive issues raised by DOC's Complaint. The Commission's authority in this area has not been preempted by federal law, and the facts of this case do not support a viable basis for preemption.

The **Legal Services Advocacy Project** (LSAP) and the **Minnesota Community Action Partnership** (MCAP) jointly urge the Commission to: (1) find that DOC has successfully met its burden of proof in the Complaint; and (2) adopt the DOC's recommendations.

The **Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans** (CDDHHM) urges the Commission to regulate VoIP providers and require that Charter pay into the TAM fund.

3.0 Initial Disposition of Complaint

The Commission ordered Charter to file an Answer to the DOC (*PUC Order*).[1] There the Commission responded to Charter's claim that the Commission has no jurisdiction over VoIP services:

> At this stage in the development of the record, it appears that both the FCC and the highest jurisdictional court to consider the issue, the United States Court of Appeals for the Eighth Circuit, have concluded that the FCC has not preempted state regulation of fixed VoIP services. While the FCC did state in its preemption order on nomadic VoIP that it would preempt state regulation of "other types of IP-enabled services having basic characteristics similar to" nomadic VoIP, the agency assured the court, in response to a challenge by the New York Public Service Commission, that that statement did not mean that it intended to preempt state regulation of fixed VoIP services.
>
> Accordingly, the court found that the jurisdictional status of fixed VoIP was "an open issue" and that it could not find preemption on the basis of a "mere prediction" that preemption would occur. The Court also noted that the FCC itself had said that technological advances giving interconnected VoIP providers the capability to track the jurisdictional confines of customer calls might result in the reversal of its preemption decision, to say nothing of precluding future preemption.
>
> While the jurisdictional issue in this case has not yet been thoroughly briefed, at this point the record does not demonstrate that the FCC has preempted this Commission's authority over Charter Affiliates, Charter Affiliates' services, the customer transfers at issue, or the behaviors and activities alleged and objected to by the Department. On the current record the Commission finds that it has sufficient jurisdiction to require an answer to this complaint.[2]

Additionally, the Commission found that it had reasonable grounds to investigate the allegations in the complaint:

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[1] Order Requiring Answer to Complaint and Setting Time Lines. *In the Matter of the Complaint by the Minnesota Department of Commerce (DOC) against the Charter Affiliates regarding Transfer of Customers*, MPUC Docket No. 14-383, November 18, 2014. (*PUC Order*)

[2] *PUC Order*, pp. 4-5, footnotes omitted.

> The Department's allegations of slamming and loading, for example, and the claims of customer transfers without notice or consent, raise serious consumer-protection issues. The claim that Charter is evading lawful TAP and TAM assessments – and advertising the resulting customer savings as a competitive advantage – implicates the Commission's responsibility to ensure fair and reasonable competition. And the claims that Charter is providing service without a certificate of authority, without meeting the basic service requirements in the rules applicable to Competitive Local Exchange Carriers (CLECs), and without filing annual reports and submitting regulatory assessments, implicate the Commission's ability to ensure high-quality service now and in the future.[3]

4.0 Terminology and Useful Concepts

The Complaint and Answer turn on a number of points encompassing technology, law, and policy, and it is useful to touch on a number of terms and concepts to provide background for analysis. The following pages will discuss (1) some technical terms referring to the provision of communication services, (2) some statutory definitions, and (3) an historical timeline of selected court decisions affecting this docket.

4.1 Some Technical Terms

Circuit-Switched Network. Traditionally, telephone conversations traversed circuit-switched networks. The key feature of such networks is that once a call is initiated the telephone company holds open a circuit for the duration of that call, denying other conversations the use of that circuit. Circuit-switched networks can accommodate digital and non-digital (analog) signals.

Time Division Multiplexing (TDM). TDM is used to increase the efficiency of circuit-switched networks by allowing numerous conversations to be placed simultaneously over a single facility, say a copper line connecting two switches. TDM slices each of a number of simultaneous conversations into very short time segments, thousandths of a second in duration (much like the way a single frame can be extracted from a movie film). A slice from Conversation 1 is placed in Time Slot 1 (Channel 1). A slice of Conversation 2 is placed in Time Slot 2 (Channel 2) immediately behind (after) the slice in Time Slot 1. And, so on. The slices within each channel

[3] *PUC Order*, p. 5.

are ordered as they are spoken. In this way a single circuit will carry a stream of conversations made up of time-ordered slices of numerous conversations. As the stream of slices reaches its destination, each conversation (with an eye to careful time-keeping) is reconstituted with the knowledge that Channel 1 always carries ordered slices from Conversation 1.[4] In this manner, for example, conversations from 24 voice-grade DS-0 lines can be combined on a single DS-1 line.

Circuit-Switched Network and TDM. Although Circuit-Switched Network and TDM are not identical terms they are often used interchangeably, and for much conversation that practice is not troublesome.

Packet-Switched Network. In contrast to Circuit-Switched Networks, Packet-Switched Networks do not require network operators to establish a circuit that is dedicated to the conversation (or other data transmission) for the duration of the conversation. Rather, small packets of digitized voice data are created and addressed to the desired destination. The packets comprising a data transmission traverse the network independently, possibly (and likely) using different routes. At the destination the packets are combined to form the desired message. The independent routing of small packets allows for more efficient network usage, each packet being routed to take advantage of a dynamically changing network traffic. Packet switching technology was developed in the 1960s and 1970s.[5]

Internet and PSTN. PSTN refers to the Public Switched Telephone Network. The traditional PSTN is a circuit-switched network. Its intelligence, controlled by the telephone company, lies at the center of the network in switches that open circuits connecting call originators to the call recipients. It is optimized for providing quality voice service. Access to the PSTN is gained through telephone companies. The Internet is a packet-switched network (but not all packet-switched networks are part of the Internet). Its intelligence lies in the myriad individual computers connected to the network. Using standardized Internet Protocols, data (packet by packet and including voice data) can be routed between users and providers of content and applications. Access to the Internet is gained through Internet Service Providers (ISPs). A residential customer with a landline telephone beside a desktop computer connected to the Internet via the telephone line will pay both the telephone company and the ISP for monthly service (although payments may be consolidated into one bill).[6]

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[4] The process of reducing numerous conversations to one stream is referred to as "multiplexing" or "muxing." Reconstituting the individual calls from the multiplexed stream is referred to as "de-multiplexing" or "de-muxing."
[5] http://en.wikipedia.org/wiki/Packet_switching, accessed April 22, 2015.
[6] For a brief discussion see "The Internet and the Public Switched Telephone Network," The Internet Society, June 1, 2012: http://internetsociety.org/sites/default/files/The%20Internet%20and%20the%20Public%20Switched%20Telephone%20Network.pdf, accessed April 25, 2015.

Internet Protocol Suite (TCP/IP). Protocols, in general, are sets of instructions, directions or algorithms. It has been said that "protocols are to communications as programming languages are to computations."[7] There are two particularly notable protocols within the Internet Protocol Suite, protocols that lie at the heart of packet-switched networks. TCP is the Transmission Control Protocol. In short, TCP breaks data into packets of fewer than 1,500 characters for transmission and recombines those packets at the destination. The packets contain information regarding the sender, the destination, the packet's relationship to other packets comprising the communication, and information allowing TCP at the destination to determine if the information in the packet has been corrupted during transmission. IP refers to Internet Protocol. It is the protocol that directs the packets to the desired destination.[8]

Voice over Internet Protocol (VoIP). VoIP refers to digitized voice data transmitted over a packet-switched network using Internet Protocols. The "I" in VoIP should not be taken as an indication that a VoIP conversation necessarily traverses the Internet.

Over-the-Top VoIP (OTVoIP). Over-the-Top VoIP refers to VoIP services that use the Internet to provide voice services. Companies such as Skype and Vonage provide such services.

Fixed Interconnected VoIP. Fixed Interconnected VoIP is a general term commonly used to refer to VoIP communications characterized by (1) fixed geographical endpoints (allowing a determination of whether a call is intrastate, interstate, or international in nature) that (2) traverse the public switched telephone network – as opposed to private networks. In older, less-used terminology, Fixed Interconnected VoIP communication could be characterized as "phone-to-phone" VoIP calls.

Nomadic VoIP. Nomadic VoIP is a general term commonly used to refer to VoIP services where the geographic location of the caller and/or the recipient of a call is not fixed. This terminology was not widely used ten to fifteen years ago. What has come to be referred to as Nomadic VoIP has been characterized as including "computer-to-computer" calls, "phone-to-computer" calls, and "computer-to-phone" calls. This terminology reflects the notion that the "phone" is geographically fixed while the "computer" has no fixed location.

Internet Service Provider. Newton's *Telecom Dictionary* defines an Internet service provider as a "vendor who provides access for customers (companies and private individuals) to the Internet and the World Wide Web. The ISP also typically provides a core group of internet

[7] http://en.wikipedia.org/wiki/Communications_protocol#cite_note-AnalogyII-2, accessed April 25, 2015.
[8] For a general discussion see: Preston Gralla. How the Internet Works, 8th ed., QUE Publishing, 2007.

utilities and services like E-mail, News Group Readers and sometimes weather reports and local restaurant reviews."[9]

Recently, in its *Open Internet Order*, the FCC defined Basic Internet Access Service (BIAS) as:

> A mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all Internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up Internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence, or that is used to evade the protections set forth in this Part.[10]

The FCC has determined that such services are to be regulated as common carriage. Note that the *Open Internet Order* is expected to take effect next month, on June 12, 2015.

Broadband. Newton's *Telecom Dictionary* defines broadband as "any circuit significantly faster than a dial-up phone line. That tends to be a cable modem circuit … a DSL circuit, a T-1 or an E-1 circuit … In short, the term broadband can mean anything you want it to be so long as it's "fast.""[11] The FCC has determined that broadband that provides speeds of at least 25 Mbps down and at least 3 Mbps up can be termed "advanced telecommunications capability."[12] Note that "broadband" is not equivalent to "Internet service." Internet service can be provided over broadband facilities.

In its *Open Internet Order* the FCC describes its use of the term "broadband:"

> We note that our use of the term "broadband" in this Order includes but is not limited to services meeting the threshold for "advanced telecommunications capability," as defined in Section 706 of the Telecommunications Act of 1996 … . Section 706 defines that term as "high-speed, switched, broadband telecommunications capability

[9] Harry Newton with Steve Schoen. Newton's Telecom Dictionary, 26 ed., New York: Flatiron Publishing, 2011, p. 628.
[10] Report and Order on Remand, Declaratory Ruling, and Order. *In the Matter of Protecting and Promoting the Open Internet*, GN Docket No. 14-28, FCC 15-24, released March 12, 2015. *(Open Internet Order)*. Definition codified as 47 C.F.R. § 8.2(a).
[11] Newton's Telecom Dictionary, p. 214.
[12] 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment. *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 14-126, FCC 15-10, released February 4, 2015.

> that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology."[13]

Internet. The Internet has been defined in numerous ways. Wikipedia defines it as follows:

> The Internet is a global system of interconnected computer networks that use the standard Internet protocol suite (TCP/IP) to link several billion devices worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web (WWW), the infrastructure to support email, and peer-to-peer networks for file sharing and telephony.[14]

4.2 Some Statutory Definitions

Telecommunications. Congress defines telecommunications as follows:

> The term "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.[15]

Telecommunications Service. Congress defines telecommunications service as follows:

> The term "telecommunications service" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.[16]

Information Service. Congress defines information service as follows:

> The term "information service" means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not

[13] *Open Internet Order*, footnote 27.
[14] http://en.wikipedia.org/wiki/Internet, footnote omitted, emphasis omitted, accessed April 9, 2015.
[15] 47 U.S.C. § 153(50).
[16] 47 U.S.C. § 153(53).

> include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.[17]

Telecommunications Service and Information Service. Telecommunications services and information services are mutually exclusive.

Title I – Telecommunications Act of 1934. Title I of the Act of 1934 sets out the General Provisions of the Act, including its purpose, creation of the FCC, provisions relating to the FCC, the organization and functions of the FCC, and the assessment of regulatory fees. However, the term "Title I" is often used in reference to the FCC's regulatory authority granted by the Act:

> The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions.[18]

Title I authority is often referred to as "ancillary" authority and is "limited to circumstances where: (1) the Commission's [FCC's] general jurisdictional grant under Title I covers the subject of the regulations and (2) the regulations are reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities."[19] **The FCC has exercised its ancillary authority under Title I applying it to "information services."**

Title II – Telecommunications Act of 1934. In contrast to Title I, Title II grants the FCC considerable authority under the general heading of Common Carriage. Title II encompasses regulation related to numerous aspects of telecommunications, such as services and charges, discrimination, refunds, penalties, investigation, appeals, universal service, privacy, pole attachments, caller identification, law enforcement, offensive material, interconnection, arbitration, wholesale rates, barriers to entry, alarm monitoring services and payphone services. **The FCC has concluded that "telecommunications services" are to be regulated under Title II.**

Title I and Title II. Although not entirely accurate, it is not uncommon to hear "Title I" and "Title II," respectively, used synonymously with "unregulated" and "regulated."

Interconnected VoIP Service. This term is defined by the FCC:

> An interconnected Voice over Internet protocol (VoIP) service is a service that:

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[17] 47 U.S.C. § 153(24).
[18] 47 U.S.C. § 154(i).
[19] *Amer. Lib. Assoc. v Fed. Commc'n Comm'n*, 365 U.S.App.D.C. 353, 364 (2005).

(1) Enables real-time, two-way voice communications;
(2) Requires a broadband connection from the user's location;
(3) Requires Internet protocol-compatible customer premises equipment (CPE); and
(4) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.[20]

Non-Interconnected VoIP Service. This term is defined by Congress:

The term "non-interconnected VoIP service" -
(A) means a service that -
(i) enables real-time voice communications that originate from or terminate to the user's location using Internet protocol or any successor protocol; and
(ii) requires Internet protocol compatible customer premises equipment; and
(B) does not include any service that is an interconnected VoIP service.[21]

4.3 Some Key Decisions

This section is intended to provide a thumbnail sketch of several key decisions of the past 12 years, decisions issued by the Minnesota Commission, the FCC, and two courts of appeal. The summaries are brief, they are not definitive, and they do not reflect all that can be gleaned from those decisions or other related decisions. Arguments regarding those decisions and others will receive greater attention in subsequent sections.

On July 15, 2003, DOC filed a complaint with the Commission alleging that Vonage Holdings Corporation failed to (1) obtain authority to provide telephone service in Minnesota, (2) submit a required 911 plan, (3) pay 911 fees, and (4) file a tariff. DOC asked the Commission to order Vonage to comply with Minnesota's statutes and rules and to assess appropriate penalties.[22]

On September 11, 2003, the Commission issued an order finding that Vonage was providing telephone service in Minnesota and that the Commission held jurisdiction over the matter. The Commission ordered Vonage to comply with Minnesota statutes and rules.[23]

On October 16, 2003, in response to an appeal by Vonage, the Minnesota District Court granted Vonage a permanent injunction.[24] The Court analyzed the services provided by Vonage

[20] 47 C.F.R § 9.3.
[21] 47 U.S.C. § 153(36).
[22] *In the Matter of the Complaint of the Minnesota Department of Commerce Against Vonage Holding Corp Regarding Lack of Authority to Operate in Minnesota*. MPUC Docket No. 03-108.
[23] Order Finding Jurisdiction and Requiring Compliance. MPUC Docket No. 03-108. (*Minnesota Vonage Order*)

(computer-to-phone, and phone-to-computer) determining they were information services and, as such, beyond the reach of the Minnesota Commission. The Court noted that Vonage did not provide phone-to-phone services. Vonage's services as analyzed by the Court have come to be referred to, informally, as Nomadic VoIP. DOC, in its Complaint, refers to this decision as the ***2003 Vonage Decision***.

On November 9, 2004, in response to a petition filed by Vonage the FCC preempted the Minnesota Commission's authority to regulate Vonage. The FCC found that the characteristics of Vonage's service (both endpoints are not fixed geographically) precluded any practical determination of whether calls could be identified as interstate or intrastate in nature for compliance with Minnesota regulation without thwarting federal policy objectives.[25] The FCC declined to make a determination as to whether Vonage's services should be classified as information services or telecommunications services. DOC, in its Complaint, refers to this decision as the ***FCC Vonage Order***.

On December 22, 2004, while entertaining an appeal by the Minnesota Commission of the District Court decision, and in response to the *FCC Vonage Order*, the Eighth Circuit Court determined that it was not the appropriate forum for the Minnesota Commission to dispute the merits of the FCC's filing and the Court affirmed the District Court's *2003 Vonage Decision*.[26] DOC, in its Complaint, refers to this Eighth Circuit decision as ***Vonage I***.

On March 21, 2007, the Eighth Circuit Court, in response to a consolidated appeal of the *FCC Vonage Order* (1) concluded that an issue raised by the New York PSC was not ripe for review, (2) otherwise affirmed the FCC order, and (3) denied the petitions for review.[27] The New York PSC had argued that the FCC had not adequately explained the need to preempt fixed VoIP services. The Court found that the FCC had not preempted state regulation of fixed VoIP and that the FCC had indicated that VoIP providers who can track the geographic endpoints of their calls do not qualify for the preemptive effects of the *FCC Vonage Order*. DOC, in its Complaint, refers to this Eighth Circuit decision as ***Vonage II***.

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[24] *Vonage Holdings Corp. v. Minn. Pub. Util. Comm'n*, 290 F.Supp.2d 993 (D. Minn. 2003), (*2003 Vonage Decision*).

[25] Memorandum Opinion and Order. *In the Matter of Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, FCC 04-267, released November 12, 2004. (*FCC Vonage Order*).

[26] *Vonage Holdings Corp. v. Minn. Pub. Util. Comm'n*, 394 F.3d 568 (8th Cir. 2004), (*Vonage I*).

[27] *Minn. Pub. Util. Comm'n v. Fed. Commc'n Comm'n*, 483 F.3d 570 (8th Cir. 2007), (*Vonage II*).

5.0 Jurisdiction and Preemption

The central threshold argument raised by Charter holds that this Commission does not have the authority to regulate Charter's VoIP service – that VoIP services are information services as defined by Congress and, as such, are beyond the reach of this Commission. As a secondary argument Charter has claimed that the FCC would likely preempt an attempt by the Commission to regulate its VoIP services.

Both Charter and DOC make reference to decisions by the Minnesota District Court and the FCC addressing VoIP services sold by Vonage Holdings Corporation. Staff will begin the discussion of jurisdiction and preemption by addressing the scope of the *2003 Vonage Decision* and the *FCC Vonage Order*. Subsequently, Staff will review the development of the rationale behind the distinction between information services and telecommunications services and will address Congress's classification language and how it has been interpreted in a few key instances.

5.1 Vonage Holdings Corporation

The debate as to whether states have jurisdiction over VoIP services gained national attention in 2003 when the Minnesota Commission issued an order requiring Vonage, a VoIP service provider, to comply with Minnesota statutes and rules. The Commission issued that order in response to a complaint filed by DOC on July 15, 2003, alleging that Vonage failed to (1) obtain authority to provide telephone service in Minnesota, (2) submit a required 911 plan, (3) pay 911 fees, and (4) file a tariff. DOC asked the Commission to order Vonage to comply with Minnesota's statutes and rules and to assess appropriate penalties.

In response to the Commission's Order Vonage (1) sought an injunction from the Minnesota District Court and (2) petitioned the FCC to preempt the Minnesota Order. The Court found that Vonage's Digital Voice service is an information service and granted the injunction sought by Vonage. The FCC preempted the *Minnesota Vonage Order*, but declined to classify Digital Voice as either an information service or a telecommunications service. The different approaches taken by the Court and the FCC are reflected in Charter's arguments in this Complaint. First, and most directly, Charter argues that its VoIP service is an information service as defined by the Act and, as such, beyond the reach of state commissions. Second, and less directly, Charter makes reference to the FCC's preemption order and other FCC orders in which the FCC discussed its policies regarding VoIP services. Charter argues that those FCC decisions indicate the FCC would preempt the Minnesota Commission from regulating Charter's services as it did in the Vonage case.

5.1.1 The *2003 Vonage Decision*: Scope

On October 16, 2003, in response to an appeal by Vonage, the District Court of Minnesota granted Vonage a permanent injunction. The Court found that the backbone of Vonage's service was the Internet, that Vonage provided computer-to-phone, and phone-to-computer services, and that Vonage did not provide phone-to-phone IP telephony service. The Court also noted that the FCC had tentatively concluded that phone-to-phone IP telephony lacks the characteristics that would render it an information service. In addressing Vonage's services the Court relied upon the FCC's criteria for determining whether a service qualifies as IP telephony:

> In using the term "phone-to-phone" IP telephony, we tentatively intend to refer to services in which the provider meets the following conditions: (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.[28]

The Court reasoned that:

> In applying the FCC's four phone-to-phone IP telephony conditions to Vonage, it is clear that Vonage does not provide phone-to-phone IP telephony service. Vonage's services do not meet the second and fourth requirements. Use of Vonage's service requires CPE different than what a person connected to the PSTN uses to make a touch-tone call. Further, a net change in form and content occurs when Vonage's customers place a call. If the end user is connected to the PSTN, the information transmitted over the Internet is converted from IP into a format compatible with the PSTN. Vonage's service is not a telecommunications service because "from the user's standpoint" the form of a transmission undergoes a "net change."[29]

And,

> Vonage's activities fit within the definition of information services. Vonage's services are closely tied to the provision of telecommunications services as defined by

[28] *2003 Vonage Decision*, 290 F.Supp.2d 993, 999-1000.
[29] *2003 Vonage Decision*, 290 F.Supp.2d 993, 1000.

> Congress, the courts and the FCC, but this Court finds that Vonage *uses* telecommunications services, rather than provides them.[30]

And,

> Because Vonage never provides phone-to-phone IP telephony (it only provides computer-to-phone or phone-to-computer IP telephony), from a "functional standpoint," Vonage's service is distinguishable from the scenario the FCC considered to be telecommunications services.[31]

It is clear that the Court analyzed only those services specific to Vonage. In today's parlance those services can be referred to as "over-the-top VoIP" or "nomadic VoIP services." Because the Court did not analyze phone-to-phone services (Vonage offered none) the court made no finding as to those services, services referred to in this docket as "fixed interconnected VoIP." Unfortunately, the Court made several unqualified statements regarding VoIP in general (as opposed to Vonage's specific services) that have led to some confusion. Specifically, the Court stated:

> VoIP services necessarily are information services, and state regulation over VoIP services is not permissible because of the recognizable congressional intent to leave the Internet and information services largely unregulated.[32]

And,

> The Court can find no statutory intent to regulate VoIP, and until Congress speaks more clearly on this issue, Minnesota may not regulate an information services provider such as Vonage as if it were a telecommunications provider.[33]

Staff believes these statements may appropriately be considered as dicta.

5.1.2 The *FCC Vonage Order*, 2004

On November 9, 2004, in response to a petition filed by Vonage the FCC preempted the Minnesota Commission's authority to regulate Vonage finding that (1) it is impossible (or practically so) to determine one or both geographic endpoints of a Vonage Digital Voice call,

[30] *2003 Vonage Decision*, 290 F.Supp.2d 993, 999, emphasis in original.
[31] *2003 Vonage Decision*, 290 F.Supp.2d 993, 1000-1001.
[32] *2003 Vonage Decision*, 290 F.Supp.2d 993, 1002.
[33] *2003 Vonage Decision*, 290 F.Supp.2d 993, 1003.

and (2) state regulation would thwart federal policy objectives.[34] Of significance, the FCC refrained from classifying VoIP service as either information or telecommunications service.[35] The FCC stated:

> There is, quite simply, no practical way to sever DigitalVoice into interstate and intrastate communications that enables the *Minnesota Vonage Order* to apply only to intrastate calling functionalities without also reaching the interstate aspects of DigitalVoice, nor is there any way for Vonage to choose to avoid violating that order if it continues to offer DigitalVoice anywhere in the world. Thus, to whatever extent, if any, DigitalVoice includes an intrastate component, because of the impossibility of separating out such a component, we must preempt the *Minnesota Vonage Order* because it outright conflicts with federal rules and policies governing interstate DigitalVoice communications.[36]

Addressing inseverability the FCC predicted how it might act if faced with similar questions of jurisdiction:

> Indeed, the practical inseverability of other types of IP-enabled services having basic characteristics similar to DigitalVoice would likewise preclude state regulation to the same extent as described herein. Specifically, these basic characteristics include: a requirement for a broadband connection from the user's location; a need for IP-compatible CPE; and a service offering that includes a suite of integrated capabilities and features, able to be invoked sequentially or simultaneously, that allows customers to manage personal communications dynamically, including enabling them to originate and receive voice communications and access other features and capabilities, even video. In particular, the provision of tightly integrated communications capabilities greatly complicates the isolation of intrastate communication and counsels against patchwork regulation. Accordingly, to the extent other entities, such as cable companies, provide VoIP services, we would preempt state regulation to an extent comparable to what we have done in this Order.[37]

Significantly, the FCC's preemption of Minnesota's jurisdiction over Vonage's Digital Voice service hinges upon two findings: (1) that it is impossible to sever state and federal jurisdiction,

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[34] Memorandum Opinion and Order. *In the Matter of Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, FCC 04-267, released November 12, 2004. (*FCC Vonage Order*).
[35] See footnote 46, *FCC Vonage Order*.
[36] *FCC Vonage Order*, ¶ 31, footnote omitted.
[37] *FCC Vonage Order*, ¶ 32; footnotes omitted.

and (2) state regulation would thwart federal policies. Staff believes that the impossibility justification may not be applicable to fixed interconnected VoIP service provided by Charter.

On March 21, 2007, the Eighth Circuit Court, in response to a consolidated appeal of the *FCC Vonage Order* (1) concluded that an issue raised by the New York PSC was not ripe for review, (2) otherwise affirmed the FCC order, and (3) denied the petitions for review. The New York PSC had argued that the FCC had not adequately explained the need to preempt fixed VoIP services. The Court found that the FCC had not preempted state regulation of fixed VoIP and that the FCC had indicated that VoIP providers who can track the geographic endpoints of their calls do not qualify for the preemptive effects of the *FCC Vonage Order*. Specifically, the FCC stated:

> [W]e note that an interconnected VoIP provider with the capability to track the jurisdictional confines of customer calls would no longer qualify for the preemptive effects of our *Vonage Order* and would be subject to state regulation. This is because the central rationale justifying preemption set forth in the *Vonage Order* would no longer be applicable to such an interconnected VoIP provider.[38]

In response to the Eighth Circuit's finding Charter responded:

> [T]hat FCC statement is purely dicta and has no decisional significance. But in any case, Charter does not contend that it qualifies for preemption solely on the basis of the *Vonage* order. Rather, Charter argues that state regulation is preempted because Interconnected VoIP is an information service.[39]

5.2 Classification of Services

This section offers a discussion of the rationale for classification of services and how Congress and the FCC, in several instances, have established the demarcation line. This discussion is not exhaustive of all arguments that can be brought to bear on the issue, but it is intended to focus on criteria that the Commission may find useful and appropriate.

[38] Report and Order and Notice of Proposed Rulemaking. *In the Matter of Universal Service Contribution Methodology*, WC Docket No. 06-122, FCC 06-94, released June 27, 2006, ¶ 56.
[39] Charter Answer, footnote 11.

5.2.1 Communications and Data Processing; 60s, 70s & 80s

Although newly defined in 1996, the terms "telecommunications service" and "information service," respectively, paralleled, the older terms "basic service" and "enhanced service." [40] The distinction between services derived from the notion that "communications" and "data processing" should be regulated differently. As computers became commercially available in the 1960s, regulated telephone service providers began to employ large mainframe computers. Significantly, excess computing capacity could be used to perform data processing tasks unrelated to the provision of telephone service. Thus, possession of those computers, paid for by ratepayers, gave telephone companies a competitive advantage over other entities seeking to enter the data processing market. To encourage innovation in the computer and data processing markets the FCC sought to distinguish "basic service" from "enhanced service," regulating the former under common carriage rules and allowing the latter to develop with less regulation. Arguably, this FCC policy, in addition to publicly-funded research, was fundamental to the development and growth of the Internet.[41]

The FCC's approach to treating communications and data processing differently was developed in a series of orders adopted in the 1970s and 1980s and referred to as the *Computer Inquiries*.

> The origins of the government's deregulatory approach to "information services" go back to the *Computer Inquiries*. In *Computer II*, the FCC reaffirmed its policy of encouraging the growth of long distance data processing applications – the precursors of today's Internet – by shielding information service providers from common carriage regulation under Title II. In a similarly deregulatory vein, the Commission recognized that telephone companies – and specifically AT&T's still-integrated Bell System, with its prodigious resources – could play a valuable role in developing such applications.[42]

The FCC defined basic services in its *Computer II* decision:

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[40] In 1980 the FCC stated: "In defining the difference between basic and enhanced services, we have concluded that basic transmission services are traditional common carrier communications services and that enhanced services are not. Thus, while those who provide basic services would continue to be regulated, enhanced service vendors would not be subject to rate and service provisions of Title II of the Communications Act. Final Decision. *In the Matter of the Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Docket No. 20828, FCC 80-189, released May 2, 1980 (*Computer II*), ¶ 119.

[41] See Jonathan E. Nuechterlein and Philip J. Weiser. Digital Crossroads. Cambridge: MIT Press, 2005, pp. 151-4. See also Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, Federal Communications Law Journal, Volume 55, Issue 2, Article 2, 2003: http://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=1324&context=fclj.

[42] Digital Crossroads, pp. 152-3.

> In offering a basic transmission service, therefore, a carrier essentially offers a **pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information.** It is clear that in defining a basic service in this manner, we are in no way restricting a carrier's ability to take advantage of advancements in technology in designing its telecommunication network. Consistent with our Tentative Decision, a carrier maintains its flexibility to structure its communications network such that the network efficiently functions as the basic building block upon which it (in the form of a separate subsidiary in some cases) as well as other service vendors can add computer facilities to perform myriad combinations and permutations of information processing, data processing, process control, and other enhanced services.[43]

The FCC defined enhanced services:

> For the purpose of this subpart, the term *enhanced service* shall refer to services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information. Enhanced services are not regulated under title II of the Act. [44]

The FCC further elaborated on enhanced services stating:

> [T]he regulatory demarcation between basic and enhanced services becomes relatively clear-cut. An enhanced service is any offering over the telecommunications network which is more than a basic transmission service.[45]

5.2.2 The FCC's *Frame Relay Order*, 1995

The FCC's *Frame Relay Order*[46] illustrates the FCC's application of its *Computer Inquiries* investigation in drawing a distinction between basic and enhanced services for the purpose of protecting basic communications while allowing data computing industry to develop in a

[43] *Computer II*, ¶ 96, emphasis added.
[44] 47 C.F.R. § 64.702(a), emphasis in original.
[45] *Computer II*, ¶ 97.
[46] Memorandum Opinion and Order. *In the Matter of Independent Data Communications Manufacturers Association, Inc. Petition for Declaratory Ruling That AT&T's InterSpan Frame Relay Service Is a Basic Service*, FCC DA 94-2190, released October 18, 1995. (10 FCC Rcd 13717 (1995))

competitive market. In 1994, the Independent Data Communications Manufacturers Association (IDCMA) petitioned the FCC for a declaratory ruling that AT&T's InterSpan Frame Relay Service should be subject to Title II common carriage regulation. Frame relay service, the FCC explains, is a "high-speed packet-switching technology used to communicate digital data between, among other things, geographically dispersed local area networks (LANs)."[47] Frame relay protocols were beginning to replace older X.25 protocols (defined in 1976) necessitating the conversion of data from one protocol to another.[48]

The FCC concluded that frame relay service is a basic service subject to Title II regulation. The FCC reasoned as follows:

> In the Computer III decisions … the Commission reaffirmed earlier decisions concluding that three types of protocol processing are not enhanced services within the meaning of the Commission's rules. First, the Commission reaffirmed that the enhanced services definition applies only to end-to-end communications between or among subscribers. Thus, communications between a subscriber and the network itself (e.g. for call setup, call routing, and call cessation) are not considered enhanced services.
>
> Second, the Commission determined that protocol conversions necessitated by the introduction of new technology are also outside the ambit of the enhanced services definition. This circumstance arises when innovative basic network technology is introduced into the network in a piecemeal fashion, and conversion equipment is used in the network to maintain compatibility with CPE.
>
> Third, the Commission reaffirmed that internetworking protocol conversions – those conversions taking place solely within the network that result in no net conversion between users – should be treated as basic services. This final exemption applies in situations where a carrier uses the protocol conversions merely to facilitate provision of an overall basic service. Thus, in a case where a carrier converts from X.25 to X.75 formatted data at the originating end within the network, and then converts the data back from X.75 to X.25 at the terminating end, the protocol conversion is treated as facilitating a basic X.25 service, rather than enhanced protocol conversion. Accordingly, a carrier service providing one of these three exempted forms of protocol conversion is engaged in the provision of a basic service.[49]

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[47] *Frame Relay Order*, ¶ 6.
[48] *Frame Relay Order*, ¶ 3 - ¶ 7; https://en.wikipedia.org/wiki/X.25, accessed April 22, 2015.
[49] *Frame Relay Order*, ¶ 14 - ¶ 16, footnotes omitted.

5.2.3 The Telecommunications Act of 1996: New Definitions

With the passage of the Telecommunications Act of 1996 Congress replaced the basic/enhanced distinction with the new telecommunications/information classification.

Congress defined **telecommunications** as follows:

> The term "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.[50]

Congress defined **telecommunications service** as follows:

> The term "telecommunications service" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.[51]

And, Congress defined **information service** as follows:

> The term "information service" means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.[52]

Several months after the signing of the Act into law the FCC addressed the change in terminology:

> We conclude that all of the services that the Commission has previously considered to be "enhanced services" are "information services." … [T]he differently-worded definitions of "information services" and "enhanced services" can and should be interpreted to extend to the same functions. We believe that interpreting "information services" to include all "enhanced services" provides a measure of regulatory stability

[50] 47 U.S.C. § 153(50).
[51] 47 U.S.C. § 153(53).
[52] 47 U.S.C. § 153(24)

> for telecommunications carriers and ISPs alike, by preserving the definitional scheme under which the Commission exempted certain services from Title II regulation.[53]

Approximately one year after the passage of the Act the FCC elaborated on the distinction between telecommunications and information services in its *Non-Accounting Safeguards Reconsideration Order*. There the FCC modified its previous order with respect to protocol processing services:

> In paragraph 106, we referred to all three types of excepted protocol processing services, collectively, as "no net" protocol processing services. Upon further reflection, we conclude that our statement that all three exempt services do not involve net protocol conversions is not strictly correct, since the second category of excepted protocol processing services includes services that may involve net protocol conversions to end users. Therefore, we hereby revise the text of paragraph 106 (footnotes omitted) to read:
>
> > 106. We note that, under *Computer II* and *Computer III*, we have treated three categories of protocol processing services as basic services, rather than enhanced services. These categories include protocol processing: 1) involving communications between an end user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users; 2) in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and 3) involving internetworking (conversions taking place solely within the carrier's network to facilitate provision of a basic network service, that result in no net conversion to the end user). … Because the listed protocol processing services are information service capabilities used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service," they are excepted from the statutory definition of information service. These excepted protocol conversion services constitute telecommunications services, rather than information services, under the 1996 Act.[54]

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[53] First Report and Order and Further Notice of Proposed Rulemaking. *In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 271 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, released December 24, 1996, ¶ 102. Note that the FCC goes on to say that "information services" include a limited set of services that are not "enhanced services," ¶ 103.

[54] Order on Reconsideration. *In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 271 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, FCC 97-52, released February 19, 1997, ¶ 2, footnote omitted.

5.2.4 The *Report to Congress*, 1998

In the year following the passage of the Telecom Act of 1996 Congress directed the FCC to submit a report regarding provisions of the Act addressing the universal service system (*Report to Congress*).[55] The Act compelled the opening of local markets to competition, thus threatening established subsidies (implicit and explicit). Those subsidies allowed local service providers to offer service at relatively low rates as a means of encouraging broad subscribership nation-wide. Expressing a need to sufficiently fund universal service, while exposing the emerging market for internet-based communication to minimal regulation, Congress sought an understanding of how the FCC would interpret terms such as "telecommunications service" and "information service," terms that had been newly defined by the Act a year earlier. Underlying Congress' pursuit of clarity was the notion that telecommunications services would support funding for universal service while information services would better thrive if they did not bear that support burden. The FCC found that support for universal service would enhance the reach of telecommunications networks which, in turn, would support the information services provided by way of those networks.[56]

The FCC clarified the relationship between the old and the new classification terms:

> Reading the statute closely, with attention to the legislative history, we conclude that Congress intended these new terms to build upon frameworks established prior to the passage of the 1996 Act. Specifically, we find that Congress intended the categories of "telecommunications service" and "information service" to parallel the definitions of "basic service" and "enhanced service" developed in our Computer II proceeding . . . .[57]

The FCC elaborated on the mutual exclusivity of telecommunications services and information services:

> [W]e affirm our prior findings that the categories of "telecommunications service" and "information service" in the 1996 Act are mutually exclusive. Under this interpretation, an entity offering a simple, transparent transmission path, without the capability of providing enhanced functionality, offers "telecommunications." By contrast, when an entity offers transmission incorporating the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or

[55] Report to Congress. *In the Matter of Federal-State Joint Board on Universal Service*. FCC 98-67, CC Docket No. 96-45, April 10, 1998. Occasionally referred to as the *Stevens Report*.
[56] *Report to Congress*, ¶ 3.
[57] *Report to Congress*, ¶ 21.

> making available information," it does not offer telecommunications. Rather, it offers an "information service" even though it uses telecommunications to do so.[58]

Significantly, the FCC emphasized that the functional nature of an end-user offering is central to distinguishing information services from telecommunications services:

> **This functional approach is consistent with Congress's direction that the classification of a provider should not depend on the type of facilities used. A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure. Its classification depends rather on the nature of the service being offered to customers.**[59]

The *Report to Congress* explicitly addressed IP telephony (VoIP). Here it is useful to quote the FCC at some length:

> We recognize that new Internet-based services are emerging, and that our application of statutory terms must take into account such technological developments. We therefore examine in this section Internet-based services, known as IP telephony, that most closely resemble traditional basic transmission offerings. The Commission to date has not formally considered the legal status of IP telephony. The record currently before us suggests that certain "phone-to-phone IP Telephony" services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."[60] [61]

However, the *Report to Congress* does elaborate upon the features of IP telephony:

> "IP telephony" services enable real-time voice transmission using Internet protocols. The services can be provided in two basic ways: through software and hardware at customer premises, or through "gateways" that enable applications originating and/or terminating on the PSTN. Gateways are computers that transform the circuit-switched voice signal into IP packets, and vice versa, and perform associated

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[58] *Report to Congress*, ¶ 39, footnote omitted.
[59] *Report to Congress*, ¶ 59, footnote omitted, emphasis added.
[60] *Report to Congress*, ¶ 83, footnotes omitted.
[61] In 2004 the FCC opened its IP-Enabled Services Proceeding: Notice of Proposed Rulemaking. *In the Matter of IP-Enabled Services*, FCC 04-28, WC Docket No. 04-36, Released March 10, 2004. There it sought comment regarding the classification of various IP-enabled services. The FCC has not, to date, made an explicit ruling regarding classification of IP telephony.

> signalling, control, and address translation functions. The voice communications can be transmitted along with other data on the "public" Internet, or can be routed through intranets or other private data networks for improved performance. Several companies now offer commercial IP telephony products. For example, VocalTec sells software that end users can install on their personal computers to make calls to other users with similar equipment, and also makes software used in gateways. Companies such as IDT and Qwest employ gateways to offer users the ability to call from their computer to ordinary telephones connected to the public switched network, or from one telephone to another. To use the latter category of services, a user first picks up an ordinary telephone handset connected to the public switched network, then dials the phone number of a local gateway. Upon receiving a second dialtone, the user dials the phone number of the party he or she wishes to call. The call is routed from the gateway over an IP network, then terminated through another gateway to the ordinary telephone at the receiving end.[62]

In addressing the classification of IP telephony, the FCC distinguished between "computer-to-computer" IP telephony and "phone-to-phone" IP telephony. This distinction parallels the terminology used in the DOC Complaint, the former term being analogous to "nomadic VoIP" and the latter term being analogous to "fixed interconnected VoIP." With respect to "computer-to-computer" IP telephony, the FCC reasoned:

> In the case of "computer-to-computer" IP telephony, individuals use software and hardware at their premises to place calls between two computers connected to the Internet. The IP telephony software is an application that the subscriber runs, using Internet access provided by its Internet service provider. The Internet service providers over whose networks the information passes may not even be aware that particular customers are using IP telephony software, because IP packets carrying voice communications are indistinguishable from other types of packets. As a general matter, Title II requirements apply only to the "provi[sion]" or "offering" of telecommunications. Without regard to whether "telecommunications" is taking place in the transmission of computer-to-computer IP telephony, the Internet service provider does not appear to be "provid[ing]" telecommunications to its subscribers.[63]

In contrast, the FCC discusses "phone-to-phone" IP telephony as follows:

> "Phone-to-phone" IP telephony services appear to present a different case. In using the term "phone-to-phone" IP telephony, we tentatively intend to refer to services in

[62] *Report to Congress*, ¶ 84, footnotes omitted.
[63] *Report to Congress*, ¶ 87, footnotes omitted.

> which the provider meets the following conditions: (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.[64]
>
> Specifically, when an IP telephony service provider deploys a gateway within the network to enable phone-to-phone service, it creates a virtual transmission path between points on the public switched telephone network over a packet-switched IP network. These providers typically purchase dial-up or dedicated circuits from carriers and use those circuits to originate or terminate Internet-based calls. From a functional standpoint, users of these services obtain only voice transmission, rather than information services such as access to stored files. [footnote 188: Routing and protocol conversion within the network does not change this conclusion, because from the user's standpoint there is no net change in form or content.] The provider does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information. Thus, the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."[65]

5.2.5 The *2003 Vonage Decision*: Analysis

The *2003 Vonage Decision* was discussed above in Section 5.1.1. In brief, the Court determined that:

> [T]he VoIP service provided by Vonage constitutes an information service because it offers the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." … . The process of transmitting customer calls over the Internet requires Vonage to "act on" the format and protocol of the information. … Vonage's services are closely tied to the provision of telecommunications services as defined by Congress, the courts

[64] *Report to Congress*, ¶ 88.
[65] *Report to Congress*, ¶ 89.

> and the FCC, but this Court finds that Vonage *uses* telecommunications services, rather than provides them.[66]

Further,

> Because Vonage never provides phone-to-phone IP telephony (it only provides computer-to-phone or phone-to-computer IP telephony), from a "functional standpoint," Vonage's service is distinguishable from the scenario the FCC considered to be telecommunications services.[67]

5.2.6 *The Pulver Decision*, 2004

In 2004, the FCC addressed the classification of services offered by pulver.com (Pulver).[68] In the *Pulver Decision* the FCC declared Pulver's Free World Dialup (FWD) service to be an information service. Finding Pulver's FWD service to be an internet application, the FCC described Pulver's FWD as follows:

> As described by Pulver, FWD offers users of broadband Internet access the opportunity to join other such users worldwide in talking with one another directly over the Internet as well as communicating directly via video or text. FWD facilitates this interactive communication capability by offering such users the ability to become FWD members through an initial registration process followed by the new member complying with other requirements specified by FWD that are necessary to enable communications to be made. Specifically, members must have an existing broadband Internet access service as Pulver does not offer any transmission service or transmission capability. In addition, members must acquire and appropriately configure Session Initiation Protocol (SIP) phones or download software that enables their personal computers to function as "soft phones." Once these criteria are met, anyone anywhere in the world can obtain a Pulver-assigned five- or six-digit FWD number (not a North American Numbering Plan (NANP) number) to facilitate using the member's broadband service to make free voice over Internet Protocol (VoIP) or other types of peer-to-peer communications to other FWD members. According to Pulver, it neither knows nor needs to know where its members are geographically located in order for its members to use FWD. In addition, Pulver indicates it can not

[66] *2003 Vonage Decision*, 290 F.Supp.2d 993, 999.
[67] *2003 Vonage Decision*, 290 F.Supp.2d 993, 1000-1001.
[68] Memorandum and Order. *In the Matter of Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, FCC 04-27, WC Docket No. 03-45, Released February 19, 2004.

> determine its members' geographic location. Once an FWD member obtains its FWD number, that number is completely portable to any broadband-accessible location to which that member may go. Moreover, FWD members may not even know where other members are physically located during any given communication session with another member as FWD enables members to register up to 25 different locations for potential receipt of communications from other members, any one of which locations may end up being the Internet address from where the communication is actually answered.[69]

The FCC concluded that Pulver's FWD was an information service for a number of reasons:

> We conclude that FWD is an information service because FWD offers "a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." Through its server accessible over the Internet, FWD makes available to its members information that enables them to determine whether other members are available to talk; information on how to contact other members; and an optional voicemail capability that enables members to leave messages for unavailable members who have chosen this feature. Specifically, FWD offers its members a number of "computing capabilities." First, FWD enables its members to "acquire" information about other members' online presence at any particular time (similar to an instant messaging service). Second, FWD "stores" both member information (e.g., assigned numbers) and, if a member opts-in, voicemail messages on its server, that are accessible to other members. Third, Pulver provides members with certain information (i.e., identifying numbers and passwords) that they "utilize" first to register for the FWD service and then to contact other members who are online. Fourth, the FWD service "processes" the "SIP invite" (i.e., the information an initiating member sends to the FWD server indicating it wishes to communicate with a recipient member) by determining both the recipient member's Internet addresses and online availability. Once FWD determines that the recipient member is available online, it "makes available" the SIP invite to that recipient member. Making available the Internet addresses of the intended recipient member enables the initiating member to "retrieve" this information. Finally, if a member's equipment generates a private Internet address that interferes with the ability of the user's CPE to determine public Internet addresses, FWD will "transform" or repair the addressing information and will relay the "signaling and media stream via a protocol conversion solution to facilitate delivery."[70]

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[69] *Pulver Decision*, ¶ 5, footnotes omitted.
[70] *Pulver Decision*, ¶ 11, footnotes omitted.

5.2.7 The *IP-in-the-Middle Decision*, 2004

Less than two months after the FCC issued its *Pulver Decision* in 2004 it addressed again the distinction between information service and telecommunications service. AT&T sought a declaratory ruling that its interexchange (long distance) service was not a telecommunications service subject to Title II because AT&T employed "IP-in-the-middle." That is, AT&T received circuit switched traffic from an originating local service provider, converted that traffic to IP format for transmission over its backbone network, then re-converted that traffic for delivery to the terminating local service provider. In its *IP-in-the-Middle Decision* the FCC rejected AT&T's argument stating:[71]

> We clarify that AT&T's specific service is a telecommunications service as defined by the Act. AT&T offers "telecommunications" because it provides "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." And its offering constitutes a "telecommunications service" because it offers "telecommunications for a fee directly to the public." Users of AT&T's specific service obtain only voice transmission with no net protocol conversion, rather than information services such as access to stored files. More specifically, AT&T does not offer these customers a "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information;" therefore, its service is not an information service … . End-user customers do not order a different service, pay different rates, or place and receive calls any differently than they do through AT&T's traditional circuit-switched long distance service; the decision to use its Internet backbone to route certain calls is made internally by AT&T. To the extent that protocol conversions associated with AT&T's specific service take place within its network, they appear to be "internetworking" conversions, which the Commission has found to be telecommunications services. We clarify, therefore, that AT&T's specific service constitutes a telecommunications service.[72]

5.2.8 The *Open Internet Order*, 2015

On March 12, 2015, the FCC released its *Open Internet Order* classifying Basic Internet Access Service (BIAS) as a telecommunications service subject to common carriage regulation under

[71] Order. *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, FCC 04-97, WC Docket No. 02-361, Released April 21, 2004, (*IP-in-the-Middle Decision*).
[72] *IP-in-the-Middle Decision*, ¶ 12, footnotes omitted.

Title II – although the FCC forbore from subjecting BIAS to numerous traditional regulatory restrictions. The FCC's new rules will be effective in approximately 35 days, June 12, 2015.

The *Open Internet Order* directly addresses internet access service and the FCC appears to indicate explicitly that its order does not address the VoIP issues in this docket:

> IP-services that do not travel over broadband Internet access service, like the facilities-based VoIP services used by many cable customers, are not within the scope of the open Internet rules, which protect access or use of broadband Internet access service.[73]

However, the *Open Internet Order* may provide valuable insight into how the FCC applies Congress' service classification criteria to a particular service.[74] Here it is worth quoting the FCC at some length. The FCC applies a three-stage analysis:

> Three definitional terms are critical to a determination of the appropriate classification of broadband Internet access service. **First**, the Act defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." **Second**, the Act defines "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." **Finally**, "information service" is defined in the Act as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications … , but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." **We observe that the critical distinction between a telecommunications and an information service turns on what the provider is "offering."** If the offering meets the statutory definition of telecommunications service, then the service is also necessarily a common carrier service.[75]

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[73] *Open Internet Order*, ¶ 35.

[74] Additionally, the FCC has modified its definition of Public Switched Network to include public IP addresses: "*Public Switched Network*. The network that includes any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that uses the North American Numbering Plan, or public IP addresses, in connection with the provision of switched services." See p. 290 of the *Open Internet Order*. This definition will be codified as 47 C.F.R. § 20.3.

[75] *Open Internet Order*, ¶ 355, footnotes omitted, emphasis added.

Consider the **first** step regarding "points specified by the user," "information of the user's choosing," and "without change in form or content." The FCC reasons as follows:

> We find that the term "points specified by the user" is ambiguous, and conclude that uncertainty concerning the geographic location of an endpoint of communication is irrelevant for the purpose of determining whether a broadband Internet access service is providing "telecommunications." Although Internet users often do not know the geographic location of edge providers or other users, there is no question that users specify the end points of their Internet communications. Consumers would be quite upset if their Internet communications did not make it to their intended recipients or the website addresses they entered into their browser would take them to unexpected web pages. Likewise, numerous forms of telephone service qualify as telecommunications even though the consumer typically does not know the geographic location of the called party. These include, for example, cell phone service, toll free 800 service, and call bridging service. In all of these cases, the user specifies the desired endpoint of the communication by entering the telephone number or, in the case of broadband Internet access service, the name or address of the desired website or application. More generally, we have never understood the definition of "telecommunications" to require that users specify – or even know – information about the routing or handling of their transmissions along the path to the end point, nor do we do so now. Further, that there is not a one-to-one correspondence between IP addresses and domain names, and that DNS often routes the same domain name to different locations based on its inference of which location is most likely to be the one the end user wants, does not alter this analysis. It is not uncommon in the toll-free arena for a single number to route to multiple locations, and such a circumstance does not transform that service to something other than telecommunications.
>
> Broadband Internet access service may use a variety of protocols to deliver content from one point to another. However, the packet payload (i.e., the content requested or sent by the user) is not altered by the variety of headers that a provider may use to route a given packet. The information that a broadband provider places into a packet header as part of the broadband Internet access service is for the management of the broadband Internet access service and it is removed before the packet is handed over to the application at the destination. Broadband providers thus move packets from sender to recipient without any change in format or content, and "merely transferring a packet to its intended recipient does not by itself involve generating, acquiring, transforming, processing, retrieving, utilizing, or making available information." Rather, "it is the nature of [packet delivery] that the 'form and content of the

> information' is precisely the same when an IP packet is sent by the sender as when that same packet is received by the recipient."[76]

Consider the **second** step: "offering telecommunications for a fee directly to the public." The FCC reasons:

> We find that broadband Internet access service providers offer broadband Internet access service "directly to the public." As discussed above, the record indicates that broadband providers routinely market broadband Internet access services widely and to the general public. Because a provider is a common carrier "by virtue of its functions," we find that such offerings are made directly to the public within the Act's definition of telecommunications service.[77]

Consider, finally, the **third** step: is the service an information service? The FCC reasons:

> We further find that broadband Internet access service is not an information service. The Act defines "information service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications . . . **but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service**."[78] To the extent that broadband Internet access service is offered along with some capabilities that would otherwise fall within the information service definition, they do not turn broadband Internet access service into a functionally integrated information service. To the contrary, we find these capabilities either fall within the telecommunications systems management exception or are separate offerings that are not inextricably integrated with broadband Internet access service, or both.[79]

For the subsequent 22 paragraphs the FCC makes numerous findings to the effect that BIAS is not an information service: [80] (1) the Domain Name System (DNS) falls within the telecommunications management exception to the definition of information services, (2) even if it did not fall within the exception it is not so inextricably intertwined with BIAS so as to convert the entire service offering into an information service offering, (3) caching falls within the exception, (4) security mechanisms fall within the exception, (5) the conversion of IPv4 to IPv6

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[76] *Open Internet Order*, ¶¶ 361-2, footnotes omitted.
[77] *Open Internet Order*, ¶¶ 363, footnotes omitted.
[78] The phrase in bold-faced type is referred to as the "telecommunications management exception to the definition of information services."
[79] *Open Internet Order*, ¶¶ 365, footnotes omitted, emphasis added.
[80] *Open Internet Order*, ¶¶ 366-87.

falls within the exception, and (6) BIAS is not inextricably linked with add-on information services.

6.0 DOC Complaint and Charter Response

This section directs the discussion back to the record comprising filings submitted by the parties to the docket. The first section restates the formal allegations made by DOC. Subsequent sections address the parties' arguments regarding (1) service classification, (2) state authority, (3) public interest, (4) TAP and TAM provision and support, and (5) customer notice of transfer.

6.1 Formal Complaint

DOC claimed that the transfer of customers - and the service arrangements resulting from them - violated Minnesota law in at least the following ways:[81]

A. Slamming and Loading - DOC claimed the transfers violated Minnesota's anti-slamming and anti-loading statutes, Minn. Stat. §§ 237.661 and 237.663.

B. Certification Requirement - DOC claimed that the Charter Advanced Services companies were serving the transferred customers without first obtaining a certificate of authority, violating Minn. Stat. § 237.16, subd. 1; Minn. Stat. § 237.74, subd. 12; Minn. R. 7812.0200, subp. 1; and Minn. R. 7812.0300.

C. Acquisition of Property, Assets, Obligations of Another Company - DOC claimed that the customer transfers violated the property-acquisition statute, Minn. Stat. § 237.23.

D. Basic Service Requirements - DOC claimed that the customer transfers violated the basic service requirements of Minn. R. 7812.0600, which - among other things - prohibits service providers from withdrawing from service territories without notice to customers and regulators and without ensuring continuity of service.

E. Telecommunications Access Minnesota (TAM) - DOC claimed that Charter was violating Minn. Stat. § 237.52, subd. 3, by ending its collection and remittance of the statutory per-line surcharges that fund the TAM program, which provides specialized services and equipment to communication-impaired Minnesotans.

[81] *PUC Order*, pp. 1-2, footnotes omitted.

F. Telephone Assistance Program (TAP) - DOC claimed that Charter was violating Minn. Stat. § 237.70 in two ways: (a) by ending its collection and remittance of the statutory per-line surcharges that fund the Telephone Assistance Program, which provides bill credits for low-income customers; and (b) by ceasing to offer Telephone Assistance Program benefits to newly qualifying customers.

G. Unfair Competition - DOC claimed that the Charter Advanced Services companies sought and obtained an unfair competitive advantage over other local service providers by advertising the absence of the TAM and TAP surcharges that they are illegally failing to collect and remit.

H. Violation of Earlier Commission Order - DOC claimed that Charter Affiliates' refusal to extend Telephone Assistance Plan benefits to newly qualifying customers violated an earlier Commission order adopting a settlement between the Department and Charter Fiberlink, LLC and Charter Telephone of Minnesota, LLC.

I. Inconsistent Representations in Earlier Case - DOC claimed that Charter Affiliates' claims of exemption from Commission regulation conflicted with claims Charter Affiliates had made in an earlier case to secure interconnection rights dependent on being subject to state regulation.

J. Annual Reports and Regulatory Assessments - DOC claimed that Charter Affiliates violated Minn. Stat. § 237.295, subd. 2 by failing to file annual reports and pay the regulatory assessments that fund Minnesota regulatory activities.

DOC sought the following relief:[82]

1. An order requiring Charter to comply with Minnesota Statutes Chapter 237 by providing intrastate services in accordance with its tariffs, price lists, contracts, and Commission rules and orders, until Charter demonstrates that its services are not subject to the Commission's jurisdiction.

2. An order determining that Charter has knowingly and intentionally violated the statutes and rules cited in DOC's complaint, as well as Minn. Stat. §§ 237.09, 237.74, and 237.121(a)(3), 237.121(b), and Minn. R. 7812.2210, subp. 9, and is therefore subject to enforcement proceedings under Minn. Stat. §§ 237.74 and 237.461, subd. 2, with penalties to be determined by a court.

[82] *PUC Order*, p. 3.

3. An order determining that Charter has intentionally violated state law and Commission rules pertaining to the provision of telephone or telecommunications services and is therefore subject, at the Commission's discretion, to revocation or suspension of its certificate of authority under Minn. Stat. § 237.16.

4. Such other relief as the Commission deems just and reasonable.

6.2 Classification of Services

Although the FCC has not, to date, explicitly classified fixed interconnected VoIP services, DOC makes reference to an argument by the National Association of Regulatory Commissioners (NARUC) maintaining that the FCC has **indirectly** determined that fixed interconnected VoIP services are telecommunication services.[83] The more direct classification arguments raised by the parties will be summarized in the subsequent section.

6.2.1 NARUC Classification Argument

NARUC reasoned as follows:

(1) Pursuant to § 214(e) of the Act only a "common carrier designated as an eligible telecommunications carrier [ETC]… shall be eligible to receive universal service support in accordance with section 254 … ;"

(2) Pursuant to § 153(51) of the Act a "telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services … ."

(3) The FCC in its *CAF Order* (¶ 80) states that as "a condition of receiving support, we require ETCs to offer voice telephony as a standalone service throughout their designated service area" and "ETCs may use any technology in the provision of voice telephony service;"

(4) IP/VoIP is "any technology."

[83] See footnote 14 and Attachment 2, DOC Comments, January 20, 2015. NARUC's argument appears in an *Amicus Curiae* Brief (pp. 8-13) prepared in support of the Michigan Public Service Commission in *Michigan Bell v Quackenbush and Michigan PSC*, August 19, 2014. The Court did not receive the *Brief* stating that NARUC's position was already adequately covered by other parties and the *Brief* was received late in the briefing process.

(5) FCC Rule 47 C.F.R. § 54.101 requires that "[e]ligible voice telephony services must provide voice grade access to the public switched network or its functional equivalent; minutes of use for local service provided at no additional charge to end users; access to the emergency services provided by local government or other public safety organizations, such as 911 and enhanced 911, to the extent the local government in an eligible carrier's service area has implemented 911 or enhanced 911 systems; and toll limitation services to qualifying low-income consumers … ;"

(6) Thus, in sum, VoIP services providers are voice telephony providers, and voice telephony providers meet federal ETC qualification criteria, and to receive ETC designation a provider must be providing telecommunications services. Therefore, VoIP providers must be providing telecommunications services.

NARUC goes on to note that state commission ETC designation decisions in New Mexico, Georgia and Nevada support its argument.

Staff believes that Charter did not directly address this argument in its Reply Comments.

6.2.2 Direct Classification Argument

Charter argues, first and foremost, that its VoIP service is an information service and, as such, beyond the reach of the Minnesota Commission. Charter offers three main arguments:

First, interconnected VoIP qualifies as an "information service" because it offers the capability to perform net protocol conversions. When a Charter subscriber calls a person on the PSTN, Charter converts the voice data from IP to TDM; likewise, when a Charter subscriber receives a call from a caller who uses the PSTN, Charter converts the voice data from TDM to IP. This process constitutes the "transforming" and "processing" of information. Indeed, the "transformation" and "processing" of calls from IP to TDM and back is the feature that makes interconnected VoIP attractive to the public; without that feature, interconnected VoIP users could not speak to PSTN users. Because interconnected VoIP quite literally "transform[s]" and "process[es]" information, it is an information service.

Second, even if interconnected VoIP were not an information service solely by virtue of the IP-to-TDM protocol conversion, it would still be an information service for the independent reason that it offers a single, integrated service that is not severable into distinct information service and telecommunications service components. The FCC holds that a service will be treated as a

single, integrated information service, rather than as an information service with a separate telecommunications service component, when the telecommunications features are not "separable from the data-processing capabilities of the service" but are instead "part and parcel of" the information service and "integral to its other capabilities."

Third, interconnected VoIP is an information service based on its use of stored databases and lookup capabilities to access its users' IP addresses, which constitute the literal "retrieving" and "utilizing … information via telecommunications" under the statute. Because traffic on private IP networks such as Charter's network is routed based on IP addresses in the exact same manner as traffic on the public Internet, Charter maintains databases that associate IP addresses with 10-digit "telephone numbers." When a person places a call, Charter's service "translates" the telephone number into an IP address using lookup capabilities essentially identical to DNS.

DOC argues that the Charter Fiberlink Companies sought and received authority to operate as a CLEC in Minnesota on terms applicable to all CLECs. And, Charter has failed to show (and it is Charter's burden to show) that its fixed interconnected VoIP service should now, absent any change in law, be treated as an unregulated service. DOC argues that so long as Charter chooses to sell what is, essentially, a simple voice transportation service functionally indistinguishable from other ordinary wireline phone service that uses Minnesota's public telecommunications network, it should abide by the same rules of the road as other carriers and subscribers who provide and pay for that network.

DOC further argues that Charter's call traffic appears no different than the call traffic deemed to be a telecommunications service in the *IP-in-the-Middle Decision*. There the FCC determined that AT&T's practice of converting traffic to IP to channel it across its network, then to reconvert it before handing it off to another carrier, does not constitute an information service. Charter appears to claim that customer online access to their account information and use of a voicemail system makes its service an information service rather than telecommunications. Account access and voice mail are not regulated services, however, and Charter offers no authority to suggest that these attributes constitute can be used to distinguish information services from telecommunications services.

6.3 State Authority

Charter argues that the Minnesota Commission lacks authority under state law to impose regulation on interconnected VoIP. Charter argues:

"Telephone service" is not defined in Minnesota Statutes. And the Minnesota Legislature did not intend "telephone service" to encompass interconnected VoIP.

The Minnesota Legislature has not expressly granted the Commission jurisdiction over interconnected VoIP service.

Given all of the controversy surrounding the regulation of VoIP services, the Minnesota Legislature has never seen fit to expressly grant regulatory authority over VoIP services to this Commission despite many years and numerous opportunities to do so. In 2005, the Legislature amended statutes requiring customers to pay 911 fees. In 2008 the Legislature saw fit to apply sales tax to VoIP services. If the meaning of "telephone service" under state law already encompassed interconnected VoIP services, there would have been no need for either measure to call out interconnected VoIP services specifically.

DOC argues that Charter's claim that the Commission lacks authority under state law is inaccurate. DOC argues:

For many years, Charter has been a telecommunications carrier duly authorized by the Commission to provide service. Minnesota statutes make no distinction among technologies used to make ordinary local phone calls. Charter's service is simply "local service" and therefore regulated telephone service subject to certain requirements of Chapter 237.

No new law addressing VoIP has been necessary. Until Charter's present violations, no action to compel compliance has been necessary. Until the present matter, Charter was a duly certified carrier that apparently complied with the laws at issue in this docket. Only now has enforcement been required. Further, the Commission has all the authority it needs to obtain compliance with Minnesota statutes applicable to local service providers that are at issue in this docket.

Charter represented in an interconnection arbitration before the Commission that it is a facilities-based local service provider that provisions service over its own switch and transmission facilities, and, as a result, has the right to request that the Commission compel ILECs to interconnect with it at a point where it has local end user customers, and to provide any related services and elements at cost-based rates. Charter has shown no facts to suggest that its local service has changed in any manner affecting its status as a local service provider in the intervening years since 2008.

It is incorrect to infer that the 2008 change in the sales tax statute caused sales taxes to be imposed that had not previously been imposed on IP-based telecommunications services. Prior

to the 2008 amendment VoIP was already described as a telecommunications service subject to Minnesota sales and use tax.

6.4 Public Interest

DOC argues that there are strong public interest reasons to enforce Minnesota's laws uniformly and to protect customers. DOC believes that, with respect to services provided by the Charter Advanced Services Companies, it is Charter's claim that the Commission has no jurisdiction over:

(a) Resolution of consumer complaints;

(b) Protections concerning price discrimination in Chapter 237 and Commission rules;

(c) The protections concerning terminating service to customers in Chapter 237 and Commission rules;

(d) Requirements that allow other carriers to physically connect to its network;

(e) Consumer protection laws regarding disclosure, anti-slamming and cramming;

(f) Any notice requirements, including notices for price increases and significant changes in the terms and conditions of service in Chapter 237 and Commission rules;

(g) Any protections in Chapter 237 and Commission rules with respect to services provided to other carriers, including the disconnection of services that impact end use customers;

(h) Any protections in Chapter 237 and Commission rules that enable a customer to terminate service and switch to another carrier, including termination liability assessments that unreasonably lock the customer into a service they no longer want;

(i) Any protections in Chapter 237 and Commission rules that attempt to promote and advance competition;

(j) Any protections in Chapter 237 and Commission rules that support universal service, including providing service to all customers under the terms and conditions of an approved tariff;

(k) Any protections in Chapter 237 and Commission rules intended to maintain just and reasonable rates;

(l) Any protections in Chapter 237 and Commission rules intended to protect low income consumers, including making the TAP program available;

(m) Requirements for the collection and remittance of fees pertaining to the TAP and TAM fees;

(n) Requirements to submit regulatory assessments to recover Commission and DOC expenses associated with telecommunications regulatory activity;

(o) Annual reporting requirements used to determine regulatory assessments; and

(p) Commission approval for the change in either the ultimate control of the company or the operating company serving the customer.

Further, DOC argues, the Commission's own Consumer Affairs Office and the Better Business Bureau have received complaints about Charter's service.

Charter sought and received authority from the Commission to operate as a competitive local exchange carrier (CLEC) providing telephone service to residential customers. The regulations imposed on CLECs create an equitable marketplace for all providers of wireline telecommunications services. A company as large as Charter has the potential to cause irreparable harm to other CLECs as well as to small and large incumbent telephone companies if it (unlike regulated companies) can choose to disregard the public interest and discriminate amongst customers or traffic. Wireline local service providers are subject to laws preventing anticompetitive conduct and Charter has shown no reason why it should be treated differently than all other wireline local service providers.

OAG, CDDHHM and **LSAP/MCAP** also argue that there is sound reason to protect Minnesota's consumers

Charter argues that given there is no legal basis to subject interconnected VoIP providers such as Charter to state public utility regulation, arguments about whether the public interest would be served - or not served - by such regulation are not the legal inquiry before the Commission. Interconnected VoIP services are generally not regulated as public utilities in other states. This absence of regulation at the state level has not triggered the adverse consequences predicted by

DOC and OAG. This strongly suggests that the federal regulatory oversight of interconnected VoIP providers has adequately protected consumer interests.

DOC has cited statistics regarding complaints against Charter. Few complaints can be attributed to Charter's VoIP service in Minnesota.

To the extent DOC believes that Minnesota state regulations are truly imposing a competitive disadvantage on wireline providers relative to the many services regulated on a federal level with which they compete, such as wireless and over-the-top VoIP providers, the solution to such concerns would be to better tailor the state's wireline telephone regulations, rather than try to extend them to a subset of the federally-regulated competitors. Indeed, if DOC's contentions were correct, extending state public utility regulation to interconnected VoIP providers would simply put them at a corresponding competitive disadvantage relative to wireless and nomadic VoIP providers.

The Commission must consider the substantive evils that it would counter in deciding to classify a service as a "telephone service." No such evils are even alleged by the DOC in its Complaint. None exist.

6.5 TAP and TAM

DOC argued that Charter had ceased supporting the Telephone Assistance Program (TAP – for low-income customers) and Telecommunications Access Minnesota (TAM – for communications impaired customers), thus harming its customers and shifting the TAP/TAM burden to customers of other local service providers. By avoiding payment of TAP/TAM fees Charter creates for itself a competitive advantage. Through continued investigation DOC has been unable to substantiate Charter's claim that it offers TAP credits. Further, DOC is concerned that, if the PUC doesn't have jurisdiction, Charter may cease to offer such credits even if it does offer them now.

Charter argues that although PUC lacks jurisdiction over its VoIP service Charter continues to provide TAP credits to qualifying customers.

6.6 Customer Notice

DOC argues that Charter shifted its customers to unregulated service without prior consent or meaningful notice of the consequences to them of the transfer.

Charter claims that its customers were appropriately notified of their transfer to the Charter Advanced Services Companies.

7.0 Staff Analysis

Clearly, the threshold issue before the Commission is the extent to which the Commission has authority to regulate Charter's interconnected VoIP service. Staff will devote considerable discussion to that issue. However, it is useful to address some of the surrounding issues first, if only briefly.

7.1 The "IP" in "VoIP"

Internet Protocols (IP) are used for the formulation and routing of packets of data. The "I" in "IP" does not indicate that an entity employing those protocols is necessarily accessing the Internet, providing Internet content, providing Internet applications (apps), providing Internet access service, or in any way engaging with the Internet. The "I" simply indicates that an IP user is employing the same data management protocols as used for Internet functions.

Staff believes that Charter, with respect to its interconnected VoIP Charter Phone service, is not claiming to provide internet access service, to provide content via the internet, or to provide applications via the internet. Rather, Staff believes, Charter uses IP to manage traffic on its own private network (IP being more efficient than TDM). This is not to say that interconnected VoIP is a telecommunications service. Such classification requires a more nuanced analysis.

7.2 Transfer of Customers

Charter and DOC do not dispute the following points: (1) in March of 2013 Charter transferred residential customers from its Charter Fiberlink Companies to its Charter Advanced Services Companies, (2) the Charter Fiberlink Companies and the Charter Advanced Services Companies are under common ownership and control, (3) the Charter Fiberlink Companies have obtained certificates of authority to operate in Minnesota, and (4) the Charter Advanced Services

Companies have not sought or obtained certificates of authority from the Minnesota Commission.

7.3 Recommendations of the Parties

Both DOC and Charter ask the Commission to make a finding with respect to the Commission's authority to regulate Charter's interconnected VoIP service. They argue there is no impediment to the Commission making such a finding.

DOC asks the Commission to find, on the current record, that by transferring its residential customers Charter has violated specific Minnesota statues and rules. Upon such a finding DOC recommends the Commission refer for a contested case proceeding: (1) whether the violations by Charter were knowing and intentional within the meaning of Minn. Stat. § 237.461; (2) the number of days of each knowing and intentional violation; and (3) recommendations on appropriate penalties or other relief.

Charter asks the Commission to find that federal law preempts DOC's allegations, or that the rules at issue in DOC's Complaint do not apply to Charter's interconnected VoIP service under state law in the first instance. In the alternative, if the Commission believes that further proceedings are required to resolve those questions, Charter requests that the Commission bifurcate the proceeding and address the federal preemption and extent of state law authority prior to the alleged regulatory noncompliance issues raised in the Complaint.

7.4 The *2003 Vonage Decision*

In its *2003 Vonage Decision* the Minnesota District Court found that Vonage's over-the-top, nomadic VoIP service was an information service and, as such, beyond the reach of the Commission. No party here has argued otherwise. However, Staff believes the fact situation in the instant docket is substantially different from the Vonage docket, to such a degree that the Vonage decision does not limit the Commission's ability to address DOC's Complaint here. The Court did not address "phone-to-phone" (interconnected) VoIP service, the service provided by Charter, but not by Vonage.

7.5 The *FCC Vonage Order*

Staff does not believe the *FCC Vonage Order* preempts this Commission from addressing state regulation of interconnected VoIP service. There the FCC declined to classify Vonage's service as either a telecommunications service or an information service. Rather, the FCC preempted the Commission's finding that it is impossible (or practically so) to determine one or both geographic endpoints of a Vonage call, thus precluding any practical determination of whether calls could be identified as interstate or intrastate in nature for compliance with Minnesota regulation without thwarting federal policy objectives. Subsequently, the FCC indicated that its Vonage preemption would not apply to a VoIP provider with the ability to track the jurisdictional confines of its traffic. Thus, the FCC's preemption order is restricted to nomadic VoIP service.

7.6 State Authority

Staff believes the Commission has authority under state law to impose regulation on Charter's interconnected VoIP service (to the extent the Commission determines that Charter's interconnected VoIP service is a telecommunications service pursuant to the definition established by Congress). Chapter 237 does not define service in terms of industry technical standards, standards that, Staff speculates, have changed significantly over the last century. A non-technical specification allows the Commission to focus on communications as a service sought and experienced by customers (price, quality, reliability), no matter what technical standards are used to deliver that service.

7.7 Public Interest

Charter has argued that no public interest exists to warrant imposition of state regulation on its interconnected VoIP service. Staff disagrees and refers the Commission to the arguments made by DOC, LSAP/MCAP, OAG-RUAD and CDDHHM.

7.8 TAP and TAM

Staff is unclear as to what disputes remain with respect to Charter's provision of TAP and TAM services, aside from the central dispute regarding Commission authority to impose TAP and TAM requirements upon Charter. In its Complaint, DOC argued that Charter was failing to collect and remit TAP and TAM fees to the Department of Public Safety.

With respect to TAP, in Reply Comments, Charter has submitted a sworn affidavit indicating that Charter Advanced Services has continued to provide TAP credits to eligible customers since the March 2013 transfer of customers. Charter has also agreed to report its interconnected VoIP revenues in its annual report. Staff does not know if DOC contests these statements, although DOC is concerned that absent a finding that Charter is obligated to meet Minnesota's statutory TAP requirements Charter may not be relied upon to continue to provide TAP services. DOC is also concerned about the statements of Charter's customer service representatives on two occasions when DOC contacted those representatives in the guise of a potential new customer. DOC states that the Charter representatives indicated that Charter does not offer low income assistance plans.

With respect to TAM, Staff is unclear as to whether Charter collects TAM fees and remits them to the Department of Public Safety. Staff believes that Charter is required by federal law to provide services for the disabled.[84] DOC's Complaint, Attachment E, suggests that Charter does provide such services.

If significant controversy remains regarding issues of fact the Commission may wish to refer this matter for a contested case proceeding.

7.9 Customer Notice

Should the Commission determine it has the authority to regulate Charter's VoIP service, Staff believes the controversy regarding the sufficiency of Charter's customer transfer notice would benefit from additional evidence.

If significant controversy remains regarding issues of fact the Commission may wish to refer this matter for a contested case proceeding.

7.10 Classification of Service

In its Complaint, Attachment 2, DOC provided a copy of a document from Charter's website. There Charter provided a description of its Charter Phone service as of September, 2014. It is useful to include some excerpts here:

[84] See 47 C.F.R. § 6 and the Report and Order. *In the Matter of IP-Enabled Services*, WC Docket No. 04-36, FCC 07-110, released June 15, 2007.

(1) Charter Phone is not an Internet phone service. It is a fixed-wire line service, designed to be used in the home in which service is installed. The phone modem, or Multimedia Terminal Adaptor (MTA), that we install in your home is the property of Charter Communications.[85]

(2) An MTA is a box that connects the cable and the phone line inside your home. … [T]he MTA delivers the cable signal needed for Charter Phone service. … [An MTA] is a phone modem that enables our network to communicate with the phone lines inside your home. The MTA is usually located in a basement, closet, or office inside your home.[86]

(3) Customers with touch-tone phones will not need to purchase new equipment to use Charter Phone Service. The service works with your existing phone wires, phones, and wall jacks. Charter does install a phone modem, or Multimedia Terminal Adaptor, which is used to communicate with our network.[87]

(4) Charter offers a primary line phone service that is comparable to traditional phone service. Charter Phone uses Internet protocol for transporting calls over our own private network, so your calls never touch the public Internet. Charter Phone can be installed via any in-home phone jack, and the service does not require an Internet connection. This distinction is important because services offered by many VoIP providers do require high-speed Internet connections in the home. Moreover, most of these types of VoIP providers are able to provide only a "best effort" service-level agreement, whereas Charter gives customers a Quality of Service guarantee.[88]

(5) Just like traditional wire line services, Charter Phone works through regular phone jacks and phones, and provides access to 911 emergency services and directory listings. The difference between Charter Phone and the phone companies' traditional wire line service is that Charter takes advantage of the latest technology, which allows us to deliver crystal-clear calls and advanced calling features. Cable phone service uses Internet protocol for transporting calls over our own private network.[89]

[85] DOC Complaint, Attachment E, p. 4, under heading "Moving Charter Equipment."
[86] DOC Complaint, Attachment E, p. 3, under heading "Equipment Information."
[87] DOC Complaint, Attachment E, p. 4, under heading "Purchasing Equipment."
[88] DOC Complaint, Attachment E, p. 6, under heading "VoIP."
[89] DOC Complaint, Attachment E, p. 6, under heading "Charter vs Traditional Phone."

(6) Charter Phone is both a local and long-distance phone provider. Our Unlimited Long-Distance Calling Plan includes unlimited local, local toll, and long-distance calling in the United States, Canada, Guam, US Virgin Islands and Puerto Rico as well as the ability to make international calls at a low per-minute rate.[90]

Further, in its Answer, Charter stated:

> Charter offers an "interconnected" VoIP service, which means that Charter's VoIP service allows users to engage in two-way voice calling not only with other VoIP users, but also with users of traditional telephone service. See 47 U.S.C. § 153(25); 47 C.F.R. § 9.3[91]

With that introduction consider two main arguments regarding the classification of interconnected VoIP services: the NARUC argument and the argument derived from a direct examination of Charter's service.

7.10.1 NARUC Classification Argument

Attachment 2 of DOC's Comments comprises an *Amicus Brief* submitted by NARUC to a Michigan Court. NARUC argued that, although the FCC continues to maintain that it has not determined the classification of interconnected VoIP, it has in fact, made that determination. In short, NARUC argues that VoIP services providers are "voice telephony" providers, and "voice telephony" providers meet federal ETC qualification criteria, and to receive ETC designation a provider must be providing telecommunications services. Therefore, VoIP providers must be providing telecommunications services.

Staff is hesitant to rely too heavily on this analysis. It is unclear from the record that Charter's interconnected VoIP service qualifies as "voice telephony." The FCC defines "voice telephony" services as follows:

> Voice Telephony services shall be supported by federal universal service support mechanisms. Eligible voice telephony services must provide voice grade access to the public switched network or its functional equivalent; minutes of use for local service provided at no additional charge to end users; access to the emergency services provided by local government or other public safety organizations, such as 911 and enhanced 911, to the extent the local government in an eligible carrier's service area

[90] DOC Complaint, Attachment E, p. 2, under heading "Local and Long Distance Services."
[91] Charter Answer, p. 6.

> has implemented 911 or enhanced 911 systems; and toll limitation services to qualifying low-income consumers … .[92]

Staff is unclear as to whether Charter provides toll limitation services to qualifying low-income consumers. If Charter were to provide voice telephony as defined above, and Charter's service was its sole method of providing that voice telephony, NARUC's argument may be stronger.

If inclined the Commission may wish to seek additional comment.

7.10.2 Direct Classification Argument

In determining whether Charter's interconnected VoIP service is a telecommunications service or an information service it is necessary to hold the features of that service up for comparison to the standards set by Congress in its definitions of (1) telecommunications, (2) telecommunications services, and (3) information services. Specifically, to determine that Charter's service is a telecommunications service it is necessary, **first**, to show that Charter's service is **TELECOMMUNICATIONS**, that is:

> (1) a transmission between or among points specified by the user,
> (2) of information of the user's choosing,
> (3) without change in the form or content of the information as sent and received. [93]

Second, it is necessary to show that Charter's service, if determined to be telecommunications, is a **TELECOMMUNICATIONS SERVICE**:

> (4) **offered** for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.[94]

And, **third**, it is necessary to show that the service is not an **INFORMATION SERVICE**, defined as:

> (5) the **offering** of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing,

[92] 47 C.F.R. § 54.101.
[93] 47 U.S.C. § 153(50).
[94] 47 U.S.C. § 153(53).

(6) **but does not include** any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.[95] (this is the "the telecommunications exception")

Staff will address the three main tasks in turn. In examining Charter's interconnected VoIP service it is particularly important to remember that **the FCC determines classification in terms of the service offered**. This is a longstanding practice. In its *Report to Congress* in 1998 the FCC emphasized that the functional nature of an end-user offering is central to distinguishing information services from telecommunications services:

> **This functional approach is consistent with Congress's direction that the classification of a provider should not depend on the type of facilities used. A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure. Its classification depends rather on the nature of the service being offered to customers.**[96]

The FCC restated that principal again two months ago:

> **We observe that the critical distinction between a telecommunications and an information service turns on what the provider is "offering."**[97]

There is sound logic behind the focus on the "offer." That is, customers respond to an offer, to what is presented as desirable to them. The "offer" represents a focal point for the analysis that the technical underpinnings of services do not. The same service may be delivered using a variety of technologies, and any given technology may deliver a variety of services, more or less desirable. To focus on the technology is to step into a formless, shifting quagmire, a focus that is at considerable remove from what is more immediately relevant: service offerings that meet the public's needs and wants. To focus on technology as the core criterion at the expense of the service (offer) is to allow the tail to wag the dog. Further, rapidly changing technological specifications can be a fickle foundation for policy.

With the adoption of computers in the telecommunications industry in the 1960s and 1970s the FCC in its *Computer Inquiries* recognized the need to separate "communications" from "data processing" for **policy** purposes: to protect basic communication channels and to encourage the

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[95] 47 U.S.C. § 153(24).
[96] *Report and Order*, ¶ 59, footnote omitted, emphasis added.
[97] *Open Internet Order*, ¶ 355, emphasis added.

emerging data processing industry. Changing technology drove the need to address the distinction, but technology developments were subservient to policy considerations.

Charter's VoIP Service Involves Telecommunications

With specific reference to FCC rules, Charter refers to itself as a provider of "interconnected VoIP" service.[98] The FCC defines such service:

> An interconnected Voice over Internet protocol (VoIP) service is a service that:
> (1) Enables real-time, two-way voice communications;
> (2) Requires a broadband connection from the user's location;
> (3) Requires Internet protocol-compatible customer premises equipment (CPE); and
> (4) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.[99]

Staff believes that in identifying itself as an interconnected VoIP service provider, Charter is providing "a transmission between or among points specified by the user, of information of the user's choosing." This is borne out by Charter's description of its service as noted by DOC in Attachment E of its Complaint. Specifically, Charter describes its service as "a primary line phone service that is comparable to traditional phone service"[100] and "[j]ust like traditional wireline services, Charter Phone works through regular phone jacks and phones,"[101] and "[i]f we can bring your [phone] number from the current provider we will take care of everything for you,"[102] and "Charter Phone is both a local and long-distance phone provider."[103] Clearly, Charter is offering phone service that allows customers to place calls to phone numbers of their choice with the expectation that their voice messages will be delivered intact in real time.

Staff believes that Charter's use of packet switching technology does not change "the form or content of the information as sent and received." Indeed,

> [I]t is in the nature of IP Packet Transfer that the "form and content of the information" is precisely the same when an IP packet is sent by the sender as when

[98] Charter Answer, p. 6.
[99] 47 C.F.R § 9.3.
[100] DOC Complaint, Attachment E, p. 6, under heading "VoIP."
[101] DOC Complaint, Attachment E, p. 6, under heading "Charter vs Traditional Phone."
[102] DOC Complaint, Attachment E, top of p. 3.
[103] DOC Complaint, Attachment E, p. 2, under heading "Local and Long Distance Service."

that same packet is received by the recipient.[104] [105]

The packet content sent or received by the user is not altered by the packet headers (analogous to addressed envelopes) used to route the content (analogous to written letters). In purchasing Charter's Phone service customers are seeking a method of transmitting a communication to a phone number (point) of their choosing. Customers are not seeking a service that will modify the form or content of their voice communication. Nothing in the **offering** of Charter's Phone service suggests that Charter will be changing the form or the content. Charter does not hold itself out to provide modified voice messages via Charter Phone and, indeed, customers may balk at a service that does not send what they speak when they speak it.

Staff believes that Charter's interconnected VoIP service involves telecommunications. The fragmentation of a voice message into packets and subsequent reconstitution does not change the form or content of the message, just as the "muxing" and "demuxing" of circuit-switched voice messages using TDM does not change the form or content. By Charter's standard all electronic communications, including circuit-switched traffic, would be information services.

Charter's Interconnected VoIP Service is a Telecommunications Service

Clearly, Charter's interconnected VoIP service is **offered for a fee directly to the public** within its operating footprint. DOC, in Attachment F to its Complaint, provides an offer to "Greg Doyle or Current Resident" of Charter Phone service at $29.95 per month when bundled with Charter's Internet and television services (offer good through 9/18/14). Staff does not believe Charter disputes the claim that it offers its Charter Phone service directly to the public for a fee. Rather, Charter disputes the nature of the service provided. Staff believes that Charter's interconnected VoIP service is a telecommunications service.

Charter's Interconnected VoIP Service is Not an Information Service

As addressed above, Staff believes that Charter's interconnected VoIP service involves telecommunications and is a telecommunications service under federal law. The final step in the

[104] Barbara A. Cherry and Jon M. Peha. The Telecom Act of 1996 *Requires* the FCC to Classify Commercial Internet Access as a Telecommunications Service. Comment. *In the Matter of Protecting and Promoting the Open Internet*. GN Docket No. 14-28, December 22, 2014.

[105] Communications networks employ technologies to ensure messages and data are delivered as received: http://en.wikipedia.org/wiki/Packet_switching; http://en.wikipedia.org/wiki/Real-time_Transport_Protocol; http://en.wikipedia.org/wiki/Voice_over_Internet_Protocol, accessed April 29, 2015.

analysis requires a determination, pursuant to the federal definition of information service, as to whether Charter's service comprises:

> the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, **but does not include any use** of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.[106]

The latter phrase of the above quotation above is referred to as the telecommunications exception. Thus, the focus here is to determine whether Charter's service fits entirely within the telecommunications exception (if so, it is a telecommunications service) or if Charter is providing an information service that **uses** telecommunications service.

Consider, as background, that the use of IP in telecommunications has grown significantly in recent years. The FCC reported that, by the end of 2013, Minnesotans had purchased over 850,000 interconnected VoIP subscriptions from 116 providers (Americans, in total, purchased almost 48 million – almost 36 percent of all wireline connections in the nation).[107] The FCC also reported that interconnected VoIP subscriptions have increased at a compound growth rate of 15 percent over 2011, 2012 and 2013 (and more than double the line count since 2008).[108] However, these numbers do not fully reflect the use of IP within the core of traditional phone networks. A report of the National Regulatory Research Institute (NRRI) stated that in 2009:

> [S]ignificant portions of the interoffice transport network are being replaced by IP, even if the subscribers themselves continue to be served by circuit switches. For instance, it has been estimated that 90% of the interLATA interoffice network has already been replaced by IP technology (along with 60% of the intraLATA interoffice network).[109]

IP is significantly embedded in the nation's telecommunications network. Protocol conversion, as used by Charter, is a matter of employing a technology that is becoming the industry standard for the provision of communications. It's the new normal.

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[106] 47 U.S.C. § 153(24).
[107] Local Telephone Competition: Status as of December 31, 2013. Federal Communications Commission, Industry Analysis and Technology Division, Wireline Competition Bureau, October 2014 (*Competition Report*),Tables 9 and 17.
[108] *Competition Report*, p. 2, Tables 4 and 5.
[109] Joseph Gillan and David Malfara. The Transition to an All-IP Network: A Primer on the Architectural Components of IP Interconnection, National Regulatory Research Institute, NRRI 12-05, May 2012, p. 7.

Protocol Conversion. Charter's central argument holds that its interconnected VoIP service is an information service because it employs protocol conversion. Charter states:

> Charter's voice service is provided via VoIP, which requires voice signals to be converted into Internet Protocol ("IP") data packets that can be transmitted over broadband networks. To accomplish this conversion, Charter subscribers' handsets [traditional touch-tone phones] are attached to specialized customer premises equipment ("CPE")[Multimedia Terminal Adaptors ("MTA") – modems – owned by Charter] installed inside the subscribers' premises. After the user speaks into the handset, the CPE [MTA] formats the analog electric signals from the handset into IP data packets. The IP data packets are then routed through wiring inside the subscriber's premises to Charter's IP network outside the subscriber's home. When a Charter user receives a call, the same process happens in reverse.[110]

Charter argues the analog-to-IP and IP-to-analog conversion processes embody "transforming" and "processing" of information, thus rendering Charter's service an information service. Staff disagrees. Charter's protocol conversion falls squarely within the telecommunications exception clause: "but does not include **any** use of **any** such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." Charter's protocol conversion is central, fundamental and integral to the provision of its telecommunications service, to the "management control and operation" of its system, and in contributing to the efficiency of the national and global communications network.

One argument posed by Charter holds that it is protocol conversion "that makes interconnected VoIP attractive to the public; without that feature, interconnected VoIP users could not speak to PSTN users."[111] Staff disagrees with the framing of this argument. If a phone call is placed successfully (a connection established and maintained), the conversion is transparent. If the phone call is not placed (a connection not established) then there is no phone call to be deemed transparent, or otherwise. Furthermore, Charter's argument here is no different than if it claimed that without coaxial cable and pole attachments its service would be less attractive to customers. Customers seek a communication service. Charter **offers** such service. Whether that service is provided via TDM, IP, coaxial cable and/or pole attachments, is irrelevant here. The **offer** is the focal point of the analysis.

The FCC has long viewed some data manipulation practices as falling within the telecommunications exception. In 1980, the FCC stated:

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[110] Charter Answer, p. 5.
[111] Charter Answer, p.11.

> [W]e believe that a basic transmission service should be limited to the offering of transmission capacity between two or more points suitable for a user's transmission needs and subject only to the technical parameters of fidelity or distortion criteria, or other conditioning. Use internal to the carrier's facility of companding techniques, bandwidth compression techniques, circuit switching, message or packet switching, error control techniques, etc. that facilitate economical, reliable movement of information does not alter the nature of the basic service. In the provision of a basic transmission service, memory or storage within the network is used only to facilitate the transmission of the information from the origination to its destination, and the carrier's basic transmission network is not used as an information storage system. Thus, in a basic service, once information is given to the communication facility, its progress towards the destination is subject to only those delays caused by congestion within the network or transmission priorities given by the originator.[112]

Further, in 1997, the FCC stated:

> We note that, under *Computer II* and *Computer III*, we have treated three categories of protocol processing services as basic services, rather than enhanced services. These categories include protocol processing: 1) involving communications between an end user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users; 2) in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and 3) involving internetworking (conversions taking place solely within the carrier's network to facilitate provision of a basic network service, that result in no net conversion to the end user). … Because the listed protocol processing services are information service capabilities used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service," they are excepted from the statutory definition of information service. These excepted protocol conversion services constitute telecommunications services, rather than information services, under the 1996 Act.[113]

Charter has argued that the exceptions stated above are not implicated in this analysis. Staff believes the second exception may well apply here. Clearly the industry, and Charter as one element of the industry, is consumed with the implementation of a new basic network

[112] Computer II, Final Decision, ¶ 95.
[113] Order on Reconsideration. *In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 271 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, FCC 97-52, released February 19, 1997, ¶ 2, footnote omitted.

technology. The FCC has opened major investigations into the TDM to IP transition.[114] Furthermore, Charter "requires protocol conversion to maintain compatibility with existing CPE."

Staff believes the third exception also supports the argument that Charter's protocol conversion results in "no net conversion to the end user:" voice in, voice out.

In its 1998 *Report to Congress* the FCC stated:

> From a functional standpoint, users of these services obtain only voice transmission, rather than information services such as access to stored files. [footnote 188: Routing and protocol conversion within the network does not change this conclusion, because from the user's standpoint there is no net change in form or content.] The provider does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information. Thus, the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."[115]

To restate a central principal: Charter's service is **offered** as telecommunications service, the central feature of which is the "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."[116] And, to claim that a particular technical function (protocol conversion) in any and all instances determines service classification is to turn the analysis on its head, to sidestep the **primacy of the offer**, and to thwart the fundamental impetus for classification: the policy to protect basic telecommunications while allowing information services to thrive.

Adjunct-to-Basic. Charter's service is not offered as a means of accessing other services, services that are of significant and independent value in themselves. Charter argues otherwise,

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[114] On June 13, 2014, FCC Commissioner Pai commented upon the IP transition: "This past January, the Commission decided on a unanimous, bipartisan basis to expedite the IP Transition by moving forward with an All-IP Pilot Program. I'm grateful that we decided—together—to allow all stakeholders to suggest how to "resolv[e] the operational challenges that result from transitioning to new technology and that may impact users." Footnote 2 states: *"Technology Transitions; AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition; Connect America Fund; Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Numbering Policies for Modern Communications*, GN Docket Nos. 13-5, 12-353, WC Docket Nos. 10-90, 13-97, CG Docket Nos. 10-51, 03-123, Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, 29 FCC Rcd 1433, para. 25 (2014).": http://www.fcc.gov/document/commissioner-pai-statement-ip-transition-presentation, accessed April 29, 2015.

[115] *Report to Congress*, ¶ 89.

[116] 47 U.S.C. § 153(50).

that it provides a number of enhanced features, some of which require the use of use of Charter's internal IP address database, thus rendering its service an information service. Such features include Caller ID, Call Waiting, Call Waiting with Caller ID, Anonymous Call Rejection, Selective Call Acceptance, Call Screening, Custom Ring, Call Forward – Selective, Call Forward – Variable, Speed Dial 8, 3-Way Calling, Call Return, Auto Busy Redial, Unlimited Directory Assistance, Voicemail, Distinctive Ring, Private Number, Call Forward – Busy, and Call Forward – No Answer.

Staff disagrees with Charter's analysis and the FCC has addressed such features, treating them as adjuncts to telecommunications service:

> [T]he Commission has found that services it had previously classified as "adjunct-to-basic" should be classified as telecommunications services. These are services that fall within the literal definition of an "enhanced service" set forth in the Commission's rules, but are basic in purpose and facilitate the completion of calls through utilization of basic telephone service facilities. They include, *inter alia*, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller identification, call tracing, call blocking, call return, repeat dialing, and call tracking, as well as certain Centrex features. The Commission found that such "adjunct-to-basic" services facilitated the establishment of a transmission path over which a telephone call may be completed, without altering the fundamental character of the telephone service.[117]
>
> The Commission has consistently categorized a service option or feature as adjunct-to-basic, and thus subject to Title II regulation, if that option or feature is clearly basic in purpose and use, and brings maximum benefit to the public through its incorporation in the network. For example, the Commission has addressed whether access to a database through directory assistance that searches for a listing by name may be offered as an adjunct-to-basic telephone service. Because a subscriber using directory assistance retrieves information stored in a telephone company's computer database, directory assistance appears to fit within the definition of an enhanced service. The Commission, however, found such access to be adjunct-to-basic, rather than enhanced service, because directory assistance provides only that information necessary for a subscriber to place a call. The Commission has also held that electronic directory assistance is an adjunct-to-basic service because, as with

[117] Notice of Proposed Rulemaking. *In the Matter of Implementation of Section 255 of the Telecommunications Act of 1996 Access to Telecommunications Services, Telecommunications Equipment, and Customer Premises Equipment by Persons with Disabilities*, WT Docket No. 96-198, FCC 98-55, (*Section 255 Docket*), ¶ 39, footnotes omitted, emphasis in original.

> operator-assisted directory assistance, the purpose of the service is to facilitate the placement of telephone calls.[118]

Consider, too the Supreme Court's reference in 2005 to combining basic telecommunications with features such as voice mail:

> [A] local telephone company "cannot escape Title II regulation of its residential local exchange service simply by packaging that service with voice mail." … That is because a telephone company that packages voice mail with telephone service offers a transparent transmission path – telephone service – that transmits information independent of the information-storage capabilities provided by voice mail. For instance, when a person makes a telephone call, his ability to convey and receive information using the call is only trivially affected by the additional voice-mail capability. Equally, were a telephone company to add a time-of-day announcement that played every time the user picked up his telephone, the "transparent" information transmitted in the ensuing call would be only trivially dependent on the information service the announcement provides.[119]

Similar to Internet. Charter goes on to argue that the service offering for interconnected VoIP includes a feature virtually identical to the Domain Name Service (DNS) on which the FCC and Supreme Court relied on in determining that cable modem service is an information service. Because traffic on private IP networks such as Charter's network is routed based on IP addresses in the exact same manner as traffic on the public Internet, Charter maintains databases that associate IP addresses with 10-digit "telephone numbers." When a person places a call, Charter's service "translates" the telephone number into an IP address using lookup capabilities essentially identical to DNS.

Here, Charter appears to be arguing that, at a technical level, its service is **like** Internet access service (set aside the argument that the FCC has recently found that basic Internet access service is a telecommunications service).[120] Clearly, from a customer's perspective, when a customer buys standalone Charter Phone service that customer is aware that he or she is not purchasing internet access. Charter Phone is clearly not **like** Charter Internet, and they are not **offered** as such. Charter makes that very clear in its service description. A customer may choose to buy Internet service and phone service from Charter but that choice would not change the basic telecommunications nature of Charter Phone. Charter's argument here is no different than arguing that ambulance service should be regulated in the same manner as pizza delivery service

[118] *Section 255 Docket*, ¶ 40, footnotes omitted.
[119] *National Cable & Telecommunications Association et al. v. Brand X Internet Services et al.*, 545 U.S. 967, 997-98 (2005).
[120] *Open Internet Order*, effective June 12, 2015.

because the services are **like** each other, in that both services rely on internal combustion engines for delivering their payload.

Inextricably Linked. Charter further argues that IP address lookup service is substantively identical to an Internet Service Provider's DNS service and is inextricably tied to its voice calling features, and therefore interconnected VoIP should therefore be classified as an information service. Staff disagrees for three reasons: (1) its IP address lookup service is a function central to the provision of telecommunications service, that is, it falls squarely within the telecommunications exception as discussed above, (2) voice calling features are adjunct to the provision of telecommunications service (customers do not seek voice calling features with telecommunications thrown in on the side), and (3) the IP address lookup service may or may not be inextricably linked with the voice calling features but, the voice calling features are not inextricably linked with provision of telecommunications service (which Charter provides, as established above).

Integrated Communications. Raising another argument Charter states that it offers numerous additional services that are undoubtedly information services, such as its online voice management portal, a website through which customers can access their accounts, view and forward voicemails as email attachments, as well as voicemail-to-email functionalities that transcribe voicemails to text. Indeed, Charter argues, these are the exact types of advanced communications features the FCC called out in the Vonage order as significant in transforming the service from a mere voice communications service to an "integrated communications service."

Here Charter is speaking of Internet access, another service it offers separate from Charter Phone. Customers may buy both services, presumably finding benefit in having both services, perhaps the very benefits Charter mentions. However, this does not render the services inextricably intertwined. If a customer buys Charter Phone, it remains Charter Phone, a standalone telecommunications service, even if the customer also buys Charter Internet. A customer purchasing both services from Charter can sever the services by ceasing to purchase one at the termination of a contract.

Summary

Charter's interconnected VoIP service is telecommunications service. It provides "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received"[121] offering it "for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."[122] There is no change in form or content, just as TDM

[121] 47 U.S.C. § 153(50).
[122] 47 U.S.C. § 153(53).

does not change form or content. "It is in the nature of IP Packet Transfer that the "form and content of the information" is precisely the same when an IP packet is sent by the sender as when that same packet is received by the recipient."[123] As Charter states: "Charter offers a primary line phone service that is comparable to traditional phone service." [124]

Charter's interconnected VoIP service is not an information service. Charter may offer features with the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications,"[125] but those features are used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service" (telecommunications exception), as adjuncts to the provision of telecommunications that are not inextricably linked to the provision of telecommunications.

Staff recommends that the Commission find that Charter's interconnected VoIP service is a telecommunications service.

7.11 Commission Options

A case of this complexity and nuance makes room for the Commission to craft a wide variety of responses. Staff's list of options below provides a basic skeleton to help frame possible Commission action.

(1) Dismiss the Complaint finding that the FCC has preempted state action.

(2) Dismiss the Complaint finding that the Commission does not have the authority under state law to regulate Charter's interconnected VoIP service.

(3) Dismiss the Complaint finding that Charter's interconnected VoIP service is an information service as defined by Congress.

(4) Refer the all issues raised in the matter to the Office of Administrative Hearings for a contested case proceeding. In the event the Administrative Law Judge finds that the Commission possesses authority to regulate Charter's interconnected VoIP service request the Judge determine whether Charter knowingly and intentionally violated Minnesota statutes and rules as alleged by DOC.

[123] Barbara A. Cherry and Jon M. Peha. The Telecom Act of 1996 *Requires* the FCC to Classify Commercial Internet Access as a Telecommunications Service. Comment. *In the Matter of Protecting and Promoting the Open Internet*. GN Docket No. 14-28, December 22, 2014.
[124] DOC Complaint, Attachment E, p. 6, under heading "VoIP."
[125] 47 U.S.C. § 153(24).

(5) Find that Charter's interconnected VoIP service is a telecommunication service. Direct Charter to comply with all Minnesota's statutes and rules applicable to the provision of local telephone service. Refer to the Office of Administrative Hearings for a contested case proceeding all remaining issues, including the allegation that Charter knowingly and intentionally violated Minnesota statutes and rules by transferring its residential customers to Charter Advanced Services.

(6) Take other action.

Staff recommends option 5.