

United States Court of Appeals
For the Eighth Circuit

No. 17-2290

Charter Advanced Services (MN), LLC; Charter Advanced Services VIII (MN), LLC

Plaintiffs - Appellees

v.

Nancy Lange, in her official capacity as Chair of the Minnesota Public Utilities Commission; Dan M. Lipschultz, in his official capacity as Commissioner of the Minnesota Public Utilities Commission; John Tuma, in his official capacity as Commissioner of the Minnesota Public Utilities Commission; Matthew Schuerger, in his official capacity as Commissioner of the Minnesota Public Utilities Commission; Katie Clark Sieben, in her official capacity as Commissioner of the Minnesota Public Utilities Commission

Defendants - Appellants

Mid-Minnesota Legal Aid; National Association of Regulatory Utility Commissioners; National Association of State Utility Consumer Advocates; AARP; AARP Foundation; Barbara Ann Cherry

Amici on Behalf of Appellant(s)

Federal Communications Commission; NCTA-The Internet & Television Association; USTelecom; Voice on the Net Coalition; AT&T; Verizon

Amici on Behalf of Appellee(s)

Appeal from United States District Court
for the District of Minnesota - Minneapolis

Submitted: June 12, 2018
Filed: September 7, 2018

Before LOKEN, ERICKSON, and GRASZ, Circuit Judges.

ERICKSON, Circuit Judge.

Charter Communications is a provider of video, internet, and voice communications services. This case arose when Charter underwent a corporate reorganization in order to segregate its Voice over Internet Protocol (“VoIP”) services from its regulated wholesale telecommunications services. As part of the reorganization, Charter moved its VoIP accounts from “Charter Fiberlink” to a newly created affiliate named “Charter Advanced.” This led the Minnesota Department of Commerce to lodge a complaint with the Minnesota Public Utilities Commission (“MPUC”) alleging that Charter had violated various state laws. Charter responded that state regulation was preempted by the Telecommunications Act of 1996. The MPUC ruled against Charter.

Charter commenced an action in the United States District Court for the District of Minnesota seeking: 1) declaratory relief finding that state regulation is preempted, and 2) injunctive relief prohibiting Defendants from enforcing regulation of its VoIP services. The district court¹ denied defendants’ motion to dismiss and allowed discovery to proceed. Following competing motions for summary judgment,

¹The Honorable Susan Richard Nelson, United States District Judge for the District of Minnesota.

the district court ruled that Charter's VoIP service is an "information service" under the Telecommunications Act and that state regulation of Charter's VoIP services was therefore preempted. Because we agree with the district court, we affirm.

I. Background

Spectrum Voice is a VoIP service operated by Charter Advanced. Spectrum Voice offers a voice calling feature that allows subscribers to exchange calls with traditional telephones, transmitting voice signals as Internet Protocol ("IP") data packets via a broadband internet connection. Spectrum Voice is an "interconnected" VoIP service because of its ability to interface with traditional or legacy telephone operations. It is also a "fixed" service because it is tethered to the user's home.

Spectrum Voice subscribers receive an embedded Multimedia Terminal Adapter ("eMTA") from Charter Advanced. The eMTA is combined with a modem (for broadband internet access service) into a single device. The eMTA transforms voice calls from analog electrical signals into IP "packets," which are then carried on Charter's network. Under FCC classifications for hardware, the eMTA is considered Customer Premises Equipment ("CPE").

In order to facilitate Spectrum Voice's interconnected VoIP service, Charter must interconnect with traditional providers. Traditional telephone networks (collectively known as the public switched telephone network or "PSTN") utilize "circuit switching" technology, which establishes a dedicated pathway for the duration of a call. A technique called Time Division Multiplexing ("TDM") allows multiple circuit-switched calls to share the same line.

As the district court stated, "[t]he eMTA alters the format of voice calls between an analog electrical signal—as transmitted by the customer's handset—and the IP data packets transmitted over Charter Advanced's cable network When a

Charter Advanced customer calls or receives a call from a subscriber of a traditional telecommunications carrier, the call must be converted between IP and TDM.” Charter Advanced Servs. (MN), LLC v. Lange, 259 F.Supp.3d 980, 982 (D. Minn. 2017). This process is known as “protocol conversion.” Charter accomplishes the conversion by routing IP-TDM calls through a “Media Gateway” on Charter Advanced’s side of its connection with a TDM-based network.

Spectrum Voice provides customers access to additional features. For example, the service offers: 1) a web portal to access voicemails as digital files, convert voicemails to text, and forward them via email; 2) the ability to display caller ID info on connected cable televisions; 3) a “softphone” feature to access Spectrum Voice via a tablet or smartphone app; and other features.

Charter moved its Spectrum Voice offerings from Charter Fiberlink to Charter Advanced for the purpose of decreasing its state regulatory burden. Under the Telecommunications Act of 1996, a “telecommunications service” is “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.” 47 U.S.C. § 153(53). An “information service,” by contrast, is “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.” 47 U.S.C. § 153(24).

How a service is classified affects a state’s ability to regulate the service. Telecommunications services are generally subject to “dual state and federal regulation.” See Louisiana Pub. Serv. Comm’n v. FCC, 476 U.S. 355, 375 (1986). By contrast, “any state regulation of an information service conflicts with the federal policy of nonregulation,” so that such regulation is preempted by federal law. See

Minnesota Pub. Utilities Comm’n v. FCC, 483 F.3d 570, 580 (8th Cir. 2007); see also 47 C.F.R. § 64.702. The FCC has so far declined to classify VoIP services as either information or telecommunications services, despite repeated opportunities to do so.² See Clark v. Time Warner Cable, 523 F.3d 1110, 1113 (9th Cir. 2008) (footnotes omitted) (quoting In re IP-Enabled Services, 19 F.C.C.R. 4863, 4880-81 ¶¶ 26-27, 4886 ¶ 35 (2004)) (explaining that the FCC “solicited comment on whether VoIP services should be classified as ‘telecommunications services’ or ‘information services’ under the Act”).

The MPUC sought to regulate Charter Advanced by asserting that VoIP is a “telecommunications service” as defined by the Act. Charter responded by filing an action in the district court arguing that Spectrum Voice is an “information service” under the Act, requiring preemption of state regulation. In the absence of direct guidance from the FCC explicitly classifying VoIP services, the district court interpreted the Act with reference to prior FCC orders, and concluded that Spectrum Voice was an information service. The MPUC now appeals.

II. Discussion

We review the district court’s grant of summary judgment *de novo*, “viewing all evidence and drawing all reasonable inferences in the light most favorable to” the nonmovant. Riddle v. Riepe, 866 F.3d 943, 946 (8th Cir. 2017) (quoting Helmig v. Fowler, 828 F.3d 755, 760 (8th Cir. 2016)). Summary judgment is appropriate if “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a).

²The FCC’s amicus brief in this case is illustrative. See Brief of the FCC as Amicus Curiae Supporting Appellees at 13-15 (“[T]he agency has not yet resolved the overarching classification issue . . . the agency has not needed to definitively resolve the overarching regulatory classification of . . . VoIP service at this time.”).

As we have noted, “any state regulation of an information service conflicts with the federal policy of nonregulation.” Minnesota Pub. Utilities Comm’n v. FCC, 483 F.3d 570, 580 (8th Cir. 2007). We may therefore affirm the district court if Charter’s VoIP offerings are an information service under the Act.

We conclude that the VoIP technology used by Charter Spectrum is an “information service” under the Act.³ As the district court put it, “the touchstone of the information services inquiry is whether Spectrum Voice acts on the consumer’s information—here a phone call—in such a way as to ‘transform’ that information.” 259 F.Supp.3d at 987; see 47 U.S.C. § 153(24). IP-TDM calls involve just such a transformation. For those calls, because information enters Charter’s network “in one format (either IP or TDM, depending on who originated the call) and leaves in another, its system offers ‘net’ protocol conversion, which the FCC has defined as occurring when ‘an end-user [can] send information into a network in one protocol and have it exit the network in a different protocol.’” See id. at 986 (quoting Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended, 11 F.C.C.R. 21905, 21956 ¶ 104 (1996) (“Non-Accounting Safeguards Order”)). While the Non-Accounting Safeguards

³We note that while the FCC would be able to announce a classification decision regarding VoIP, it has so far declined to do so. See, e.g., USF-ICC Transformation Order, 26 F.C.C.R. 17663, 18013-14 ¶ 954 (2011) (explaining that “the Commission has not classified interconnected VoIP services or similar one-way services as ‘telecommunications services’ or ‘information services’”) (footnote omitted). We sometimes stay our hand “while seeking the guidance of an administrative agency’s perceived expertise” when resolving a question concerning a statute ordinarily interpreted by the agency. See Owner-Operator Indep. Drivers Ass’n, Inc. v. New Prime, Inc., 192 F.3d 778, 785 (8th Cir. 1999) (discussing the doctrine of primary jurisdiction). Here the agency has “decline[d] to provide guidance” for well over a decade, so that we may, in our discretion, proceed “according to [our] own light.” Id. (quoting Atchison, Topeka & Santa Fe Ry. v. Aircoach Transp. Ass’n, 253 F.2d 877, 886 (D.C. Cir. 1958)).

Order did not specifically discuss VoIP technology, its rationale suggests that Spectrum Voice’s protocol conversion is a “transformation” of the relevant communications.⁴ See Non-Accounting Safeguards Order, 11 F.C.C.R. at 21956 ¶ 104 (1996) (explaining that “conversion and protocol processing services are information services under the 1996 Act”); see also Vonage Holdings Corp. v. Minnesota Pub. Utilities Comm’n, 290 F. Supp. 2d 993, 999 (D. Minn. 2003) (citing 47 C.F.R. § 64.702(a)) (explaining that the “process of transmitting customer calls over the Internet require[d]” a VoIP provider to “‘act on’ the format and protocol of the information” and finding that such providers use telecommunications services, rather than providing them). Spectrum Voice’s service is an information service because it “mak[es] available information via telecommunications” by providing the capability to transform that information through net protocol conversion. Cf. Nat’l Cable & Telecommunications Ass’n v. Brand X Internet Servs., 545 U.S. 967, 988 (2005) (explaining that “all information-service providers . . . use ‘telecommunications’ to provide consumers with [their] service”).

We briefly address the Act’s carve-out from the definition of “information service.” The definition of “information service” excludes services that comprise a “capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” 47 U.S.C. § 153(24). The FCC has further defined this exception to include “(1) services ‘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) protocol processing ‘in

⁴The FCC took the position in this case that none of “the various FCC authorities invoked by the district court” should be read to “definitively resolve” the regulatory classification of Charter’s VoIP services. See Brief of the FCC as Amicus Curiae Supporting Appellees at 26-29. To be clear, we do not resolve the statutory question solely on the basis of those authorities—though like the FCC, we believe they “continue to provide important guidance on how to interpret and apply the Communications Act.” Id. at 27.

connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing [CPE])’ and (3) services ‘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).’” 259 F.Supp.3d at 988-89 (quoting Non-Accounting Safeguards Order, 11 F.C.C.R. at 21957 ¶ 106).

None of the exceptions alter our conclusion that Spectrum Voice is an information service. The first exception is inapplicable because the service at issue is “between or among users.” The network protocol technology is an essential feature of Spectrum Voice’s offerings, as the ability to call users of legacy telephony services via Spectrum Voice is a vital selling point for consumers. The second exception is also inapplicable. Spectrum Voice’s service is not aimed at providing backwards compatibility for existing CPE. Instead, Spectrum Voice’s customers must receive new CPE (the eMTA) to utilize its services. Finally, the “internetworking” exception does not apply. The FCC defines CPE as falling outside a carrier’s network. See In re Federal–State Joint Board on Universal Service, 18 F.C.C.R. 10958, 10067 ¶ 18 (2003) (defining CPE as “equipment that falls on the customer side of the demarcation point between customer and network facilities”). As such, the eMTA is located outside of the carrier’s network by definition. Since any conversion back into the original form of the information takes place outside of the network (in the eMTA), the “internetworking” exception is inapplicable.

III. Conclusion

We agree with the district court that Spectrum Voice is an “information service” under the Act. Preemption of state regulation of Spectrum Voice is therefore warranted. Accordingly, we affirm the district court’s grant of summary judgment to Charter Advanced.

GRASZ, Circuit Judge, dissenting.

Because I do not believe net protocol conversions qualify as information services under the federal Communications Act, I would reverse the district court's conclusion that federal law preempts state regulation of Charter's Spectrum Voice service.

I. Background

The FCC and the telecommunications industry have long debated the question of how best to address protocol conversions when categorizing services. In its Computer II inquiry in 1980, the FCC created a “relatively clear-cut” distinction between “basic services” and “enhanced services.” *In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384, 420–21 ¶¶ 97 (1980) (“*Computer II*”). Basic services were the typical telecommunications services, while any improvement on that service was an enhanced service, including protocol conversions. *Id.* at ¶¶ 97, 99. This conclusion was not unanimous because, as a dissenting commissioner argued, some type of protocol conversion may be necessary to provide any service. *Id.* at 511–12, 516 (Fogarty, Comm'r, dissenting in part). In 1983, the FCC clarified that some protocol conversion is necessary to basic services, but it narrowly construed which protocol conversions are necessary while indicating that it would consider waiver applications for basic service providers that wanted to add other protocol conversions. *See In the Matter of Communications Protocols under Section 64.702 of the Commission's Rules and Regulations*, 95 F.C.C.2d 584, 590–92 ¶¶ 14–16 (1983).

The Telecommunications Act of 1996, which amended the Communications Act, largely adopted the FCC's basic service and enhanced service categories in its definitions of telecommunications service and information service, respectively, with a very important change that is relevant here: it did not include protocol conversions

in the definition of information service. Compare 47 U.S.C. § 153(24) with *Computer II* at ¶ 5. In a 1998 report to Congress, the FCC admitted that its prior discussion of protocol processing in its 1996 *Non-Accounting Safeguards Order* may be incorrect in light of that statutory definition, and it deferred the categorization of net protocol conversions to another day. In *the Matter of Fed.-State Joint Bd. on Universal Serv.*, 13 FCC Rcd. 11501, 1998 WL 166178, at ¶¶ 49–52 (1998) (the “*Stevens Report*”) (discussing *Non-Accounting Safeguards Order* at ¶¶ 104–07). It remained unclear whether protocol conversions amounted to *transforming* information, making the service an “information service,” or were simply part of *transmitting* information, making it a “telecommunications service.”

Twenty years later, the lack of clarity continues. This is at least in part because the entire telephone network is in the process of changing from time-division multiplex (“TDM”) to internet protocol (“IP”). The statute contemplates such transitions because it defines a telecommunications service as “offering [] telecommunications for a fee directly to the public . . . *regardless of the facilities used.*” 47 U.S.C. § 153(53) (emphasis added). If the converters used to pass calls between old and new network lines during a transition are the defining feature of an information service, then any telecommunications service would become a lightly regulated information service while using conversion and revert back to being a heavily regulated telecommunications service as soon as the transition from TDM to IP is complete. Such an understanding would create a functional end-run around the statutory language stating a telecommunications service remains such “regardless of the facilities used.”

While the FCC has not completely resolved the categorization of VoIP, it has issued some orders regarding IP lines, and Charter is avoiding that precedent based on a technicality regarding where conversion occurs. The FCC previously declared that AT&T’s service is a telecommunications service, even though it uses IP lines in the middle of its network, because the call still enters and exits the network on

traditional phone lines. See *In the Matter of Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, 19 FCC Rcd. 7457 (2004) (“*IP-in-the-Middle Ruling*”). Here, Charter’s calls technically begin on IP lines and end on traditional phone lines — even though their customers use traditional phone lines to begin calls — because the converter box is inside the customer’s home. The only practical difference between Charter’s network and AT&T’s network is whether the first converter box is inside or outside customers’ homes.

If performing the conversion from TDM to IP inside a customer’s home is sufficient to convert a telecommunications service into an information service, then AT&T, or any similarly situated provider, could greatly reduce its regulatory burden simply by moving converter boxes inside customers’ homes. A simple change of physical location would transform what used to be telecommunications services to information services. This may explain why the FCC has yet to make categorical pronouncements on protocol conversions. An overarching category for all net protocol conversions would create a potential pathway for every company to escape the heavier telecommunications service regulations.

The FCC started a proceeding to address the categorization of interconnected VoIP in 2004. See *IP-Enabled Services*, 19 FCC Rcd. 4863 (2004). In its amicus brief to this Court, the FCC confirmed that this proceeding is still pending, stating that none of its prior authorities “purport[] to decide (nor should be read to definitively resolve) the regulatory classification” at issue here.

II. Analysis

In my view, the net protocol conversion in Charter’s service makes it either a telecommunications service or something entirely outside the primary categories of

services in the Communications Act. The one thing it cannot be is an information service.

Under its statutory definition, an information service includes “transforming . . . information via telecommunications.” 47 U.S.C. § 153(24). A telecommunications service is “the offering of telecommunications for a fee directly to the public.” *Id.* § 153(53). Both types of services involve “telecommunications,” which is defined 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.” *Id.* § 153(50).

If we assume that interconnected VoIP services “provide” “telecommunications” as defined in statute,⁵ then we must presume that no “change” occurs between the two phone sets on either end of the interconnected VoIP line. *See id.* Charter argues that the telecommunications portion of its service is between the customer’s premises and the media gateway that performs the protocol conversion, but this argument is incorrect since the receiving phone, not the media gateway, is the “point[] specified by the user.” *Id.* As a result, when addressing the question of whether Charter’s media gateway transforms information, in order to rule in favor of Charter, we would have to conclude that a device that does not change the form or content of information (because it is part of telecommunications) is also a device that transforms information (because it is an information service). *See id.* § 153(24), (50). The first conclusion forecloses the second one. In short, if Charter’s service provides telecommunications (as defined in statute), then its net protocol conversion cannot be part of an information service, but instead must be part of a telecommunications service.

⁵The Parties agreed on this point, but it appears that no circuit court has ever addressed whether interconnected VoIP is by definition “telecommunications.” *See, e.g., Vonage Holdings Corp. v. FCC*, 489 F.3d 1232, 1241 (D.C. Cir. 2007) (declining to reach the issue because it was not preserved for review).

On the other hand, if a net protocol conversion does “change” the information sent and received by users, it is not telecommunications by definition and is thus neither a part of a telecommunications service nor an information service (which, again, is offered “*via telecommunications*”). *Id.* § 153(24) (emphasis added), (50), (53). To be clear, protocol conversions do not necessarily place a service outside telecommunications as defined in the Communications Act. As the FCC has observed, whether a protocol conversion changes the form or content is assessed “as sent and received” by end users, meaning that a conversion that makes no net change to the information can be part of a telecommunications service. *See Non-Accounting Safeguards Order* at ¶ 106; *IP-in-the-Middle Ruling* at ¶¶ 12–13. But for our purposes, we need not attempt to resolve the decades-long dispute of how to categorize various types of protocol conversions.⁶ It is sufficient that if Charter’s net protocol conversion does not change the information (because it provides telecommunications), then its service cannot at the same time involve transforming the information (so as to make it an information service); and conversely, if Charter’s net protocol conversion does change the information, then it is not telecommunications and thus not part of either category of service.

I also reach no conclusions about whether the Communications Act or the FCC could preempt MPUC’s regulations on *other* grounds. For example, the Communications Act requires that state regulation of universal service be consistent with FCC regulations. 47 U.S.C. § 254(f). Furthermore, some portions of the Communications Act treat interconnected VoIP as distinct from other services, *see*,

⁶I find no merit in the MPUC’s arguments that net protocol conversions meet the current telecommunications management exception categories for reasons similar to the majority, but I also see nothing in the statute that prevents the FCC from recognizing additional categories should it find that approach to be the best way to resolve an issue.

for example, 47 U.S.C. §§ 222(g), 615a-1(g);⁷ *but see id.* § 620(a),⁸ which suggests that a regulatory solution is needed beyond the narrow issue in this case. If new technology has made federal law insufficient to adequately address interconnected VoIP and its relationship to state law, then the FCC should use its existing authority to solve the problem or Congress should make any necessary statutory fixes.

The question presented to us is rather narrow: whether the federal Communications Act categorizes net protocol conversions in interconnected VoIP as an information service. I conclude it does not. I also agree with the FCC that none of its prior orders purport to decide or should be read to definitively resolve the regulatory classification at issue here. Thus, I would reverse the district court’s finding of preemption.

⁷The term “IP-enabled voice service” in these statutes refers to interconnected VoIP. *See* 47 U.S.C. § 615b(8) (set out first).

⁸The term “advanced communications” includes interconnected VoIP. *See* 47 U.S.C. § 153(1).