United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 9, 2007 Decided June 1, 2007

No. 06-1276

VONAGE HOLDINGS CORPORATION,
PETITIONER

v.

FEDERAL COMMUNICATIONS COMMISSION AND
UNITED STATES OF AMERICA,
RESPONDENTS

VERIZON COMMUNICATIONS INC., ET AL.,
INTERVENORS

Consolidated with
06-1317

On Petitions for Review of an Order of the
Federal Communications Commission

Glenn B. Manishin argued the cause for petitioner Computer and Communications Industry Association. With him on the briefs were *Jonathan E. Canis* and *Stephanie A. Joyce.*

Christopher J. Wright argued the cause for petitioner Vonage Holdings Corporation. With him on the briefs were *Scott Blake Harris*, *Brita D. Strandberg*, and *Stephanie Weiner*.

Ross A. Buntrock and *Michael B. Hazzard* were on the briefs for intervenor Voice on the Net Coalition, Inc. in support of petitioner.

James M. Carr, Counsel, Federal Communications Commission, argued the cause for respondents. With him on the brief were *Thomas O. Barnett*, Assistant Attorney General, U.S. Department of Justice, *Robert B. Nicholson* and *Robert J. Wiggers*, Attorneys, *Samuel L. Feder*, General Counsel, Federal Communications Commission, *Eric D. Miller*, Deputy General Counsel, *Richard K. Welch*, Associate General Counsel, and *John E. Ingle*, Deputy Associate General Counsel.

David C. Bergmann was on the brief for intervenor National Association of State Utility Consumer Advocates.

Michael E. Glover, *Edward Shakin*, *Christopher M. Miller*, *Helgi C. Walker*, *Joshua S. Turner*, and *Megan L. Brown* were on the brief for intervenor Verizon Communications Inc.

Before: TATEL and GARLAND, *Circuit Judges*, and EDWARDS, *Senior Circuit Judge*.

Opinion for the Court filed by *Circuit Judge* TATEL.

TATEL, *Circuit Judge*: Petitioners, providers of voice over internet protocol services (VoIP), challenge a Federal Communications Commission order requiring them to

contribute to the Universal Service Fund (USF). Specifically, they claim that, in requiring such contributions, the Commission exceeded its authority under the Telecommunications Act of 1996 and acted arbitrarily and capriciously by (1) analogizing VoIP to wireline toll service for the purposes of setting the presumptive percentage of VoIP revenues generated interstate or internationally, (2) requiring pre-approval for traffic studies submitted by VoIP providers but not for those submitted by wireless providers, and (3) suspending the "carrier's carrier rule" with respect to VoIP. We conclude that the Commission has statutory authority to require VoIP providers to make USF contributions and that it acted reasonably in analogizing VoIP to wireline toll service for purposes of setting the presumptive percentage of VoIP revenues generated interstate and internationally. But finding the Commission's explanation wanting as to the pre-approval of traffic studies and the suspension of the carrier's carrier rule, we vacate those portions of the Order.

I.

In March 2004, the Federal Communications Commission issued a notice of proposed rulemaking calling for comments on how best to regulate a range of internet protocol-enabled services, including voice over internet protocol, an internet-based service offering "multidirectional voice functionality, including, but not limited to, services that mimic traditional telephony." *In re IP-Enabled Services*, 19 F.C.C.R. 4863, 4866 n.7 (2004); *see also Minn. Pub. Utils. Comm'n v. FCC*, Nos. 05-1069, 05-1122, 05-3114, 05-3118, 2007 WL 838938, at *1 (8th Cir. Mar. 21, 2007) (describing the difference between packet-switched and circuit-switched communications). Perhaps most significantly for VoIP's future, the Commission asked whether it should classify VoIP

as a "telecommunications service" or an "information service." If classified as a telecommunications service, VoIP would be subject to mandatory Title II common carrier regulations, 47 U.S.C. § 153(44), but as an information service it would not. *See Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 975–77 (2005). The Commission also requested comment on a range of narrower questions, including—most relevant to this case—whether VoIP providers should be required to contribute to the Universal Service Fund (USF). *See IP-Enabled Services*, 19 F.C.C.R. at 4905 ¶ 63 (calling for comment on whether VoIP providers should contribute to the USF but stating that the question would be addressed in the separately docketed *Universal Service Contribution Methodology* proceeding).

The USF is a funding stream the Commission uses to subsidize telecommunications and information services in rural and high-cost areas, as well as for schools, libraries, and low-income households. 47 U.S.C. § 254(b)(3), (h)(1)(B). The USF receives its funding from businesses in the telecommunications sector; some businesses are required by statute to contribute while others must contribute only when the Commission has, in its discretion, required them to do so. Specifically, the Act mandates contributions from "[e]very telecommunications carrier that provides interstate telecommunications services." *Id.* § 254(d). Moreover, under its permissive contribution authority, the Commission may demand USF contributions from "[a]ny other provider of interstate telecommunications . . . if the public interest so requires." *Id.*

Two years later and following public comment, the Commission issued an order requiring providers of "interconnected" VoIP services to contribute to the USF. *In re Universal Service Contribution Methodology*, 21 F.C.C.R.

7518 (2006) (hereinafter "Order"). Interconnected VoIP services "(1) enable real-time, two-way voice communications; (2) require a broadband connection from the user's location; (3) require IP-compatible customer premises equipment; and (4) permit users to receive calls from and terminate calls to the PSTN [public switched telephone network]." *Id.* at 7526 ¶ 15; *see also* 47 C.F.R. § 9.3.

Deferring a decision on whether to classify VoIP as a telecommunications service or an information service, the Commission grounded its order in its permissive contribution authority and, alternatively, its Title I ancillary jurisdiction. *See Am. Library Ass'n v. FCC*, 406 F.3d 689, 692–93 (D.C. Cir. 2005) (holding that the Commission may regulate under its ancillary jurisdiction when "the subject of the regulation [is both] . . . covered by the Commission's general grant of jurisdiction under Title I of the Communications Act . . . . [and] 'reasonably ancillary to the effective performance of the Commission's various responsibilities.'" (citation omitted)). The Commission gave three reasons for taking this discretionary step. First, USF contributions have declined in recent years, while interconnected VoIP services have "experienced dramatic growth." Order at 7528 ¶ 19. Thus, requiring contributions from interconnected VoIP providers would "preserve and advance universal service." *Id.* at 7527 ¶ 17. Second, interconnected VoIP providers ought to contribute to the USF because "much of the appeal of their services to consumers derives from the ability to place calls to and receive calls from the PSTN, which is supported by universal service mechanisms." *Id.* at 7540 ¶ 43. Third, competitive neutrality—a principle that requires advantaging no one technology over another—favors making VoIP providers contribute because they increasingly compete with analog voice service providers, who contribute to the USF. *Id.* at 7541 ¶ 44.

Having decided to require VoIP providers to contribute, the Commission turned to the issue of how to calculate the level of such contributions. The Commission assesses USF contributions only on revenues generated from interstate or international calls. *See Tex. Office of Pub. Util. Counsel v. FCC*, 183 F.3d 393, 446–48 (5th Cir. 1999). For companies connecting landline customers, determining the percentage of interstate or international calls is relatively simple. But for wireless and VoIP providers—whose customers may use their services from many locations and often have area codes that do not correspond to their true location—determining the percentage of interstate and international traffic is more difficult. Given those difficulties, the Commission established—as it has since 1998 for wireless—a "safe harbor" that approximates the percentage of VoIP revenues generated from interstate and international calls. The safe harbor ensures that VoIP providers will not have to make USF contributions on more than a certain percentage of their revenues. As its name suggests, the safe harbor is only a ceiling: VoIP providers may reduce their USF contributions if, through traffic studies, they can show that their actual percentage of interstate and international revenues falls below the safe harbor percentage.

To set the safe harbor level, the Commission sought to identify the "appropriate analogue" for VoIP service. Order at 7545 ¶ 53. The Commission considered two possibilities: wireline toll service (colloquially referred to as landline long distance), which the Commission presumes to be 64.9% interstate and international, and wireless service, presumed to be 37.1% interstate and international. The Commission selected wireline toll service as the better analogue, giving two reasons for its decision. First, it cited two industry reports, one estimating that 83.8% of VoIP traffic is interstate

or international and a second putting the figure at 66.2%—both figures higher than the safe harbor level for wireline toll service. Second, the Commission cited advertisements demonstrating that VoIP providers frequently market their service as a substitute for wireline toll service, noting that many customers purchase such plans in order to "place a high volume of interstate and international calls" and consequently "benefit from the pricing plans the providers offer for such services." *Id.* at 7546 ¶ 55.

The Commission then ruled that interconnected VoIP providers wishing to contribute less than the safe harbor level may do so only after the Commission has approved their traffic studies. This rule differs from the rule applicable to wireless providers, who may contribute according to the findings of their traffic studies even before Commission approval. Having "identified concerns in the wireless context with the use of traffic studies," the Commission feared that allowing VoIP providers to rely on traffic studies without pre-approval would "risk extending the problems we have identified with the use of traffic studies . . . to a new technology." *Id.* at 7547 ¶ 57. Addressing the inconsistent treatment of wireless and VoIP providers, the Commission explained that imposing a pre-approval requirement on both groups "would be disruptive to wireless contributors who, unlike interconnected VoIP providers, are already relying on the current regime." *Id.*

Finally, the Commission suspended the so-called carrier's carrier rule, which prevents duplicative USF contributions at the wholesale and retail levels. The rule accomplishes this by basing contributions only on "end-user telecommunications revenues." 47 C.F.R. § 54.706(b). The Commission suspended the rule with respect to VoIP for two quarters following issuance of the Order, explaining that "if

carriers are permitted to invoke the carrier's carrier rule immediately to exclude revenues from interconnected VoIP providers, the result could be a net decrease in the Fund in the short term," a result inconsistent with its obligation to "preserve and advance universal service." Order at 7548 ¶ 59.

The Computer and Communications Industry Association (CCIA), a trade group with at least one interconnected VoIP provider among its members, and Vonage Holdings Corporation (Vonage), a provider of interconnected VoIP, now petition for review. The CCIA challenges the Commission's assertion of authority—under both section 254(d) and its Title I ancillary jurisdiction—to require VoIP providers to contribute to the USF. Vonage does not contest the Commission's authority to require USF contributions, challenging instead three other aspects of the Order: the safe harbor level, the pre-approval requirement for traffic studies, and the suspension of the carrier's carrier rule.

II.

Section 254(d) of Title 47 states that:

> Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service. . . . Any other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.

47 U.S.C. § 254(d). According to the Commission, section 254(d)'s "permissive portion" (the final sentence) authorizes it to require VoIP providers to contribute to the USF, regardless of whether VoIP is ultimately classified as a "telecommunications service" or an "information service." Understanding this position requires a brief detour through the regulatory classification decision the Commission has yet to make and the statutory text and case law governing it.

The Act defines both "telecommunications service" and "information service" as "offerings." *See* 47 U.S.C. § 153(46) (defining "[t]elecommunications service" as "the offering of telecommunications for a fee directly to the public"); *id.* § 153(20) (defining "[i]nformation service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications"). In an order issued several years ago, the Commission advanced a narrow definition of the verb "offer," explaining that cable modem service, even though it contains telecommunications as a component, is not a "telecommunications service" because an "offering" of telecommunications can only be something perceived as telecommunications by the end user viewing the integrated, finished product. *In re Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 17 F.C.C.R. 4798, 4822–23 ¶¶ 38–39 (2002) (hereinafter "Cable Modem Order"). Because cable modem customers use the service "to access the World Wide Web . . . rather than 'transparently' to transmit and receive ordinary-language messages without computer processing" the Commission concluded that "cable modem service is not a 'stand-alone,' transparent offering of telecommunications." *Brand X*, 545 U.S. at 988 (citing Cable Modem Order at 4823–4825 ¶¶ 41–43). In *Brand X*, the Supreme Court upheld the

Commission's interpretation of the word "offer" as reasonable, explaining:

> It is common usage to describe what a company "offers" to a consumer as what the consumer perceives to be the integrated finished product, even to the exclusion of discrete components that compose the product . . . . One might well say that a car dealership "offers" cars, but does not "offer" the integrated major inputs that make purchasing the car valuable, such as the engine or the chassis. It would, in fact, be odd to describe a car dealership as "offering" consumers the car's components in addition to the car itself.

Brand X, 545 U.S. at 990.

Were the Commission to conclude that VoIP is an "offering of telecommunications" and therefore to classify it as a telecommunications service, VoIP providers would fall under section 254(d)'s mandatory contribution language (the first sentence). The scope of the Commission's *permissive* contribution authority, however, does not depend on whether VoIP is considered an "offering" of either telecommunications or information. Rather, the Commission's permissive contribution authority extends to "*provider[s]* of interstate telecommunications." 47 U.S.C. § 254(d) (emphasis added). The verb "provide," the Commission explained, "is a different and more inclusive term than 'offer.'" Order at 7538–39 ¶ 40. Black's Law Dictionary, upon which the Commission relied, defines "'provide'" as "'[t]o make, procure or furnish for future use, prepare. To supply; to afford; to contribute.'" *Id.* (alteration in original) (quoting BLACK'S LAW DICTIONARY 1244 (6th ed. 1990)). Under this definition, the Commission explained, the verb "provide" is broad enough to include the

act of supplying a good or service as a component of a larger, integrated product. For instance, under the Commission's interpretation, McDonald's provides beef, as well as hamburgers, and *The Washington Post* provides ink, as well as newspapers.

After concluding that a "provider of telecommunications" need only supply telecommunications as a component of its finished product, the Commission explained that VoIP does in fact include telecommunications as a component. The Act defines "[t]elecommunications" 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." 47 U.S.C. § 153(43). The Commission explained that interconnected VoIP services provide such transmission by virtue of their interconnection with the PSTN:

> [B]y definition, interconnected VoIP services are those permitting users to receive calls from and terminate calls to the PSTN. . . . [W]e find interconnected VoIP providers to be "providing" telecommunications regardless of whether they own or operate their own transmission facilities or they obtain transmission from third parties. In contrast to services that merely use the PSTN to supply a finished product to end users, interconnected VoIP supplies PSTN transmission *itself* to end users.

Order at 7539–40 ¶ 41 (footnotes and internal quotation marks omitted); *see also id.* at 7540 n.147 (distinguishing a contrary result in *In re Petition for Declaratory Ruling that pulver.com's Free World Dialup Is Neither Telecommunications nor a Telecommunications Service*, 19 F.C.C.R. 3307, 3312 ¶ 9 (2004), on the grounds that the non-

interconnected VoIP provider in that order did not "supply connectivity to any PSTN user.").

With this background in mind, we turn to the issues before us.

III.

Where, as here, Congress has delegated interpretive authority to an agency, we review the agency's interpretation of a statute under the familiar two-part test set forth in *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). We first inquire whether "Congress has directly spoken to the precise question at issue. . . . [and if] the intent of Congress is clear, that is the end of the matter." *Id.* at 842–43. But if "the statute is silent or ambiguous with respect to the specific issue, the question . . . is whether the agency's answer is based on a permissible construction of the statute." *Id.* at 843. In this case, the Commission does not contend that the statute unambiguously places VoIP providers within the phrase "providers of telecommunications." Nor has petitioner CCIA given us any reason to conclude that either the phrase "providers of telecommunications" or the Act's definition of telecommunications unambiguously exempts VoIP providers from the Commission's permissive contribution authority. Thus, we proceed to *Chevron* step two, where "we need not determine that the [agency's] reading . . . is the best possible reading, only that it was reasonable." *Am. Fed'n of Gov't Employees, Local 446 v. Nicholson*, 475 F.3d 341, 355 (D.C. Cir. 2007).

The Commission's application of section 254(d) to interconnected VoIP providers involved two discrete decisions: (1) that, unlike the verb "offer," the verb "provide" may apply to the act of supplying a component of an

integrated product, and (2) that VoIP providers supply telecommunications as a component of their service.

Provide v. Offer

Recall that in *Brand X* the Supreme Court upheld the narrow definition of "offer" advanced by the Commission. Thus, we now face only two issues: has the Commission reasonably interpreted the word "provide," and was it reasonable for the Commission to give the word "provide" a different meaning than the word "offer"?

As to the first issue, we have little trouble concluding that the word "provide" is sufficiently broad to encompass the Commission's interpretation. Returning to *Brand X*'s car dealership hypothetical, we see nothing strange about the statement that a dealership provides both cars *and* engines. Indeed, one could reasonably interpret the statement that a dealership "does not provide engines" to mean that it sells cars without engines, not that it won't sell disconnected engines.

We also see nothing that would prevent the Commission from interpreting the word "offer" from the demand side (i.e., the consumer's perception of what she receives) and the word "provide" from the supply side (the seller's perception of what she supplies). True, the words have mutual synonyms and can be used interchangeably in some contexts. *See, e.g.*, WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 1566, 1827 (1993) (listing "supply" in the definitions of both words). Such similarities, however, provide an insufficient basis for concluding that Congress unambiguously intended the two words to have the same meaning—something it could have accomplished quite simply by using the same word. Indeed, we have repeatedly held that "'[w]here different terms are used in a single piece of legislation, the court must presume

that Congress intended the terms to have different meanings.'" *Transbrasil S.A. Linhas Aereas v. Dep't of Transp.*, 791 F.2d 202, 205 (D.C. Cir. 1986) (alteration in original) (quoting *Wilson v. Turnage,* 750 F.2d 1086, 1091 (D.C. Cir. 1984)). Thus, the Commission's construction of the verb "provide" in the phrase "providers of telecommunications" is reasonable under *Chevron* step two.

Telecommunications as a Component of VoIP

CCIA presents three challenges to the Commission's finding that VoIP providers supply telecommunications as a component of their service insofar as they "suppl[y] PSTN transmission *itself* to end users." Order at 7540 ¶ 41. All three are unpersuasive.

First, CCIA argues that "[a]s only telecommunications, and not 'information services,' may be subject to the USF contribution obligations under the Act, the *VoIP Order* exceeds the scope of the Commission's authority." CCIA Br. 22–23. Spoiling for tomorrow's battle, CCIA insists that "VoIP is an information service, whether or not it is 'interconnected' with the PSTN." CCIA Br. 23–24. But, although "information service" and "telecommunications service" are mutually exclusive categories, CCIA points to no authority supporting its argument that a provider of "information services" cannot also be a "provider of telecommunications" for the purposes of section 254(d). Indeed, the Act clearly contemplates that "telecommunications" may be a component of an "information service," defining the latter as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." 47 U.S.C. § 153(20).

Second, CCIA argues that "[u]nder *Brand X*, the Commission is not permitted to isolate the 'transmission element' of VoIP and consider that component in isolation for purposes of Title II classification." CCIA Br. 29. But in *Brand X* the Court merely held that the meaning of the word "offering" in the statute's definition of "telecommunications service" was ambiguous and that the Commission's narrow interpretation was reasonable. The Court had no occasion to consider the meaning of the phrase "providers of telecommunications," much less to determine that the phrase unambiguously demands the same construction the Commission applies to an "offering of telecommunications."

Finally, CCIA argues that "since *interconnected* VoIP always involves change in the 'form or content' of information, it cannot by definition be 'telecommunications.'" CCIA Reply Br. 6. But we have found no indication that anyone made this argument before the Commission, which may explain why the Commission never addressed it. Asked about this at oral argument, CCIA's counsel pointed to two portions of the record where he assured us we would find the argument. *See* Oral Arg. Tr. 8 (citing CCIA Reply Br. 5 n.5). Like much of CCIA's brief, however, the cited comments argue only that VoIP is an information service, not that interconnected VoIP providers provide no "telecommunications" as a component of their service. Accordingly, we may not address this argument here. *See* 47 U.S.C. § 405(a) (foreclosing judicial review of "questions of fact or law upon which the Commission . . . has been afforded no opportunity to pass").

Finding that the Commission has section 254(d) authority to require interconnected VoIP providers to make USF contributions, we have no need to decide whether the

Commission could have also done so under its Title I ancillary jurisdiction.

IV.

Next we turn to Vonage's challenges to the safe harbor level, the pre-approval requirement for VoIP traffic studies, and the suspension of the carrier's carrier rule. We review these decisions under the arbitrary and capricious standard, affirming if the Commission "considered the relevant factors and articulate[d] a rational connection between the facts found and the choice made." *BellSouth Telecomms., Inc. v. FCC*, 469 F.3d 1052, 1056 (D.C. Cir. 2006) (alteration in original) (citation and internal quotation marks omitted). Mindful of Congress's insistence that USF contributions be made "on an equitable and nondiscriminatory basis," we devote particular attention to the Commission's reasons for treating VoIP differently from other technologies. 47 U.S.C. § 254(d); *see also* 47 U.S.C. § 254(b)(4) ("All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.").

Safe Harbor Level

The Commission set the safe harbor level by analogizing VoIP to wireline toll service. Because VoIP's functionality and customer profile differ from those of other technologies, reasoning by analogy in this way invites some inevitable imprecision. Vonage, however, does not challenge this aspect of the Commission's method, nor do we think it could, given our cases demanding far less than perfect precision in agency line drawing. In *WJG Telephone Co. v. FCC*, we wrote:

> It is true that an agency may not pluck a number out of thin air when it promulgates rules in which percentage terms play a critical role. When a line has to be drawn, however, the Commission is authorized to make a "rational legislative-type judgment." If the figure selected by the agency reflects its informed discretion, and is neither patently unreasonable nor "a dictate of unbridled whim," then the agency's decision adequately satisfies the standard of review.

675 F.2d 386, 388–89 (D.C. Cir. 1982) (citations omitted); *see also WorldCom, Inc. v. FCC*, 238 F.3d 449, 461–62 (D.C. Cir. 2001) ("The relevant question is whether the agency's numbers are within a zone of reasonableness, not whether its numbers are precisely right." (internal quotation marks omitted)).

Vonage argues that the Commission acted arbitrarily and capriciously in choosing wireline toll service instead of wireless service as the analogue for VoIP. The Commission analogized VoIP to wireline toll service principally because VoIP providers market their service as a substitute for wireline toll service and offer pricing plans—typically flat fees for unlimited local and long distance calls—that make the service attractive to customers who place high volumes of interstate and international calls. Questioning this analogy, Vonage argues that, unlike wireline toll service, VoIP functions as an "all-distance service" that enables local as well as long distance and international calls. Vonage also points out that the Commission recognized VoIP's all-distance functionality in two previous decisions, one requiring VoIP providers to ensure 911 service, *In re IP-Enabled Services, E911 Requirements for IP-Enabled Service Providers*, 20 F.C.C.R. 10,245, 10,246 ¶ 1 (2005), and the other requiring them to

provide intercept capability for law enforcement, *In re Communications Assistance for Law Enforcement Act and Broadband Access and Services*, 20 F.C.C.R. 14,989, 15,009–10 ¶ 42 (2005).

We agree with Vonage that this difference in capabilities renders the VoIP/wireline toll service analogy imperfect. Perfection, however, is not what the law requires. To prevail, Vonage must show that wireless is so much the better analogue for VoIP that the Commission acted arbitrarily and capriciously by failing to select it. This Vonage has not done. The mere fact that both VoIP and wireless are "all-distance" services hardly compels the conclusion that usage patterns for VoIP are closer to those for wireless than to those for wireline toll service. Vonage's "all-distance" argument also does nothing to disturb the Commission's conclusion that VoIP and wireless are likely to attract different types of customers—with VoIP customers predisposed, on average, to making more long distance and international calls. Indeed, Vonage concedes that VoIP is unlikely to attract customers who make relatively few long distance calls, but nowhere argues that the same is true for wireless. That omission is significant: if VoIP only attracts customers who make high volumes of long distance and international calls but wireless attracts all kinds of customers—perhaps because its mobility appeals even to people who make few long distance calls—then VoIP will carry a greater proportion of long distance and international calls than wireless.

Because Vonage has neither shown why usage patterns for VoIP are more like those for wireless than for wireline toll service nor unsettled the Commission's reasoning regarding the type of customer attracted to VoIP, we have little trouble rejecting its challenge to the safe harbor level. Our confidence in this conclusion is unshaken by Vonage's criticism of the

two industry reports cited in the Order. One of those reports estimates that 83.8% of VoIP traffic is long distance or international and the other puts the figure at 66.2%. Vonage insists that these reports, both of whose estimates exceed the 64.9% level selected by the Commission, shed no light on the issue because they estimate world-wide rather than just U.S. VoIP traffic and because nothing suggests that the reports cover only *interconnected* VoIP. For these reasons, we agree with Vonage that the two reports, by themselves, would provide weak support for the Commission's decision. But the Commission did not hang its hat solely on these reports. Indeed, had the Commission done so, we expect that, given the reports' estimates, it would have chosen an even higher safe harbor level. The Commission, moreover, did not overstate the reports' precision, citing them only for the general proposition that "VoIP traffic is predominantly long distance or international." Order at 7545 ¶ 53. Finally, because neither Vonage nor any other commenter submitted studies of its own, the two industry reports appear to be the only record evidence estimating actual VoIP traffic. Given this, we are reluctant to fault the Commission for considering the only available data, however imperfect. *See Am. Pub. Commc'ns Council v. FCC*, 215 F.3d 51, 56 (D.C. Cir. 2000) ("Where existing methodology or research in a new area of regulation is deficient, the agency necessarily enjoys broad discretion to attempt to formulate a solution to the best of its ability on the basis of available information." (internal quotation marks omitted)).

Pre-Approval of Traffic Studies

The Commission chose to require pre-approval for VoIP traffic studies because of "problems [it had] identified with the use of traffic studies by wireless carriers." Order at 7547 ¶ 57. In other words, the Commission decided that the consequences

of unreliable traffic studies submitted by wireless providers should be borne not by the wireless providers themselves, but by VoIP providers alone. Though recognizing the inequity in this decision, the Commission devoted but one sentence to justifying it: "While there would be a benefit to parity of requirements between wireless and interconnected VoIP providers, a pre-approval requirement for wireless traffic studies would be disruptive to wireless contributors who, unlike interconnected VoIP providers, are already relying on the current regime." *Id*.

This explanation hardly justifies treating VoIP and wireless differently. Imposing a new pre-approval requirement on wireless carriers would no doubt have been disruptive to them. The Commission, however, has failed to explain how it is any less disruptive to impose such an obligation on interconnected VoIP providers who have gone overnight from making no direct USF contributions to contributing at nearly twice the level of wireless providers. We understand that regulations can be more costly when unforeseen. We also understand that the Commission may have assumed, given the *IP-Enabled Services* notice, that interconnected VoIP providers would have foreseen new USF regulations. But even so, the Commission has given us no reason to believe that interconnected VoIP providers foresaw that they would be subject to a pre-approval requirement. After all, the Commission had declined to impose such a requirement on wireless providers despite the fact that their own studies suffered from reliability problems. The Commission's explanation thus gives us no confidence that it has apportioned USF obligations on "an equitable and nondiscriminatory basis." 47 U.S.C. § 254(d).

Suspension of the Carrier's Carrier Rule

We come finally to the Commission's suspension of the carrier's carrier rule—a rule that prevents double payment at the wholesale and retail level by basing USF contributions only on "end-user telecommunications revenues." 47 C.F.R. § 54.706(b). As the Commission acknowledged, this decision effectively required VoIP providers to make duplicative USF contributions for two quarters: once directly on their own interstate and international revenues and a second time indirectly in the form of higher costs passed along from carriers who sell them telecommunications inputs. The Commission's sole justification for imposing this unique obligation on VoIP providers was this: "if carriers are permitted to invoke the carrier's carrier rule immediately to exclude revenues from interconnected VoIP providers, the result could be a net decrease in the Fund in the short term." Order at 7548 ¶ 59.

This explanation suffers from a fundamental flaw: the Commission never explained how there could be a net decrease in fund revenues by making VoIP providers contribute while keeping the carrier's carrier rule in force. Indeed, increasing USF revenues was the very reason the Commission gave for requiring interconnected VoIP providers to contribute to the Fund. And, as Vonage points out, the only reason to expect a decrease in fund revenues would be if the indirect payments interconnected VoIP providers made before the Order were somehow larger than the direct payments they would make after the Order. For that to occur, however, interconnected VoIP providers would have to sell their services for less than they pay for a single wholesale input—an unlikely business model that, without some explanation from the Commission, we are unwilling to assume VoIP providers pursue.

In its brief, the Commission offered several new explanations for a potential short-run decrease in the fund. We, however, may not consider counsel's post-hoc rationalizations. *See SEC v. Chenery Corp.*, 318 U.S. 80, 89–90 (1943).

V.

We grant the petitions for review and vacate the Order with respect to the pre-approval requirement for interconnected VoIP traffic studies and the suspension of the carrier's carrier rule. We deny the petitions with respect to the Commission's construction of section 254(d), the setting of the safe harbor level, and all remaining claims, which we have considered and found to be without merit.

So ordered.