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Reforming the FCC's Internet Protocol Captioned Telephone Service Program

by

Randolph J. May *

I. Introduction and Summary

Internet Protocol Captioned Telephone Service (IP CTS) is a form of a telecommunications relay service (TRS) that allows individuals with a hearing impairment to both read captions and use their residual hearing to understand a telephone conversation.¹ Without doubt, the availability of IP CTS to those hearing impaired persons who need this form of assistance fulfills an important societal function. Indeed, Congress included Section 225 in the Communications Act to require that the Federal Communications Commission ensures the provision of TRS for persons who are

¹ Generally, IP CTS employs two network paths: a connection via the public switched telephone network (PSTN) or a Voice over Internet Protocol (VoIP) service for the voice conversation between the parties to the call, and a separate Internet connection that transmits the other party's voice from the IP CTS user's phone to a communications assistant (CA) and transmits captions from the CA back to the IP CTS user. When an IP CTS user places or receives a call, he or she is automatically connected to a CA at the same time that the parties to the call are connected. In the most widely used version of IP CTS, the CA then re-voices everything the hearing party says into a speech recognition program, which automatically transcribes the words into captions. In a second version, the CA uses stenography to produce the captions, typing the speech content directly into captions. And now, technological advances in computer-driven conversion of spoken language into readable text, or "Automatic Speech Recognition" or "ASR," holds the promise of further increasing the efficiency of IP CTS.

deaf, hard of hearing, deaf-blind, or have speech disabilities.² TRS services are intended to be functionally equivalent to the provision of voice communications services used by persons without disabilities.

Importantly, Section 225 requires the Commission to ensure that telecommunications relay services, including IP CTS, are made available "to the extent possible and in the most efficient manner."³ This direction is an acknowledgement by Congress that, absent a focus by the Commission on efficiency, TRS services likely would not be available to as many persons who need them or be sustainable over time. With the important societal purpose of IP CTS service in mind, along with the mandate that the service be offered in the most efficient manner, I submit that the Commission needs to modernize and reform the program to promote its sustainability. More particularly, the Commission should adopt a uniform compensation rate for IP CTS providers and also implement either a price cap regime or use a reverse auction to drive the compensation rate as close as possible to that which would prevail in a free market.

Back in January 2013, in response to an unusual spike in Internet Protocol Captioned Telephone Service growth the previous year, the Commission adopted interim measures designed to prevent those who did not need the service or who were ineligible users from participating in the IP CTS program. For present purposes, the interim measures adopted in 2013 are not relevant here, and in any event, the FCC's order was vacated in part by the D.C. Circuit.⁴ But those measures marked an acknowledgement by the Commission that meaningful reform measures should be pursued.

Significantly, IP CTS demand continued to grow substantially. From 2011 to 2017, the Commission says that annual IP CTS minutes grew from approximately 29 million to 363 million.⁵ And in 2018-2019, according to the TRS Fund Administrator, IP CTS will represent about 78% of the total minutes compensated by the TRS Fund and about 66% of the total TRS Fund payments.⁶ This amounts to a projected total of almost \$999 million paid for the 2018-2019 period.⁷

As stated above, the IP CTS program meets an important societal need – to make available to hearing-impaired persons the ability to communicate effectively, or as Congress put it in Section 225, to communicate in "a manner that is functionally equivalent to the ability of a hearing individual" who does not have a disability. Like the Commission's Lifeline program, which provides subsidies to support communications services for low-income persons, the IP CTS program is worthy of support not only because it meets the needs of those hearing-impaired individuals who need assistance, but also because, through its "network effect," it fulfills a broader societal purpose. The more people who are able to communicate effectively with each other using available telecommunications services, the more valuable, in a social welfare sense, communications networks become for all users. But, like Lifeline, to be deserving of support –

² 47 U.S.C. §225.

³ 47 U.S.C. §225(b)(1).

⁴ See *Sorenson Communications, Inc. and CaptionCall, LLC v. FCC*, 755 F. 3d 702 (D.C. Cir. 2014).

⁵ Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, CG Docket No. 13-24, FCC 18-79, released June 8, 2018, at para. 8.

⁶ *Id.*

⁷ *Id.*

and to sustain public support – IP CTS must be operated as efficiently as possible, and as free from waste and abuse as possible.

As part of the same proceeding initiated in 2013 when the Commission adopted several interim measures intended to improve the efficient operation of the IP CTS program, the Commission is now considering, in a *Further Notice of Proposed Rulemaking*,⁸ additional substantive measures to reform and modernize the program so that, consistent with the congressional mandate, it is run as efficiently as possible. In light of the significant growth in IP CTS usage, coupled with a declining base of contribution support from the end-user telecommunications revenues that support all TRS services, it is important that the Commission adopt and implement meaningful reforms that implement compensation rates and compensation methodologies that control the costs of the IP CTS program .

More specifically, as explained in more detail below, the Commission should implement a uniform compensation rate for program providers that, to the extent possible, mirrors a free market-driven rate and which is applicable to all IP CTS providers. Consistent with a commitment that all IP CTS providers should be incentivized to operate as efficiently as possible, the Commission should not allow tier-based rates that compensate different providers differentially, regardless of their size or the technology used to provide the service.

Furthermore, going forward, in order to achieve the most cost-effective operation of the IP CTS program, the Commission should implement a ratemaking approach designed to drive compensation rates to market-driven levels that reflect the actual costs of providing service, not the submitted (or claimed) costs as is the case in traditional rate-of-return methodologies. To implement a uniform (non-tiered) compensation rate, the Commission should consider implementing a price cap approach or a reverse auction. Each of these approaches is superior to one that is dependent on the submitted costs claimed by the IP CTS.

II. Interim Steps Towards Modernization and Reform of the IP CTS Program

As the Commission observes in the *Report and Order* released on June 8, 2018, annual IP CTS minutes have grown rapidly for almost the past decade. From 2011 to 2017, they increased from approximately 29 million to 363 million. This represents about 66% of total TRS fund payments to all TRS providers for 2018-2019 – or in actual payments, almost one billion dollars.⁹ During the same period, the telecommunications revenues from end users which support the contributions to the TRS fund have been declining – to wit, the TRS contribution base has decreased from about \$79 billion in 2008 to about \$53 billion in 2018.¹⁰ As the Commission puts it in the *Report and Order*, this raises "the threat that over the long term, ever increasing levels of contribution may not be sustainable."¹¹

⁸ Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, CG Docket No. 13-24, FCC 18-79, released June 8, 2018.

⁹ Id. at para. 8.

¹⁰ Id.

¹¹ Id.

To its credit, the Commission is now focused on taking actions that will comply with the congressional direction to operate the IP CTS program as efficiently as possible. This is important, of course, so that the program can remain sufficiently fiscally sound to be capable of fulfilling its objective of assisting hearing impaired persons. And, concomitantly, it is important so that the public – the consumers who are assessed the charges on their telecom services to contribute to the TRS Fund – continues to support the program.

In the June 2018 *Report and Order*, in an important step towards modernizing and reforming the IP CTS program, the Commission terminated the use of the previously used Multi-State Average Rate Structure (MARS) methodology which had been adopted in 2007. This methodology calculated the interstate compensation rate based on collection of intrastate TRS service rates which were averaged. In short, the Commission determined "that MARS is no longer an effective methodology to ensure that IP CTS compensation rates correlate to actual reasonable costs."¹² In place of a MARS-derived rate, based on the examination of reported cost and demand data submitted by the IP CTS providers, the Commission commenced a reduction in the IP CTS compensation rate from the then-prevailing rate of \$1.9467 per minute to \$1.75 per minute from July 1, 2018 - June 30, 2019, and then to \$1.53 per minute from July 1, 2019 – June 30, 2020. The Commission adopted these interim IP CTS rates to bring the per minute compensation "more in line with the reasonable costs of providing this service."¹³

In my view, the Commission properly rejected pleas to delay terminating reliance on the MARS methodology in the face of evidence that the methodology resulted in rates substantially higher than actual service provider cost. And in setting the interim rate to be in effect through June 30, 2020, the Commission also properly rejected pleas to adopt some form of tiered rates that would apply different rates for service providers of different sizes. The Commission pointed out that setting a single uniform rate creates incentives for all service providers to offer high-quality services at a reasonable cost. On the other hand, a tiered rate structure reduces the incentives for high-cost (above average cost) providers to find ways to innovate and be more efficient. This is true regardless whether the service provider is smaller than average or has more recently entered the market. The point is that the Commission properly recognized that deviation from a single uniform rate discourages those above-cost providers from adopting measures to become more efficient and to reduce their costs.

III. Meaningful Permanent Steps to Modernize and Reform the IP CTS Program

Throughout the June 2018 *Further Notice of Proposed Rulemaking* the Commission emphasizes its goal of providing "incentives for providers to increase their efficiency through innovation and cost reduction."¹⁴ Indeed, the Commission has identified this goal many times over the years for IP CTS and other TRS programs. So, in the *Further Notice*, to its credit, the Commission is considering additional meaningful reforms to achieve its efficiency and cost reduction goals, including what it calls "alternative approaches."¹⁵

¹² Id., at para. 16.

¹³ Id. The interim rates were still above average costs in order to provide a "cushion" to the providers as the agency moved closer to average costs "in a gradual manner." Id., para. 22.

¹⁴ Id., at para. 70.

¹⁵ Id.

To accomplish its goal, and realize the maximum societal benefits, the Commission should adopt approaches that result in compensation rates that replicate, as much as possible, actual rates that would prevail in a competitive free market. In this instance, the two approaches that appear most feasible to implement at this point to accomplish the goal are a price cap regime or a reverse auction. The Commission takes note of both approaches in the *Further Notice*.

A. A Price Cap Regime

To oversimplify a bit, in a traditional rate-of-return ratemaking regime, the rates a service provider may charge are based on *allowable* costs, including a return on capital. Without attributing any malevolent motives, this methodology, inherently, discourages the provider from seeking to innovate or reduce costs. In other words, as long as the provider may recover all the service providers' *claimed* costs allowed by the ratemaking authority, traditional ratemaking methodologies tend to incentivize the provider to operate inefficiently.

Aside from the perverse incentives created by a ratemaking methodology based on the service providers' *claimed reported* costs, as the Commission has acknowledged many times, such a methodology is necessarily difficult, complex, and contentious in its implementation. Without any need to belabor the point here, there are unending – sometimes seemingly metaphysical – disputes regarding the proper cost accounting systems, cost allocation methodologies, the accuracy of demand data, the reasonableness of expenses, and so forth.¹⁶

In contrast to a ratemaking regime based on claimed reported costs, a properly formulated price cap regime, aside from avoiding the need for the regulatory authority to make the difficult and contentious determinations regarding allowable costs, creates incentives for the service providers to become more innovative and efficient. Under a price cap regime, once an initial presumably cost-based rate is set, service providers may not increase their rates above the "cap" to recover any claimed increases in costs. By the same token, if providers are able to lower their costs, they retain the resulting profits. Thus, as the Commission recognized as far back as 1997, price caps encourage service providers "to reduce costs, to invest efficiently in new plant and facilities, and to develop innovative service offerings."¹⁷

In 2005, the Commission put it this way:

Price cap regulation encourages incumbent LECs to improve their efficiency by harnessing profit-making incentives to reduce costs, invest efficiently in new plant and facilities, and develop and deploy innovative service offerings, while setting price ceilings at reasonable levels. In the short run, the behavior of individual companies has no effect on the prices they are permitted to charge, and they are able to keep any

¹⁶ Throughout much of the 1980s, I participated as counsel for a group of large users of telecommunications services in traditional rate proceedings before state public utility commissions. Suffice it to say, I had first-hand experience in observing all the pitfalls and pratfalls of this type of ratemaking that was based on determinations of allowable costs.

¹⁷ *In re Regulatory Reform for Local Exchange Carriers Subject to Rate of Return Regulation*, Order on Reconsideration, 12 FCC Rcd 2259, 2262 ¶ 5 n.20 (1997). There are many other FCC orders dating from the 1990s with statements to the same effect.

additional profits resulting from reduced costs. This creates an incentive to cut costs and to produce efficiently. In this way, price caps act as a transitional regulatory scheme until the advent of actual competition makes price cap regulation unnecessary.¹⁸

As the Commission explained much more recently, a price cap regime encourages service providers "to become more productive and innovative by permitting them to retain higher earnings while discouraging wasteful investment."¹⁹ This is why price cap regulation is also called incentive regulation and why it is superior to a ratemaking methodology that relies on claimed costs.

In order for the price cap regime to accomplish its intended purpose, the initial price cap period must be long enough to create sufficient stability for the service providers to devise and implement innovations and cost-saving measures. In other words, in order for the incentive that a price cap regime creates for service providers to operate more efficiently and cost-effectively, the providers must be assured that the capped rates (subject to the usual adjustments to take into account inflation and productivity gains) will remain in place long enough for them to act on the incentives.²⁰

B. A Reverse Auction Regime

I am pleased that the Commission invited comment on a so-called reverse auction as a methodology for establishing IP CTS compensation rates.²¹ And I am especially pleased that Commissioner Michael O'Rielly, in his separate statement issued in conjunction with the *Further Notice*, urged the Commission to explore the use of a reverse auction in place of setting rates through a rate methodology dependent on reported costs. He recited all the acknowledged pitfalls associated with cost-of-service ratemaking and stated that "[t]here are several ways a reverse auction could be designed, including to allow multiple providers to offer services at competitively set rates."²²

It is universally accepted by economists that competitive bidding in auctions is a means of replicating an efficient market with regard to the distribution of scarce resources – and from an economic perspective, all resources have a scarcity value. And it is well known that Nobel

¹⁸ Special Access Rates for Price Cap Local Exchange Carriers, WC Docket 05-25, FCC 05-18, released January 31, 2005, at para. 11.

¹⁹ *In re Business Data Services in an Internet Protocol Environment*, Report and Order, 32 FCC Rcd 3459, 3538 ¶180 (2017).

²⁰ It is not my intent here to set forth the specific parameters of the price cap regime that the Commission should adopt. I am familiar with the Declaration that Professor Michelle Connolly submitted which is attached to the comments submitted on September 17, 2018, by CaptionCall LLC in response to the Commission's *Further Notice of Proposed Rulemaking* (CG Docket No. 13-24). Professor Connolly, who served two separate terms as the Commission's Chief Economist, offers some specific recommendations regarding price cap design and those recommendations should be carefully considered. Professor Connolly is also a member of the Free State Foundation's Board of Academic Advisors, so I am very familiar with her expertise on matters such as the ones she addresses in her Declaration.

²¹ Report and Order, Declaratory Ruling, Further Notice of Proposed Rulemaking, and Notice of Inquiry, CG Docket No. 13-24, FCC 18-79, at para. 95, released June 8, 2018.

²² Statement of Commissioner Michael O'Rielly Approving in Part and Concurring in Part, CG Docket No-13-24, June 8, 2018.

Laureate Ronald Coase first urged the FCC to use auctions in 1950.²³ While it took quite a while – longer than it should have in my view – the Commission has long since embraced the use of auctions in various contexts in which it seeks to maximize the efficient use of resources and overall societal benefit. For example, the Commission has now conducted many spectrum auctions in various frequency bands in which the highest bidders are awarded the frequencies on offer. And the Commission has successfully executed a fairly complicated "reverse and forward" auction to free up spectrum used by TV broadcasters for wireless use.

In a reverse auction, as its name implies, the *lowest* – not the highest – bidder or bidders are awarded what is on auction as *sellers* bid for the prices at which they are willing to sell their services or products. So, in the case of an IP CTS auction, the lowest bidder or bidders (depending on the auction design) would establish the rate at which it, or they, can serve new IP CTS customers during the auction cycle and receive compensation from the TRS Fund. Thus, reverse auction has the effect of allocating admittedly scarce TRS resources to the most efficient, lowest-cost provider or providers. By awarding the resources to the lowest bidder (or bidders), the reverse auction incentivizes cost-effective efficient operation consistent with the congressional directive that the IP CTS program be run as efficiently as possible.

The Commission has recently employed reverse auctions in other contexts in order to achieve the most efficient, least costly distribution of scarce resources, such as in the Connect America program which provides universal service subsidies for carriers serving high-cost areas. Of course, as is the case with a price cap regime, an auction must be properly designed to maximize the consumer benefits and achieve the societal goal.²⁴

IV. Conclusion

It is important for the Commission to now move forward to adopt meaningful substantive reforms to ensure, consistent with the congressional mandate, that the IP CTS program is operated as efficiently and cost effectively as possible. This is necessary not only to comply with the congressional mandate but to ensure that the program is sustainable going forward.

In order to accomplish its reformist goal of modernizing the IP CTS program, the Commission should adopt proposals that, to the extent possible, lead to a compensation rate for participating service providers that replicates a rate that would prevail in a competitive free market. In this regard, for the reasons articulated in this *Perspectives*, I submit that a uniform single rate applicable to all service providers participating in the program, determined through implementation of either a price cap regime or by a reverse auction, should be adopted.

* Randolph J. May is President of the Free State Foundation, an independent, nonpartisan free market-oriented think tank located in Rockville, Maryland.

²³ R.H. Coase, *The Federal Communications Commission*, 2 J. Law & Econ. 1 (1950).

²⁴ I do not intend to offer an opinion here on the proper design of a reverse auction for the IP CTS program, but I am aware that CaptionCall has included in its comments submitted to the Commission a proposed auction design by Professor Andrzej Skrzypacz. See Comments of CaptionCall, LLC, CG Docket No. 13-24, at Appendix D, September 17, 2018. In light of his professional qualifications and experience, Professor Skrzypacz's proposal certainly deserves serious consideration.