

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
ETC Annual Reports and Certifications)	WC Docket No. 14-58
)	
Rural Broadband Experiments)	WC Docket No. 14-259

July 20, 2016

**REQUEST FOR CLARIFICATION OR PARTIAL
RECONSIDERATION**

On May 26, 2016 the FCC released Report and Order and Further Notice of Proposed Rulemaking. Southern Tier Wireless, Inc. (“STW”) requests that the Commission clarify several elements of the order.

The FCC asked specifically how to ensure access and service similar to urban areas. Using weights that entice respondents to provide the fastest service possible rather than the cheapest service possible should achieve that goal. Failure to enable the fastest service possible with the existing funds would be a failure of policy. To be clear, it is likely that most ISPs will offer tiers of service below the minimum required tier and therefore consumers can always select cheaper options, but the only way to encourage investing the substantive amount of capital required to enable the higher speed tiers is to allow higher and faster bids to win over lower and slower bids. Presuming an average support level of \$326 / location, a \$300 / location bid in tier 3 should beat a \$30 / location bid in tier 2 (particularly because the funds have already been collected and allocated). A system that allows the \$30 location to win simply redistributes the funds to another state with a more costly/faster tier bid that does not have a competitive bid in a lower tier. Thus we strongly recommend using units/bid weights in increments of 100 to promote the policy objectives in this auction. (For example, if you begin at 0 for the Minimum tier, the Baseline tier should have a weight of 100, the above baseline of 200, etc.)

Next generation fixed wireless technology can already reach 100/10 for a point-to-point network but such technology is currently not cost-effective to deploy to every potential subscriber. We therefore request that the FCC codify the current language certifying compliance with a service-tier based on the highest speed product offered in the relevant geography, and that benchmark

pricing obligations will apply to one particular and clearly specified broadband service offering meeting the Commission's requirements, such as a low latency 25/3 service (rather than to every individual service offered by each carrier, which would be a bureaucratic and compliance nightmare). Such an approach would enable us to provide 100/10 service or above for customers who demand such service and point-to-multipoint technology for customers interested in 50 or 25 mbps. This would also further the stated goal of remaining technology-neutral.

We suggest weighting that begins at -100 for the minimum tier, provides a weight of 0 in the baseline tier, and 100 in the 100 mbps tier. Determining how much to weight Gigabit over 100 mbps is much more of a policy question than an economic question as it dictates the technological choice, so we abstain from offering a perspective there. Such a strong weighting in the faster tier(s) will ensure that recipients invest in rural America and serve the interests of these location's inhabitants for at least a decade to come. (10 and 25 mbps speeds will be horrifically slow by the end of the support period and while the order does have language mandating some speed advancement in keeping with rural averages, investing heavily in these slower tiers will further handicap these regions.) Additionally, we can deploy rural networks today with existing technologies that offer competitive consumer-level pricing in the 10 and 25 mbps tier but also allow 100 mbps connections when desired by consumers. As wireless technologies continue to improve over time these commercial offerings will continue to scale upward as well.

Subscriber data from form 477 or other sources will take far too long to analyze and offer numerous opportunities for incumbents to bias and ultimately destroy this next phase. Data at the tract level (especially in other states) as reported on 477 by the incumbents will not be indicative of the on-the-ground situation of unserved households.

The ability to cluster or group our bid as a package bid that will allow us to aggregate eligible areas and reserve prices has substantial value. Our network solutions will cover areas that generally go beyond a funded census block. In fact, to be economic, we believe that our network coverage will go beyond whatever the Commission establishes as the minimum biddable unit. Package bids should not be allowed for high latency performance levels.

It is commonly understood that, in general, most calling activity is local and as the distance expands, the relative call volumes are lower. As high latency services are deployed in local areas, the latency will be doubled for calls or connections to locations in the same geographic region which are served by the same high latency service. The doubling of the latency could force health care facilities, educational facilities, and government facilities to move latency sensitive applications out of the region. These applications are not constrained to voice or VOIP. This could include PSAPs for emergency 911 calls and computer applications that are processed in the area.

With the inclusion of satellite broadband, network reliability may become a factor during heavy rain, ice, or snow conditions. Solar outages are another consideration, outage frequency can occur more than twice a year for a few days with durations of 15 minutes or longer. The implications to emergency services, 911 and other remote health care, could be deadly. We strongly advise the Commission to accept the conclusions of expert studies previously provided

to the Commission (“ITU-T Recommendation G.114 specifies a maximum round-trip latency threshold of 300ms for acceptable voice services. As shown in Section 4.1.1, the round-trip latency for satellite signals is between 500 and 600ms—twice the allowable threshold. With this level of latency, the quality of service leads to a poor user experience¹.”)

Additionally, on page 9, G.114² shows that according to the ITU, at above 400ms latency many to all users are dissatisfied. To maintain voice services in these rural areas (particularly as traditional copper plant continues to be abandoned), the FCC must weigh low latency services substantively higher than high latency. We, therefore, propose a weight of 100 for low latency services.

Regarding the use of the E-model for speech applications, the effect of delay can be seen in the following graph of Transmission Rating, R, versus delay. Also shown are the speech quality categories of ITU-T Rec. G.109 [5], which translate the R values to levels of user acceptance.

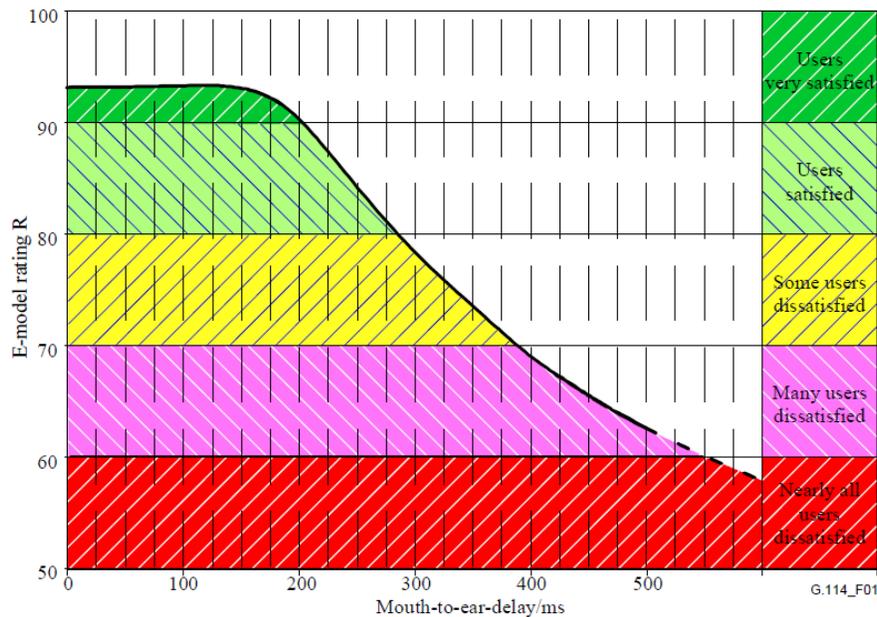


Figure 1/G.114 – Determination of the effects of absolute delay by the E-model

The potential impact that high latency services will have on voice quality for consumers in rural America is a concern. To obtain the required ETC status to receive the CAF funds, an applicant must be certified by the appropriate state commission or the FCC. An ETC designation requires a public interest finding.

Recognizing that the high latency performance standard is included in the competitive bid services, it is implied that high latency will not preclude issuance of an ETC by the appropriate commission. But what is unclear is the requirement for the incumbent to continue Carrier of

¹ <https://ecfsapi.fcc.gov/file/7520956711.pdf>

² https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-G.114-200305-1!!PDF-E&type=items

Last Resort ('COLR') obligations; particularly when the competitive ETC service for voice is known to have a high latency component. As discussed in paragraph 67, December 18, 2014 CAF Ph II Order, FCC 14-190, "*Our decision to grant limited forbearance does not redefine price cap carriers' service areas or revoke price cap carriers' ETC designations in these areas, and we emphasize that it does not preempt price cap carriers' obligation to continue to comply with any state requirements, including carrier of last resort obligations to the extent applicable.*", Price Cap carriers may be required to continue to support ETC obligations despite the expiration of USF funding.

Does a high latency voice service that is known to be subject to network reliability concerns from solar outages during the year and subject to service disruption from heavy rain or snowfall constitute a service that is comparable to services available in urban areas? Will the Price Cap carriers be authorized to relinquish their public interest obligations by both the federal and state commissions?

As a fixed wireless provider, we applaud the Commission's position that auction participation be technology neutral. However, as the funding for the reverse auction is meant to support broadband as well as voice services, we strongly encourage the Commission to adopt auction rules and weightings that allow low latency solutions to prevail in all situations where that is an option, and relegate high latency, satellite based solutions to those situations where there simply is no auction participant offering a terrestrial, low latency solution.

For the comparable benchmark pricing, all services that we provide must be provided over our broadband service. As such, a standalone voice product does not make sense to us. We will provide voice using Interconnected VoIP. This will be provided as an individual service over our broadband. We request that the requirement for a standalone voice service be removed.

Concerning the public interest obligations cited in CFR 47 §54.309, Connect America Fund Phase II Public Interest Obligations, if a competitive bid applicant's winning bid is based on Tier 3, is certification only required for one of the applicant's broadband service offerings that meets or exceeds any of the performance standards cited for the for four tiers? For example, if the applicant's broadband service offerings include a service that complies with the tier 1 performance tier and the pricing is at or below the applicable benchmark announced annually by public notice issued by the Wireline Competition Bureau, would the applicant be compliant in certifying reasonable comparability of rates?

For the buildout, we are concerned about differences between the locations provided from the CACM census block and the number that we actually identify (which, for example, may include homes that were non-primary residences at the time of the census but have since become primary residences). We understand that we will be reporting at the statewide level. We also recognize that including all of the locations in the census block to create an average support per census block for all locations will enable a better matching of the locations in each funded census block. But our bids will be for a relative small area within the states that we are considering. While relatively small, we need to take all prudent steps that we can to limit any requirements for repayment of support, particularly if that repayment has a penalty that is higher than the support received, as the FCC 16-64 Order and FNPRM has recommended.

We, therefore, request the opportunity to submit, within a defined time period, any corrections that we identify as we complete our detailed review of the locations during our final review of our network prior to deployment following acknowledgement of our award from the auction. Since the Price Cap period allowed about fifteen weeks after the final date to accept the Price Cap funding, we are requesting that we have a minimum of fifteen weeks after receipt of a formal notice of award to provide our reconciliation of the locations in the service area that we are awarded support funding to serve. If the locations identified are fewer than funded, we request that our total support be reduced accordingly. If they are higher, we request that our total funding be increased. In either case, the change in funding will be derived by the bid amount for the affected census blocks times the absolute increase or decrease in the addressable locations.

Southern Tier Wireless, Inc.
Wayne Hawley, President

