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Response of WTA – Advocates for Rural Broadband
to the House Energy and Commerce Committee's
White Paper on Network Interconnection

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In its White Paper on Network Interconnection, the House Energy and Commerce Committee (Committee) requests public comment on several issues regarding interconnection and peering agreements between communications networks and the role of government in regulating these agreements.

WTA – Advocates for Rural Broadband (WTA) is a national trade association representing more than 250 small rural telecommunications providers that serve some of the most remote, difficult and expensive-to-reach areas of the country and that are providers of last resort to those residing there. Most WTA members serve fewer than 3,000 access lines in the aggregate, and fewer than 500 access lines per exchange. Whereas WTA members were predominately providers of traditional voice services over copper networks during the early 1990's when the Telecommunications Act of 1996 was being debated and enacted, they have more recently been evolving into providers of increasingly higher-capacity broadband data, video and voice services over hybrid fiber/copper networks, and are also in the midst of converting from Time Division Multiplexing (TDM) to Internet Protocol (IP) technology.

In its response to the Committee's initial White Paper on Modernizing the Communications Act, WTA emphasized that the Committee should keep in mind the following three key points: (1) the communications industry and technology have changed over the decades, yet many of the principles underlying current law remain sound; (2) rural areas of our country served by WTA's members have different market dynamics than more suburban and urban areas and continue to

need regulatory structures tailored to these unique circumstances; and (3) federal universal service policies for areas served by rural local exchange carriers (RLECs) have helped to ensure that consumers living in high-cost rural areas receive services reasonably comparable in quality and price to those in more densely populated areas. WTA reiterates the validity and importance of these three principles and emphasizes that nothing it states herein with respect to the Committee's questions regarding IP interconnection is intended to modify or reduce the primacy of these principles.

Statement of WTA's Position on Internet Protocol Interconnection

For WTA members, the most pressing current and long-term network interconnection issue is their ability to obtain and maintain the IP interconnection and middle mile arrangements necessary to provide their rural customers with quality and affordable access to Internet content, applications and services.

Since 1996, Sections 251 and 252 of the Communications Act have been remarkably successful in enabling a growing variety of telecommunications carriers to connect directly and indirectly with each other and with the Public Switched Telecommunications Network as a whole. Whereas the transition to a competitive telecommunications industry could have left many people unable to communicate with their relatives, friends and business associates for long periods of time, the negotiation, arbitration, interconnection and pricing provisions of Sections 251 and 252 kept such disruptions to a minimum and limited their duration and extent.

WTA believes that Sections 251 and 252 apply to the interconnection of IP networks as well as TDM networks. In particular, Internet backbone and transport providers (including middle mile transport providers, whether or not they employ special access services) meet the definition of "telecommunications carriers" in that they offer for a fee directly to the public or classes thereof, transmission services for information of the users' own choosing between or among points specified by the users without change in the form or content of the information. Whether or not the Congress and the FCC determine to subject some or all retail Internet access services to Title II common carrier regulation, they should make it clear that the Internet backbone providers and

transport providers that connect service providers to the emerging Public Broadband Network are telecommunications carriers subject to Title II of the Act, particularly Sections 251 and 252.

WTA is aware that others within the industry argue that Sections 251 and 252 do not apply to IP interconnection. This interpretation disregards the actual operations of Internet backbone and transport providers, as well as the clear purposes of Sections 1, 2 and 201 of the Communications Act to establish and maintain a nationwide public communications network (whether a switched telecommunications network or a broadband network) that is available to all Americans on a just and reasonable basis. Moreover, it poses real and substantial dangers that the Internet will become the exclusive or near-exclusive domain of large peering entities, and that RLECs and other smaller broadband service providers and their customers will be unable to obtain sufficient and affordable access to all of the information, services and people that should be available to all Americans over the public network. WTA members are concerned that, in the absence of Section 251 and 252 protections, they will not be allowed to connect to the Internet at the closest technically feasible point, but will be required instead to pay for transporting the traffic of their customers to distant urban hubs. For many WTA members, this could mean being required to pay substantially more than they do today for the transport of the traffic to and from their rural customers over hundreds or thousands of miles. WTA members are also concerned that they will be unable to obtain middle mile transport of sufficient quality and capacity to meet the latency needs of their customers as well as the FCC's latency standards, or that such middle mile transport will become so expensive that significant numbers of their rural customers will be unable to afford Internet access service. In fact, in the absence of Section 251 and 252 protections, many WTA members fear that they are so small relative to most Internet backbone and transport providers that they may be unable to get the larger providers even to participate in *bona fide* negotiations to establish reasonable interconnection and transport arrangements with them.

WTA members have been, and remain, focused upon showing their rural customers the services they can access and the benefits they can obtain from adopting broadband service. To continue their progress toward the rapidly approaching IP world, WTA members and other small carriers need just and reasonable IP interconnection and middle mile transport arrangements so that they

can offer their rural customers broadband services and rates that are reasonably comparable to those available in urban and suburban areas.

Responses to the Committee's Specific Questions

1. In light of the changes in technology and the voice traffic market, what role should Congress and the FCC play in the oversight of interconnection? Is there a role for the states?

There is still a critical role for Congress and the FCC to play in ensuring that all Americans in all parts of the nation have just, reasonable and reasonably comparable access to the emerging Public Broadband Network. The Section 251/252 process encourages this important goal via voluntary agreements among private carriers and service providers without the need for federal or state intervention. However, if certain larger carriers refuse to negotiate interconnection arrangements with smaller entities and/or attempt to use their superior bargaining power to impose onerous terms and conditions for such arrangements, the backstop of Section 251/252 or a substantially equivalent process is necessary to level the playing field and to facilitate or impose via arbitration more equitable arrangements. Whereas most Internet backbone and middle mile transport providers operate on an interstate basis, state commissions played a very valuable and useful role in conducting Section 251/252 arbitrations of interstate and intrastate issues. State commissions are more familiar with local situations and are better able to resolve in timely fashion the more limited number of proceedings likely to arise in a single state than the FCC could do if it were required to resolve disputes arising in all of the states and territories.

2. Voice is rapidly becoming an application that transits a variety of network data platforms. How should intermodal competition factor into interconnection mandates? Does voice still require a separate interconnection regime?

In an IP world, voice traffic is composed of bits, bytes and packets just like data and video traffic. At the same time, congestion and latency problems can degrade voice calls to the point where they become unacceptable and generate consumer complaints. At some future date, there may be a satisfactory technical solution to the problem. However, at present, Congress should

maintain a separate interconnection regime or standards for voice traffic to ensure that voice services maintain at least a minimally acceptable level of quality and security.

3. How does the evolution of emergency communications beyond the use of traditional voice service impact interconnection mandates?

Congress should encourage the research and development of new and enhanced IP emergency communications services. However, with respect to both future and current emergency communications, the critical factors appear to be that: (1) each emergency call be delivered to the appropriate Public Safety Answering Point ("PSAP") so that it can be directed to the proper first responder(s); (2) each emergency call be delivered as rapidly and reliably as possible; and (3) the calling party's location be readily and accurately ascertainable. With traditional voice calls (and especially before wireline-wireless local number portability), 911 calling was a relatively simple and accurate process. With wireless calling, 911 calls became more difficult, but most of the problems have been resolved. With Voice over IP calling and the possibility of IP interconnection in distant cities hundreds or thousands of miles away, the speed, accuracy and reliability of emergency communications become much more complicated. Congress will need to examine and monitor these critical public safety issues very closely. In the absence of effective technical solutions, Congress and/or the FCC may need to require IP backbone and middle mile network designs that entail many more Internet nodes and points of interconnection so that emergency calls need travel only minimal distances with minimal opportunities for delay, degradation and/or misdirection.

4. Ensuring rural call completion has always been a challenge because of the traditionally high access charges for terminating calls to high-cost networks. Does IP interconnection alleviate or exacerbate existing rural call completion challenges?

Whereas access charges and reciprocal compensation are being reduced toward bill-and-keep ($0 in most cases) for both the traditional Public Switched Telecommunications Network and the evolving Public Broadband Network, the implementation of IP interconnection may not eliminate the rural call completion problem. An IP interconnection regime is still likely to entail charges for middle mile and other transport and transit by the carriers that operate the facilities that deliver traffic to rural areas. To the extent that these middle mile, transport and transit

charges will be higher for traffic going to certain rural areas, some service providers may continue to try to block or drop calls to such rural areas.

5. Should we analyze interconnection policy differently for best-efforts services and managed services where quality-of-service is a desired feature? If so, what should be the differences in policy between these regimes, and how should communications services be categorized?

Various levels of service quality require differing priorities, and this is likely to impact interconnection policies and regimes. Whereas Congress and the FCC need to monitor developments in this area, it would appear premature to adopt specific legislation or rules while best-efforts, managed and other levels of service are still developing, and while there is likely to be significant uncertainty and reasonable differences of opinion regarding the appropriate regulatory mechanism.

6. Much of the Committee's focus in the #CommActUpdate process has been on technology-neutral solutions. Is a technology-neutral solution to interconnection appropriate and effective to ensure the delivery and exchange of traffic?

Yes, it appears that all IP traffic is comprised of bits, bytes and packets, and that it needs to go through the Internet backbone and middle mile transport networks whether it originates or terminates as wireline, wireless, cable television or satellite traffic.

7. Wireless and Internet providers have long voluntarily interconnected without regulatory intervention. Is this regime adequate to ensure consumer benefit in an all-IP world?

As indicated on pages 2 and 3 above, WTA has serious concerns that, without Section 251 and 252 procedures or equivalent protections, rural telephone companies and other small carriers will not be allowed to connect to the Internet at the closest technically feasible point, but will be required instead to pay for transporting the traffic of their customers to distant urban hubs. WTA is also concerned that its members and other small rural carriers will be unable to obtain middle mile transport of sufficient quality and capacity to meet the latency needs of their customers as well as the FCC's latency standards, or that such middle mile transport will become so expensive that significant numbers of their rural customers will be unable to afford Internet access service.

There is a long history of reluctance on the part of large wireline and wireless carriers to negotiate interconnection and other business arrangements with individual rural telephone companies. From WTA's perspective, keeping in mind that some of WTA's member companies provide wireless service, voluntarily wireless interconnection arrangements have not always worked out smoothly without regulatory intervention, but rather that many small wireless carriers have had an increasingly difficult time obtaining reasonably priced roaming arrangements, and in some cases, any roaming arrangements at all with some of the large national wireless carriers.

8. Is contract law sufficient to manage interconnection agreements between networks? Is there a less onerous regulatory backstop or regime that could achieve the goals of section 251?

No, contract law will not be sufficient to obtain and enforce equitable interconnection agreements between large carriers and small carriers if certain large carriers refuse to negotiate with smaller carriers, or if they use their superior resources and bargaining power to impose one-sided rates, terms and conditions upon the smaller entities. A Section 251/252 regime imposed upon backbone providers and middle mile transport and transit providers should be sufficient to allow broadband service providers of all sizes and types to provide their customers with quality and affordable access to the Internet and other advanced services. The proposed Section 251/252 approach to interconnection does not require Title II common carrier regulation of retail broadband transmission services.

Conclusion

WTA reiterates that the most pressing current and long-term network interconnection issue for its members and other rural carriers is their ability to obtain and maintain the IP interconnection and middle mile arrangements necessary to provide their rural customers with quality and affordable access to broadband content, applications and services. The current Section 251/252 procedures, or their functional equivalent, are needed to ensure that large carriers will negotiate just and reasonable interconnection and middle mile arrangements with smaller carriers so that all Americans can obtain quality, affordable and reasonably comparable access to the emerging

Public Broadband Network. Such an approach does not require extensive and expensive regulation of retail broadband services but rather can be limited to backbone and middle mile transport providers.