
Dear Ms. Dortch:

On August 12, 2015 I spoke with Scott Mackoul, Jeff Goldthorpe, and Brenda Villanueva of the Public Safety and Homeland Security Bureau (PSHSB) with regard to the above captioned proceedings.

First, it is important to recognize that although inability to access wireless networks is most notable in time of emergency, as observed by the NPRM, we have no way of knowing or confirming if these are the only times when significant numbers of wireless access calls are not completed, and whether these failures (if they exist) are isolated to specific wireless networks or are shared by all wireless networks. Because there are no specific network outage or dropped call quality reports at either the state or federal level, and no way for individual customers to confirm if their inability to complete a call is systemic or shared by other callers, the only way to discover a capacity problem is when a significant event (such as the Boston Bombing or the East Coast earthquake) draws press attention and triggers such a widespread attempt to use mobile networks (and such a breakdown of social barriers) that individuals standing next to each other observe their mutual inability to complete calls.

We therefore have absolutely no way of knowing the extent to which the mobile network – either nationally or locally – is capable of providing adequate service even during an average rush hour, let alone during an emergency.

Further, we have no way of knowing whether the problem is increasing with the rate of wireless substitution. This is especially true of the interface between the wireless networks and the wireline interconnection point. Does the wireline provider have incentive to upgrade the interconnection point between the wireless networks and the wireline network? We have no evidence of a problem, but as the experience with rural...
call completion demonstrates, a problem can develop slowly over time precisely because it is unintended and its impact distributed over multiple networks and retail customers. No single customer has any way of knowing that the problem is not unique but rather systemic – and growing. Only when sufficient data is collected can any network operator, or the Commission, determine whether a systemic problem exists and what is its cause.

Second, the pending Tech Transition makes this information even more urgent to institute and collect. As our phone system grows increasingly decentralized and complex, we enjoy many positive benefits. At the same time, however, as we have seen with the rise of “sunny day” 9-1-1 outages, decentralization of the phone system also makes it harder to maintain the phone network at the quality and level of functionality that it maintained with fewer players and clearly defined responsibilities. Consumers may experience inadequate call completion and failure to reach emergency services for any of a variety of reasons ranging from poor network design by a provider to a systemic problem of failure of the industry as a whole to adequately provision critical network components.

Experience tells us that any single network operator will, logically, seek to minimize cost to itself. This is balanced against the need to provide adequate service to the customer. But because of the nature of the network environment, it may not be possible for the provider to the customer to resolve the problem (as we have seen in rural call completion) and decentralization may make it difficult to pinpoint the source of the problem (as is the case with both rural call completion and 9-1-1 governance). A system of call reporting which requires automatic reporting of dropped calls or failure to complete calls for the entire industry is both the most efficient means to track the emergence of problems and the possible lack of capacity, it is the only means to do so reliably.

For comparison, the Centers for Disease Control (CDC) employ a similar mechanism for tracking the emergence of potential epidemics by requiring reporting of the use of certain drugs or the rise in particular types of cases. By examining national trends, the CDC is able to analyze data and determine whether or not we face a potential national outbreak of Bird Flu, or track whether Measles is on the rise.

There Is No Other Way To Track Whether The Phone System Has Sufficient Capacity To Meet The Nation’s Communications Needs.

As noted by the NPRM, a core function of the Commission is to monitor the nation’s communication capacity so as to ensure that our emergency communications needs are met. Originally, Congress intended Section 214 to provide the Commission the necessary information to perform this function. Over the years, the Commission has exempted services from Section 214(a) requirements to notify the Commission as to the extension and improvement of lines and commencement of service. In the realm of wireless, the Commission has likewise moved away from specific reporting requirements with regard to deployment.
As a result, the Commission does not have a comprehensive map of the Communications capacity of the United States “for the purpose of national defense, [and] for the purpose of promoting safety of life or property.”¹ Nor do the states have any means to track the capacity within their own borders. A steady stream of deregulation has left the majority of the states utterly in the dark as to the state of their wireline network capacity. Even absent such deregulation, states could not determine the adequacy of wireless service in light of federal preemption.

**Cost to Providers Would Be Minimal.**

In order to bill customers and complete calls, providers must already track the information the Commission proposes to collect. Once information is collected in the digital age, it is trivially easy to share it, particularly with an automatic database. The provider’s own billing system and network software can collect regular reports and provide these to the Commission at the cost of an email. 

In accordance with Section 1.1206(b) of the Commission’s rules, this letter is being filed with your office. If you have any further questions, please contact me at (202) 861-0020x108.

Respectfully submitted,

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