November 14, 2014

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington D.C. 20554

Re: Governance and Oversight of
9-1-1; FCC Docket Nos. 13-75,
and 14-193

Dear Ms. Dortch:

I am writing on behalf of the Boulder Regional Emergency Telephone Service Authority ("B RETSA") with respect to the item on 9-1-1 Governance and Accountability which the Commission has placed on the agenda for its November 21, 2014 public meeting.1 B RETSA understands that the item involves a Notice of Proposed Rulemaking, and B RETSA is concerned that the Commission will seek to federalize the oversight of 9-1-1 to the detriment of public safety.

Providing for the public safety is primarily a state and local responsibility. Public safety, and 9-1-1 services, are provided by local officials familiar with their communities and the unique public safety requirements of their jurisdiction. 9-1-1 service must serve the operational imperatives of local public safety agencies. The primary regulatory oversight of 9-1-1 service should be at the state level, closest to the provision of public safety response and where overworked and under-funded public safety officials can meaningfully participate in regulatory forums.

1. While public safety organizations and PSAPs participate actively in regulatory proceedings involving 9-1-1 oversight at the state level, few public safety entities participate in Commission proceedings.

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1 B RETSA is a Colorado 9-1-1 Authority which establishes, collects and distributes the Colorado Emergency Telephone Surcharge to fund 9-1-1 Service in Boulder County, Colorado. The B RETSA Board includes the Boulder County Sheriff, the City of Boulder Police Chief, and representatives of the Boulder County Firefighters Association and the City of Longmont Division of Public Safety. The fifth seat of the Board is filled by representatives of the smaller cities and towns in Boulder County, Colorado on a rotating basis. This letter is thus intended to represent the perspective of the entity responsible for funding 9-1-1 operations, and of the agencies responsible for PSAP operations and overall public safety services.
Public safety participation in 9-1-1 oversight is essential because 9-1-1 must support effective and efficient public safety response.

2. One-size-fits-all solutions for 9-1-1 cannot adequately serve the public interest in the diverse states and jurisdictions across the country.

3. Rather than regulating 9-1-1 primarily at the federal level, the Commission should grant BRETSA’s Petition for Declaratory Ruling and clarify that states have jurisdiction over 9-1-1 regardless of the technology used.

4. While primary jurisdiction of the states over 9-1-1, regardless of the technology involved, should be confirmed; both the states and the Commission have important roles in governance of 9-1-1. The Commission must assure that services it authorizes include an E9-1-1 solution, *ab initio*, and that PSAPs have discretion over the services, information and formats they accept.

Public Safety Interest Are Not Fully Represented In Commission Proceedings.

As the Commission must be aware, there are less than a handful of parties from the public safety community which regularly participate in Commission proceedings regarding 9-1-1, necessarily representing only a few jurisdictions located in only a few states. BRETSA believes this is due to tight public budgets in the current economy, the focus of public safety agencies on their public safety responsibilities, and lack of experience and knowledge regarding participation in Commission proceedings. Indeed, BRETSA regularly participates in Commission proceedings only because undersigned counsel recognized that perspectives of public safety agencies and PSAPs were not being regularly presented in important Commission proceedings regarding 9-1-1. Counsel has thus provided BRETSA a steeply-discounted flat-fee agreement to assure that BRETSA’s perspectives, the perspective of PSAPs and agencies with overall responsibility for public safety operations and budgeting, are presented.

By contrast, the Colorado Public Utilities Commission long ago created under its rules a Colorado 9-1-1 Task Force. The Task Force includes, *inter alia*, representatives of Colorado 9-1-1 Authorities, the Basic Emergency Service Provider in Colorado (which aggregates 9-1-1 calls and delivers them to the appropriate PSAPs), local exchange carriers, wireless and VoIP providers, the handicapped community, and Colorado municipal League. The Task Force meets every other month to address issues pertinent to 9-1-1 and related matters. The Task Force has 16 seats reserved for representatives of 9-1-1 Authorities and PSAPs, its
meetings are attended by representatives of additional 9-1-1 Authorities on a non-voting basis, and non-voting members seek election to voting seats at the Task Force’s annual meetings.  

Recently, in the wake of a PUC investigation into 9-1-1 outages resulting from recent floods and fires in Colorado, the Task Force delegated to its Rules Committee the task of drafting proposed rules to address outage reporting. Representatives of 9-1-1 Authorities and PSAPs, the BESP and other providers volunteered and participated on the Committee along with PUC staff.

The participation of the 9-1-1 and public safety community at the state level stands in stark contrast to the participation of the 9-1-1 and public safety community in Commission proceedings. This is significant because the regulations and policies pertaining to 9-1-1 (and ENS) must first and foremost serve the ends of improved and more efficient public safety response.

Nor does BRETTSA believe national organizations adequately represent the interests of BRETTSA, or of public safety agencies generally. BRETTSA is aware that at least one such organization has advocated for the Commission to federalize regulation and oversight of 9-1-1. This is directly contrary to the best interests of BRETTSA and BRETTSA strenuously disagrees with the states being divested of authority over 9-1-1. BRETTSA believes that the other Colorado 9-1-1 Authorities and public safety agencies nationwide would also strenuously object to this position of the national organization if they were aware that this was being advocated.

The national association which has advocated that the Commission take over regulation of 9-1-1, has also advocated the deployment of NG9-1-1 to enable people to send text messages, photos and videos to 9-1-1, “to meet consumer expectations.” From the perspective of BRETTSA and other public safety entities with budgetary responsibility and responsibility for overall operations, the greatest promise of NG91-1 is the rule-based routing of 9-1-1 calls in overflow situations. Many PSAPs are always in hiring mode, because they often find less than one or two percent of job applicants qualified for a PSAP position, half of the ap-

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2 By contrast, the voting seats reserved for representatives of wireless and VoIP providers in Colorado have often gone un-filled, or if filled the representatives have not regularly attended. However a representative of a regional wireless provider serving rural areas of Colorado has filled one of the wireless-provider seats and does regularly attend the Task Force meetings.

3 The outages concerned involved trunks connecting switching centers to the rest of the LEC network which were not protected by facilities diversity due to terrain, populations served and cost; and not the dedicated 9-1-1 network operated by the BESP for distribution of calls to the PSAPs.

4 BRETTSA recognizes the importance of text-to-911 messaging for the deaf and hard-of-hearing, people in silent call situations, and people located beyond the range of cell towers to place voice calls. However in other cases text-to-911 messages, photos and videos can actually delay dispatch of First Responders.
Certain prerequisites for improved cooperation and collaboration between PSAPs have yet to be developed or addressed, such as the development of universal interfaces between different CAD systems, perhaps through data-field tagging, access to dispatch radio and tone-out systems, and governmental immunity for PSAP personnel handling calls for jurisdictions other than that by which they are employed.

The task of the PSAP is to determine the location and nature of an emergency so that they can dispatch First Responders. In the ordinary case this is most expeditiously and effectively accomplished through a voice call. (Emergency Response is most effectively provided by getting public safety professionals to the scene as quickly as possible so that they can make a professional evaluation of the situation and respond accordingly.)

BRETTSA and the Task Force have also pointed out that (i) transmission of photos and videos to the PSAP would in most cases actually delay communication of the information necessary for the PSAP to dispatch First Responders, and increase the stress level on PSAP personnel, (ii) ordinary citizens armed with phone cameras would likely transmit more sensational pictures such as images of body parts which would not be of any use for dispatch purposes, (iii) images provide only a single view in two-dimensions, cameras tend to compress distances, and so photographs and videos could provide a misleading picture vis-à-vis a situational aware person on-scene describing what they are seeing, hearing, smelling (such as gas), and being able to answer questions, and (iv) witnesses on scene focused on getting pictures or videos to send to 9-1-1 might very well become secondary victims. Subsequent to BRETTSA and the Task Force filing these comments, the national organizations and others began to speak of having photos and videos provided through NG9-1-1 bypass the PSAP and go directly to First Responders. However one police agency dispatched by a BRETTSA PSAP is investing in software to blank-out the screens of the mobile data terminals (“MDTs”) in police units while the units are in motion, to avoid distracted driving incidents. Firefighters in another jurisdiction served by BRETTSA complain that they cannot read their MDTs while in route to incidents because the fire trucks bounce around too much.

It is not only national organizations, or at least their representatives who may not have a professional background in public safety, who have exhibited a lack of understanding of real world public safety operations and considerations. In an early NPRM, the Commission (apparently relying on non-public safety

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5 Certain prerequisites for improved cooperation and collaboration between PSAPs have yet to be developed or addressed, such as the development of universal interfaces between different CAD systems, perhaps through data-field tagging, access to dispatch radio and tone-out systems, and governmental immunity for PSAP personnel handling calls for jurisdictions other than that by which they are employed.
agency input) discussed a capability that would be provided by NG9-1-1 for dispatchers to view traffic cameras to decide where traffic congestion existed and which First Responder unit could reach the scene of an incident the soonest, before dispatching a unit. In fact, modern CAD systems are capable of automatically dispatching units once the nature and location of the incident is entered, based upon (i) the business rules of the agency, and (ii) actual travel time of the units to the incident considering the actual routes the units will take to the scene. These CAD systems may estimate travel times using (i) real-time traffic volume information from Department of Transportation traffic monitors, where such monitors are in place, (ii) speed limit information for the route traveled and/or the speeds First Responder units can actually travel on the roads (fire trucks can rarely travel posted speed limits on winding mountain roads, for example), or (iii) other speed limitations and impediments such as schedule at-grade train crossings or road construction, if entered into the CAD system. Dispatchers also become familiar with the areas in which there is congestion at certain times of day.

Similarly, the FirstNet website has suggested that FirstNet will allow building plans to be transmitted to Firefighters responding to a fire. In fact, firefighters create and review “pre-plans,” in which they remove non-essential information from building plans and highlight information such as the location of the connections for their tankers to boost the pressure in the sprinkler systems, access points, where they can safely position their trucks, etc. These pre-plans are loaded into firefighter MDTs that they take with them to the fire.

Parties have also suggested that provision to PSAPs and First Responders of medical records of people who are subject of public safety incidents will benefit emergency response. BRETS is aware of only one instance in which medical information regarding a subject was made available to First Responders. In that instance, the subject was unable to speak, and the First Responders reviewed the subject’s medical records and determined that because he had previously been treated for fluid around his heart, that must be the cause of his current distress. The First Responders transported the subject to a hospital, where he was diagnosed with and operated on for an aortic aneurism. The First Responders were unable to diagnose or treat the subject on-scene for either fluid around his heart or for an aortic aneurism. The First Responders were not qualified to review and interpret the subject’s medical records vis-à-vis his current distress. The subject survived only because the First Responders ultimately performed their assigned task and role and transported the subject to a hospital where there were trained physicians qualified to diagnose and treat the subject. If the subject’s aortic aneurism had ruptured while the First Responders were reviewing his medical records, the subject might well have died.
James Anderson, the former Director of the El Paso-Teller County 9-1-1 Authority, has related a dispute with a lecturer at an industry-association conference. The lecturer projected that with crash telemetry, a PSAP would know if a vehicle had overturned during an accident, and the number of subjects ejected from the vehicle, and would know how many ambulances to dispatch. Mr. Anderson, also a former police chief, advised the lecturer that only the standard number of units would be dispatched according to the business rules of the agency, until a First Responder was on-scene, made a professional evaluation of the incident, and determined that additional units would be required. A First Responder agency simply will not commit multiple units to an incident, based upon crash telemetry data, making them unavailable for response to other emergencies.

Participation of public safety agency representatives with responsibility for or knowledge regarding budgets and overall public safety operations is important. These agencies participate much more actively at the state rather than the federal level.

*A One-Size Fits All Solution Is Inappropriate For Such A Large And Diverse Nation.*

The regions and jurisdictions throughout the United States are quite heterogeneous. There are heavily populated, urbanized areas, and sparsely populated rural areas. Some areas of the country have coasts or large rivers that periodically flood, with public safety considerations specific to those characteristics. Some areas and jurisdictions are mountainous and face which can block of public safety communications and where flash floods are more likely. Different areas have different population characteristics, industries and other characteristics which can affect public safety operations. Even within a region, public safety agencies may have different policies and procedures appropriate to their communities and constituents. The closer 9-1-1 governance and oversight to the communities and agencies, the more responsive to local requirements it can be. Governance and oversight should be at the state level, where it can be most responsive to local constituents’ and public safety agency needs and considerations.

*The Commission Should Confirm That States Have Jurisdiction Over 9-1-1 Services Regardless of the Technology Used.*

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What is most needed is for the Commission to act upon BRETSA’s October 23, 2012 Petition for Declaratory Ruling, in which BRETSA requested that the Commission confirm that the states have authority over 9-1-1 service, including 9-1-1 service provided by CMRS and VoIP providers. The Commission has noted that some states have legislatively deregulated 9-1-1.7 BRETSA believes that this is because the Commission has not clearly stated that the states have authority over 9-1-1 regardless of the technology used, while Wireless and VoIP providers claim that state authority has been preempted by the Commission.8 Rather than exercising greater authority and control over 9-1-1, the Commission should confirm the states’ authority over 9-1-1 regardless of the technology used.

Both the Commission and the States Have Important Roles in Oversight of 9-1-1

The Commission’s requirement that wireless and VoIP providers route 9-1-1 calls to PSAPs and provide location data, that wireless and text providers provide text-to-911 service, and its support the development and implementation of NG9-1-1 standards, has been vital and is greatly appreciated.9


It is critical that the Commission require any new service it authorizes, or to be provided over authorized services, be E9-1-1 capable (provide the ability to contact 9-1-1 and automatically provide the caller’s location). Never again should there be a situation such as the Commission’s authorization of the cellular tele-

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8 BRETSA does not believe the Commission or Congress can or should establish a “federal regulatory backstop” for those states which have deregulated 9-1-1. The Commission must respect those states’ decisions, and those states have the ability to re-regulate 9-1-1 if they deem it necessary. The results of their experiment in deregulation can benefit the other states. 9-1-1 Calls are by definition jurisdictionally inter-state, as they originate and are terminated in the same state; and indeed in the same county or city.
9 Nevertheless, BRETSA has stated in several pleadings that the primary importance of location information is for routing the call to the correct PSAP. In BRETSA’s experience, the cases in which a caller cannot provide their location to the PSAP are rare; while a significant portion of wireless calls which are default routed based on Phase I information are initially transmitted to the wrong PSAP. When a call is routed to the wrong PSAP, it takes time for the calltaker to discover the misrouting, based upon either the availability of Phase II information or the information provided by the caller. The correct PSAP must then be determined by the PSAP, the call transferred, and the caller must begin all over relating their emergency to the correct PSAP before First Responders can be dispatched. Consistent with the foregoing discussion, the Commission is focusing on increased accuracy to provide a PSAP with a “dispatchable address,” rather than on improving call routing through more expeditious provision of Phase II data and routing calls on Phase II data. Phase II routing would have a positive impact in many more incidents than would incrementally improved location accuracy.
phone and personal communications service, in which the Commission did not even require that 9-1-1 calling be provided until almost a decade after the first systems commenced commercial operations. The Commission is still working to retrofit these services to provide accurate E9-1-1 information. Fortunately, the progress which has been and is being made in retrofitting wireless services to provide accurate location information for 9-1-1 routing and automatic location information should benefit future services.

_The Commission Should Adopt Regulations Regarding 9-1-1 Services And Apps; States Or PSAPs Should Be Permitted to Opt Out of the Regulations Altogether Or on a Case-by-Case Basis._

The availability of text-to-911 messaging and NG9-1-1 will result in the introduction of a panoply of smartphone “apps” which are currently being developed to automatically send all manner of information to PSAPs. Some apps propose to allow users to upload information to the app-provider, to be automatically forwarded to “9-1-1” after a given interval, if the user does not cancel the transmission before the interval expires. The user may forget to cancel the transmission, the information may or may not be useful or usable by the PSAP, and it is unclear how the PSAP to which the information should be sent would be determined.

There are proposals to transmit medical records and information, possibly real-time health monitoring information, crash telemetry data and other types of data to PSAPs. Neither PSAP personnel nor First Responders are trained to interpret technical data including medical data, and reviewing medical records could only delay First Responders in rendering First Aid and transporting the patient to qualified medical personnel. Nor can public safety agencies afford to pay doctors rather than paramedics as First Responders, even assuming there was not already a shortage of doctors.

There are existing and proposed services which will allow PSAPs to retrieve, or provide PSAPs with, user-designated information. This information may include photographs, medications and allergies to medications, contact information for family members, information regarding the family members which reside in the family residence and which bedroom each family member occupies, disabilities or special needs of family members, etc. Some of these services are offered to PSAPs for a fee, and will automatically provide the information to a subscribing PSAP when a call is placed to 9-1-1 from the constituent’s number. With other services or applications, a user will first send a text message to the service provider. The service provider will relay the text message to the PSAP with a link in the text message to a web page. The developer expects that PSAP personnel will click on these links to access a web page on which the user-
designated information will be displayed. With NG9-1-1, the user designated information would be transmitted directly to the PSAP. To avoid violating intellectual property rights, each service or app provider will likely develop a unique look and feel to its presentation of the user-designated information, meaning that even if a PSAP chose to accept the information the layout would be different so that PSAP personnel would have to search to find such information as may be relevant on the page. It can be anticipated that large variety of additional unique or copy-cat, helpful or useless 9-1-1-oriented apps and services will follow the general deployment of NG9-1-1. While some of these apps and services will improve public safety response and some will not, the sheer volume of potential applications and communications to PSAPs in multiple formats could overwhelm the PSAPs.

The Commission should thus adopt rules requiring that:

1. Any service or application which would automatically transmit information for use by First Responders must transmit that information to a private monitoring or alarm center capable of clearing false alarms, and which would relay only usable information pertaining to actual or legitimate alarms or incidents to the appropriate PSAP, unless a PSAP affirmatively and expressly agrees to receive and accept direct transmission of the alarms or information from the specific service or application and specific provider concerned.

2. Any service or application which would provide medical, crash telemetry or other technical data must (a) transmit the information to a private monitoring center with staff trained to interpret the data and provide usable information to the PSAP, (b) transmit usable information derived from the technical data to the PSAP, a First Responder or medical facility as directed by the PSAP, only if the PSAP has affirmatively agreed to receive information from the specific service or application and specific the specific provider, and (c) transmit the information in the format approved by the PSAF.

3. Any service or application which will provide non-real time information to a PSAF, including user-designated information, which the PSAP has affirmatively agreed to receive and accept from the specific service or application and the specific provider, must provide the information a standard format approved by NENA/APCO or through XML- or other approved-tagging of data fields so that a CAD system can display the information in the standard format provided by the CAD system.
4. No service, application or provider shall transmit information or data to a PSAP, automatically or otherwise, without the affirmative and express approval of the PSAP.

Ideally the NG9-1-1 Data Complex would reject and not pass “calls” or data from services, apps or providers which a destination PSAP had not approved. However, individual PSAPs or states should not only be able to agree to accept information or data from specific services, apps or providers; individual PSAPs or states should be able to opt out of the rules altogether should they so desire, so that any service, app or provider could deliver information to them.

Under such regulations, only individuals manually placing calls or manually transmitting messages to 9-1-1 in real-time will be permitted absent PSAP or state approval.

This approach would continue the requirement that private call centers clear false alarms before contacting a PSAP to report an alarm, and would avoid the transmission of non-useful technical data to PSAPs. If a diabetic person was wearing a device which measured blood sugar and reported the measurements to a smartphone app, the monitoring center could intercede to contact the individual to clear any false reading or alarm, advise the individual to take corrective action, and contact the PSAP only if it appeared the individual required assistance from First Responders. This approach would allow a PSAP to agree to accept a new service or new configurations of a service offered by Intrado or a similar entity to deliver 9-1-1 calls or messages or related data to the PSAP, without the delay of an approval process, while avoiding PSAPs being inundated by indecipherable information from well-meaning but misguided and/or predatory developers.

This approach is intended to prevent PSAPs being overwhelmed with non-essential and perhaps indecipherable information from well-meaning or commercially predatory developers. A developer offering a copy-cat app which would not provide usable information to a PSAP could not lawfully sell the app unless PSAPs agreed to accept data from the app, and would likely violate consumer protection laws if it marketed apps from which PSAPs had not agreed to accept information. Vendors and app developers proposing useful services or apps which can gain acceptance by PSAPs will also be able to develop and market their services and applications. Where apps are accepted by PSAPs, they will have to provide the information in a format familiar to PSAPs so that PSAP personnel can readily find information required for a public safety response.

Perhaps most importantly, the PSAPs or 9-1-1 or state authorities will not have to bear the time and expense of intervening in regulatory proceedings to oppose services or changes under consideration. PSAPs simply do not have the
resources to monitor applications for approval of services or service changes, investigate the proposals, and intervene in proceedings regarding proposals they oppose.

Conclusion.

Imposing federal mandates does not guaranty the most effective or efficient 9-1-1 service or emergency response. Public safety is in any event a state and local concern best left to state and local governments. It is a truism that all emergencies are local. Even in the case of disasters affecting multiple states, it is the local and state public safety infrastructure which provides the on-the-ground response.

Just because the Commission or parties before the Commission believe they have a good idea, does not mean that they should impose those ideas, one-size-fits-all, on state and local authorities. Local and state public safety professionals operate in the context of their overall mission, not just 9-1-1 service, must meet the unique needs and concerns of their communities or constituents, and are subject to budgetary constraints to which the federal government is immune. Local and state authorities rather than the Commission, a federal agency, should take the lead in 9-1-1 governance and oversight, and drive 9-1-1 policy and regulation including the deployment of Next Generation 9-1-1.

Very truly yours,

Joseph P. Benkert