Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Utilizing Rapidly Deployable Aerial Communications Architecture in Response to an Emergency

COMMENTS OF APCO

The Association of Public-Safety Communications Officials-International, Inc. ("APCO") hereby submits the following comments in response to the Commission’s Notice of Inquiry, FCC 12-53, released May 24, 2012, in the above-captioned proceeding.¹

Founded in 1935, APCO is the nation’s oldest and largest public safety communications organization. Most APCO members are state or local government employees who manage and operate communications systems for police, fire, emergency medical, forestry conservation, highway maintenance, disaster relief, and other public safety agencies. APCO is the largest FCC-certified frequency coordinator for Part 90, Public Safety Pool channels and appears regularly before the Commission on a wide range of public safety communications issues.

The Commission is seeking comments on a variety of questions related to the potential use of Deployable Aerial Communications Architecture ("DACA") in response to emergencies. APCO believes that DACA could be a valuable means of restoring at least limited communications in the immediate aftermath of major disasters that destroy or disrupt existing terrestrial communications networks. However, because of the potential for dangerous interference to systems unaffected by the disaster, use of DACA should be the last resort and used only when existing networks are inoperable and no other means of restoration is

¹ See also Comments of APCO (filed Feb. 28, 2001) in response to Public Notice, DA 11-175, PS Docket No. 11-15, released Jan. 28, 2011.
immediately available. Furthermore, to limit the potential for interference, DACA should only be deployed in the smallest area possible to address the emergency in question.

DACA would appear to have two distinct potential roles in a disaster scenario: (1) to restore public safety agency internal communications used by first responders in the field; and (2) to restore commercial network services. The first role is the most important and should be given priority into the distribution of DACA assets. It should be noted however, that public safety radio systems are designed to withstand most types of disasters through a combination of site hardening, redundancy, and back-up power. Thus, instances of major disruptions to public safety radio systems are extremely rare. Nevertheless, every reasonable step needs to be taken to “plan for the worse” and identify potential restoration efforts, such as DACA, that can be used to ensure that first responders will be able to communicate following major disasters.

To the extent that DACA is also used to restore commercial services, priority access should be provided to emergency communications and 9-1-1 calls pursuant to established prioritization guidelines. Indeed, it may be advisable to limit use of DACA for commercial networks to those types of calls.

Any use of DACA to restore internal first responder communications will require substantial amounts of planning, coordination, and personnel training to ensure that when a disaster strikes, the equipment can be deployed quickly, properly, and without causing interference to vital radio systems that remain in operation. These tasks are complicated by the inability to predict the specific location or geographic scope of an emergency that might require the use of DACA. For example, the specific frequencies (and even the frequency band) of the disrupted terrestrial system will be unknown until the disaster strikes.
Therefore, APCO recommends that DACA operation be limited, at least initially, to existing designated public safety interoperability (a.k.a. mutual aid) channels. This serves multiple goals. First, it avoids unintended interference to the primary channels used by other agencies within the coverage area of a DACA transmitter. Second, there would be little or no need to reprogram radios on the ground, as most of those radios would already be programmed to operate on the designated interoperability channels. \(^2\) Third, knowing the frequencies to be transmitted through DACA would greatly facilitate the necessary planning and frequency coordination efforts.

The decision as to whether and how to deploy DACA should not be left to the sole discretion of individual public safety agencies. The danger of harmful RF interference (to say nothing of the potential impact on air traffic) is far too substantial. Rather, deployment should be coordinated by entities such as the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC), the relevant State National Guard, and the relevant Statewide Interoperability Coordinator (SWIC).

APCO also recommends that any use of aerial telecommunications platforms for public safety be defined in each local/regional Tactical Interoperable Communications Plan (TICP). One or more federal agencies should also provide funding for the development of standard operating procedures, training, and planning at the state and local government level.

Frequency coordination will also be essential. As APCO previously indicated to the Commission,

Frequency coordination of aerial telecommunications would require a complex set of factors that include the full range of potential transmitter locations and altitudes, power levels, duration of use, frequency selection, and whether both

\(^2\) However, there are some VHF and UHF licensees that have not programmed interoperability channels into all of their radios.
uplink and downlink transmissions are contemplated. Power levels would also vary depending upon whether both portable and mobile radios on the ground are part of the intended communications, and whether in-building coverage is needed.\(^3\)

Federal funding should be made available to facilitate the advanced frequency coordination required for DACA deployment.

**CONCLUSION**

Therefore, APCO supports further steps to facilitate the potential use of Deployable Aerial Communications Architecture consistent with the comments set forth above.

Respectfully submitted,

/s/

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\(^3\) Id. at 2.