



## **OBSERVATIONS AND TRENDS**

As residents of Alaska, we know and agree with the NTIA “effective communications services are critical to accommodate the increase in commercial, residential, governmental, and other critical economic and social activities across Arctic Alaskan communities, as well as the pan-Arctic region in general.” In our experience in Alaska and the Arctic Region, we have observed the following situations and trends:

### **1. Current Public Safety Communications Technologies Match Funding and Capabilities**

Through our operations and maintenance management of the Alaska Land Mobile Radio System (“ALMR”) and our projects that surveyed critical communications and communications preparedness throughout Alaska, we have become knowledgeable about the public safety communications infrastructure in Alaska and the Arctic region.

ALMR provides radio coverage on the major paved roadways and population areas of the state. The northernmost site is at Livengood, so it does not currently extend to northern Alaska and the Arctic Region. Similarly, ALMR transport is provided by the State of Alaska Telecommunications System (“SATS”) which covers much of the same footprint using a combination of digital and analog microwave, fiber and copper.

Public safety communications in most regions and villages outside the ALMR footprint are primarily in the public safety portion of the VHF band using simplex and half-duplex technologies. Public safety dispatch is usually local in support of law enforcement, fire and EMS operations. The number of channels at any location

is usually dependent on their ability to obtain funding for their installation and maintenance. Many coastal communities also make significant use of Marine VHF, HF and single side band for operational and response operations. These basic technologies have served rural Alaska well given the environmental, power and support challenges they must overcome.

## **2. Fiber and Other Broadband Technologies Will Change Public Safety**

### **Communications as they Become Available**

There have been several initiatives to bring broadband to Alaska's western and northern coastal communities. Many of these have yet to be fully connected to the public safety communications systems in these communities. However, when this connectivity does occur, it will open up opportunities for connectivity to ALMR, connectivity to regional dispatch locations and the potential for increased interoperability between radio, cell phones, land lines and sat phones across a more robust IP network.

## **3. Changes in Communications Technologies Will Require Increased Planning, Procedures and Training**

As described in item 1 above, current public safety communications technologies have not required or enabled any significant degree of interoperability outside each rural community. When sharing a limited number of channels across multiple public safety users, interoperability becomes a fact of life. However, as the technologies mature and the capability to talk outside one's village or region expands using multiple devices and technologies (sat phone, land mobile radio, cellular phone, land line), the need to develop plans and procedures that facilitate this new level of

interoperability will present itself. Further, as the public safety communications environment becomes more complex, the need to test these capabilities through training and exercises will increase proportionately. Getting to this point will require leadership and funding at all levels (federal, state and local).

## **CONCLUSION**

BSIT and its subsidiaries and partners are uniquely qualified to address the public safety communications needs of the Arctic region. We have extensive Alaska experience in all the verticals: planning, specification, acquisition, installation, configuration, training, operations and exercises. We appreciate the opportunity presented by this NOI to present our knowledge and capabilities to support the future of public safety communications in Alaska and the Arctic region.

Respectfully submitted,

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December 2, 2014