STATE OF ALASKA
REQUEST FOR INFORMATION (RFI)

Department of Administration
Office of the Commissioner
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State of Alaska Rural Television Policy and Projects

INTRODUCTION

Pursuant to AS 44.21.020(10), 44.21.264, and 44.21.266(6), the State of Alaska Department of Administration is seeking information from interested parties for how the State should proceed regarding the issues involved with public broadcasting in Alaska including but not limited to: statewide organization of public broadcasting, rural digital television transmitter conversion, providing rural television programing, maintaining current rural television satellite reception capabilities, and rural television emergency notification capabilities including an understanding of potential project costs for budgeting purposes. Existing and emerging private provider options should be considered as an alternative and/or supplement to the existing state-owned systems. It was deemed that providing adequate television and radio service to rural Alaska is a valid public purpose and is specifically authorized by AS 44.21.320.

Information sought includes but is not limited to:

1. Suggestions regarding the organization and structure of public broadcasting in Alaska.

2. Suggestions regarding how to provide these public broadcasting/emergency alert services in the most cost-effective manner.

3. Suggestions on whether the ARCS Digital Conversion Project should be completed and if so how to complete it.

4. Suggestions on how to perform a technical system survey to assess needs for an operational satellite receiver and low power RF transmitter installation and maintenance in rural communities.

5. Suggestions for possible moving the ARCS/SATS oversight to another governmental agency or non-profit organization.

6. Suggestions related to the location/maintaining of the television satellite uplink.

7. Identifying potential partners with the DOA to file an extension for the low power digital transmitter conversion with the FCC before July 2021.

8. Identifying potential partners with the DOA to provide information, analysis, and advice on Public Telecommunications policy issues, public broadcasting needs and issues while responding to requests for service from DOA on various other telecommunications issues.

9. Suggestions on improving the ability to access multiple funding sources to potentially include a balance portfolio of federal funding, state funding, individual donors/customer revenue, corporate support, and foundation grants

An explanation of the components of the existing Alaska rural public broadcast system follows:

GOVERNMENT ENTITIES

Department of Administration (DOA)

Alaska Public Broadcasting Commission (APBC) - Authority: AS 44.21.256; AS 39.50.200 nine members - Function: Encourages and supervises development of integrated state public broadcasting system; recommends grant funding. The commission was created to encourage and supervise the development of an integrated public broadcasting system for the state and for the coordination of all public broadcasting stations. (AS 44.21.264) The primary purpose of the commission is the encouragement and support of noncommercial public broadcasting in the state through the provision of operating and capital grants in support of the delivery of noncommercial programs intended for a general audience by locally controlled nonprofit broadcast stations or telecommunications entities. Allocation of Discretionary Funds. The Alaska Public Broadcasting Commission may allocate a small percentage of the annual television and/or radio legislative appropriation for special projects that may arise in the course of the year and to maintain a reserve fund for emergency expenses. Those dollars which are not specifically allocated at the outset of the fiscal year may be subsequently disbursed by the Commission for any purposes which it, in its discretion, determines further its statutory objectives. No state funds were approved for the Commission to operate or disperse during Fiscal Year 2020. APBC prior to 2020 annually contracted ($40,000) with Alaska Public Broadcasting Inc. (APBI) to provide administrative support services for the APBC.

Department of Public Safety (DPS)

DPS is a user of the Alaska Land Mobile Radio system.

Department of Military and Veterans Affairs (DMVA)

DMVA is a user of the Alaska Land Mobile Radio system. The DMVA Office of Emergency Management's State Emergency Operations Center (SEOC) facilitates some emergency

messages that go out over the Alaska Emergency Alert System that goes through all Alaska broadcasters including the Alaska Rural Communication Service (ARCS). The vast majority (95%+) EAS alerts are issued by the National Weather Service. The most serious is a tsunami warning. The DMVA SEOC issues state level alerts (AMBER Alerts and Civil Emergency Messages), and back-ups the National Weather Service for tsunami warnings and local jurisdictions for local emergency messages. Local jurisdictions issue alerts for their areas for evacuation, 911 outage, etc. (was used Summer 2019 by the Mat-Su Borough for a fire evacuation for the McKinley Fire.) The federal government can, but never has, issue a Presidential Action Message.

STATE OF ALASKA RURAL TELEVISION SYSTEM INFORMATION

Alaska Rural Communication Service (ARCS) is a network of low-powered satellite fed television transmitters that offers free, over the air, television and radio programming across much of rural Alaska. It is owned by the State of Alaska and maintained in partnership by the state, the television and radio stations that contribute content, and supported by local communities. The program content is a mix of public and commercial television network and syndicated product, Alaskan produced news and public affairs, and educational and informational programs from a variety of sources. ARCS is the only free-to-watch television for many rural Alaskans and broadcasts Emergency Alerts under the State of Alaska Emergency Alert System Plan (EAS).

The Alaska Rural Communication Service Council (ARCS Council) consists of individuals from each region of Alaska and are responsible for selecting the overall program schedule for staff to follow. The ARCS Council is a policy committee whose members are selected as follows: one consumer member selected from each of the 12 regional nonprofit Native associations in Alaska; one representative from the Department of Education; one representative from the University of Alaska; one member from the Alaska Public Broadcasting Commission; a representative from the Bethel Broadcasting Inc. (the current manager station for the Council); and two public members selected at large by the Governor. In the past, the ARCS Council would hold annual meeting to determine ARCS programing. This programing is provided through a contract the Alaska Department of Administration has with Alaska Public Broadcasting Inc. (APBI).

Alaska Public Broadcasting Inc. (APBI) has held multiple non-competitive, sole source contracts and grants for these services for over twenty years. As such, APBI has been the primary provider for ongoing maintenance; service and equipment upgrades; coordination of the ARCS Council and content providers; facilitation of the State of Alaska Emergency Alert System Plan (EAS) alerts over ARCS; and, liaison with the Satellite Interconnection Project (SIP).

The **State of Alaska Emergency Alert System Plan (EAS)** outlines the use of the FCC-mandated Emergency Alert System in Alaska. The Plan details the system for the National, State, and Local levels, and the activation authorities at each level. The members of the State Emergency Communications Committee, the Committee responsible for Alaska EAS, are listed, as are the EAS protocols used to send EAS messages. The Plan details the testing of the system and has guidance for Emergency Management and National Weather Service personnel to use when activating the EAS. The Plan also designated the local areas the State has been divided

into, gives a template for Local Areas to use when creating their own Plans, gives codes for the various locations in Alaska, and also gives instructions for cable operators.

The **Satellite Interconnection Project (SIP)** is the State of Alaska owned infrastructure for delivering public media services around the State. The SIP contains digital video and audio streams configured in a variety of combinations to serve the needs of Alaska's public broadcasting community, distance education providers and consumers, and to distribute emergency alerts among Federal, State and local EAS users. Participants: All of Alaska's public broadcasters use the SIP in multiple ways. The following entities directly use SIP to move content:
The State of Alaska: ARCS Television Service and University of Alaska Television, UATV
Public Television: KAKM-TV, Anchorage, KUAC-TV, Fairbanks, KTOO-TV, Juneau, and KYUK-TV, Bethel
Public Radio: The Alaska Public Radio Network, KNBA-FM, Anchorage, KMXT-FM, Kodiak, KUAC-FM, Fairbanks, KSKA-FM, Anchorage, KCAW-FM, Sitka, KSDP-FM, Sand Point, and KUCB-FM, Unalaska

APBI produces no content. APBI acts as a hub for distributing local, regional, national content paid for and produced by other educational and commercial businesses. APBI is also responsible for ensuring that Emergency Alert System (EAS) services are operational through ARCS.

The **Emergency Alert System** (EAS) is a national public warning system commonly used by state and local authorities to deliver important emergency information, such as weather and AMBER alerts, to affected communities over television and radio. Emergency Alert System participants – radio and television broadcasters, cable systems, satellite radio and television providers, and wireline video providers – deliver state and local alerts on a voluntary basis, but they are required to deliver Presidential alerts, which enable the President to address the public during a national emergency.

The **Federal Emergency Management Agency (FEMA)** and the **Federal Communications Commission (FCC)** work collaboratively to maintain the Emergency Alert System (EAS) and Wireless Emergency Alerts, which are the two main components of the national public warning system. Authorized federal, state, and local authorities create the alerts that are transmitted through the system. The majority of EAS alerts originate from the National Weather Service in response to severe weather events, but an increasing number of alerts are being sent by state, local, territorial, and tribal authorities. FEMA is responsible for any national-level activation and tests of the EAS.

Rural Television Transmitter Digital Conversion Project
In 2013 the State Department of Administration received a $5 million appropriation to upgrade rural analog television transmitters in ARCS to digital. This digital upgrade is mandated by the FCC to occur before July 2021. As many as two hundred and fifty-six (256) were once in operation. It is estimated there are more than 180 (180) communities using the ARCS television system. Alaska Public Broadcasting Inc. (APBI) was contracted to perform the digital conversions. APBI has also been contracted to provide a "hot line" regarding issues with rural television transmitters. In 2019 APBI reported that 97 sites have the digital upgrades "deployed." It is unknown how many of these "deployed" sites were ever or are currently actually

operational. APBI has not maintained a record of their operational status. The DOA has expressed concern that APBI has not provide a definitive answer as to how many "deployed" digital upgrades are operational. , and after having reached out to ARCS communities, the DOA shared that some rural communities, including as large as Dillingham, do not have operational equipment. APBI does report that there are still at least 86 communities needing deployment of the upgrades and that these remaining sites have conditions that make them more difficult to deploy and/or make operational than the ones already "deployed" to.

PRIVATE COMMERCIAL RURAL TELEVISION INFORMATION

Several commercial television programing providers are serving rural Alaska.
According to their website Dish TV is available in:
Anchorage Fairbanks Wasilla Juneau Eagle River Palmer North Pole Ketchikan Soldotna Kenai Kodiak Sitka Homer Bethel Chugiak Fort Wainwright Elmendorf AFB Barrow Eielson AFB Fort Richardson Seward Unalaska Valdez Nome Delta Junction Big Lake Petersburg Dutch Harbor Kotzebue Dillingham Cordova Willow Haines Wrangell Anchor Point Sterling Douglas Girdwood Craig Tok Kasilof Metlakatla Talkeetna Glennallen Healy Salcha Nikiski Hooper Bay Ninilchik Hoonah Klawock Sand Point Sutton Skagway Togiak King Cove Seldovia Selawik Aniak Chevak Emmonak Point Hope Unalakleet Mountain Village Akutan Kwethluk Kake Fort Yukon Saint Paul Island Yakutat Naknek Galena Alakanuk Houston and Quinhagak.

According to their website GCI TV is available in:
Anchorage, Angoon, Bethel, Cordova, Fairbanks, Ft Greely, Homer, Juneau, Kenai and Soldotna, Ketchikan, Kodiak, Kotzebue, Mat-Su, Nome, Petersburg, Seward, Sitka, Utqiagvik, Valdez and Wrangell.

Multiple commercial satellite broadband providers are reported to be planning on providing service to rural Alaska in the near future. Anywhere from 15% to 39% of Alaskans are underserved by internet providers (meaning they have access to none or only one). Satellite internet is the only option to get service to these people: running a fiber line into a rural area with a small population isn't a viable commercial option. Local Alaska television stations are currently streaming there news programing and satellite broadband uses may be able to get these local newscasts through the internet.

Multiple satellite internet companies are now eyeing Alaska as the perfect proving ground for their new tech, including low Earth orbit (LEO) satellites. Companies such as SpaceX, OneWeb, (recently filed for bankruptcy protections) Astranis Hughes North America**,** Telesat, and LeoSat are reported to be planning to use vast numbers of lower-capacity LEO satellites to provide broadband internet connections to the globe. In Alaska it is reported that SpaceX is the closest to a viable commercial broadband providing operation with Southeast Alaska servce possibly available late 2020. It is unknown if such capability would be able to provide television programing (over the top) to rural Alaska as part of internet services.

STATE OF ALASKA TELECOMMUNICATIONS SYSTEM (SATS)

State of Alaska Telecommunications System (SATS) – The Telecom Business Unit of the Office of Information Technology (OIT) within the Alaska Department of Administration (DOA) (formerly Enterprise Technology Services (ETS)) maintains the system which is a network of microwave and 2-way telecommunications sites throughout the state, supports day-

to-day operations of state agencies and emergency responders statewide. The acronym SATS is the term often used instead of the longer phrase State of Alaska Telecommunications System. The term State of Alaska Telecommunications System was created as a title for a book of spread sheets used to allocate costs for services provided by the telecommunications services division of the Alaska Department of Administration. The SATS book was created in 1990 to determine costs of providing services and to establish rates for these services. Each spreadsheet in the SATS book described what cost percentage of a telecommunications site was used for the services provided by or at that site. In the past, the SATS was the core set of telecommunications sites forming the fundamental infrastructure that provided telecommunications services for the executive branch of the State of Alaska. The majority of the sites and equipment are now owned and operated by the Alaska Department of Administration, Office of Information Technology. Other government and utility organizations own and operate portions

Communication operations supported by SATS include telephone, computer wide area networks (WAN), 2-way radio, paging, video conferencing, ARCS and others. During 2020/2021 SATS and ALMR oversite will be transferring to DMVA and/or DPS. The typical annual budget for SATS (including the Alaska Land Mobile Radio system (ALMR)) is approximately $9 million. However, the system currently needs about $24 million in upgrades to an over $300 million system. Prior to the 1990s the management of ARCS was included with the management of SATS/ALMR. At some point the management of ARCS was transferred to the DOA Commissioners Office.

SATS is an aggregation of approximately 159 telecommunication sites linked together through a variety of different transport methods (although primarily via terrestrial microwave) and covering the majority of the state's road system. The physical transport layers, the electrical, optical, mechanical and functional interfaces carrying the signal include: • Terrestrial microwave; • Fiber optic cabling; • Copper wire; and • 2-way radio. SATS may be viewed as a "Network-of-Networks" as it encapsulates so many different services. It has evolved over a span of 50 years from a basic 2-way radio system into the backbone of the state's Wide Area Network (WAN) and Public Safety communications system.

If one also includes Conventional 2-Way sites into the count, SATS is comprised of over 300 sites and 26,235 radios, including 16,408 Alaska Land Mobile Radio (ALMR) units at the end of 20121. In fact, ALMR has grown significantly over the last six years, from 76 agencies making 9,008,350 voice calls in 2008 to 119 agencies making 12,778,142 2013. The system complexity is significant since SATS is comprised of over twelve thousand separate pieces. OIT/DOA manages over 1,000 Federal Communications Commission (FCC) licenses with most being associated to this system. Each of the over 180 towers and frequencies used requires a separate license.

The **Alaska Land Mobile Radio System (ALMR)** is also dependent on the microwave backbone provided by SATS. The State of Alaska, the Department of Defense, other federal agencies in Alaska, and local municipalities joined together in a consortium effort to design, build, and now operate as well as maintain, a fully interoperable wireless communications system in Alaska. The primary objective of ALMR is to provide a reliable and secure, cost-

effective emergency communications system for all emergency responders and DOT in Alaska, especially for multi-agency responses to emergencies and critical situations.

The **Alaska Land Mobile Radio (ALMR)** Communications System is an independent radio network for emergency responders in Alaska during critical emergencies like the November 30, 2018 earthquake near Anchorage. ALMR consists of 86 dedicated wireless radio communication sites along Alaska's highways, marine highway, and remote mountaintops. It is a cooperative effort between federal (both DOD and non-DOD), state, local governments and tribal entities serving over 20,000 subscribers. ALMR serves 156,600 of Alaska's total 663,267 square miles, providing secure communications separated from traditional telecommunications systems, essential for emergency response. ALMR is supported by an interagency user council and an executive council. ALMR Provides Alaskan public safety first responders with interoperable communications that are cost effective, reliable, and adhere to national standards for public safety land mobile radio. Website: alaskalandmobileradio.org/

DOA/OIT contracts with Bering Straits Corporation to provides for installation, maintenance, and repair of radio and communication components for the ALMR system that supports public safety communication in Alaska. Two-way radio is the primary source of reliable public safety communication among law enforcement, correctional officers, transportation crews, and first responder personnel in Alaska.

ALMR MEMBER AGENCIES

State (24): Department of Public Safety, Alaska Army National Guard, Alaska Railroad Corporation, Alaska State Defense Force, Division of Alaska Pioneer Homes, Division of Public Health-Section of Emergency Programs, Legislative Affairs Agency, Office of Information Technology, Salcha-Delta Soil and Water Conservation District, UAF Fire Department, UAF Police Department, Alcohol and Marijuana Control Office, Division of Juvenile Justice, Division of Parks and Outdoor Recreation, Department of Corrections, DEC - Environmental Health Lab, DEC - Prevention, Preparedness and Response, and Department of Transportation & Public Facilities

Federal Non-DOD(18) DOD (6):

Bureau of Alcohol, Tobacco, Firearms & Explosives, 13th Space Warning Squadron - Clear Air Station, 103rd Weapons of Mass Destruction - Civil Support Team, Bureau of Land Management, 354th Fighter Wing - Eielson Air Force Base, 168th Wing, Drug Enforcement Agency, 673rd Air Base Wing - Joint Base Elmendorf-Richardson (JBER), 176th Wing, Federal Bureau of Investigation, US Army Corps of Engineers - AK District, Federal Emergency Management Agency, USARAK (Ft Greely, Ft Wainwright), ICE - Homeland Security Investigations, USMC Detachment - MP Company D, 4th LE Battalion, Internal Revenue Service - Criminal Investigations, National Oceanic & Atmospheric Administration – Fisheries, National Park Service, National Program Protection Directorate - Federal Protective Services, Transportation Security Administration, US Coast Guard Investigative Service, US Fish & Wildlife Service, US Forest Service - Chugach Fire and Aviation Management, Division of Forestry US Forest Service, Law Enforcement Division of Homeland Security & Emergency, Management US Postal Inspection Service, US Postal Service Office of the Inspector General, US Marshal Service, and Civil Air Patrol - Alaska Wing

INFORMATIONAL RESOURCES

1. State of Alaska Telecommunications System (SATS) Analysis (Spring 2014) World Wide Technology, Inc. An analysis of the State of Alaska's microwave backbone and public safety telecommunication resources.
2. State of Alaska Emergency Alert System Plan 2016
3. Alaska Public Media Engineering and Facilities Priorities 2019-2023 Alaska Public Media
4. Public Broadcasting in Alaska: A Long Range Plan by The Alaska Public Broadcasting Commission 1991 Edition (AS 44.21.266(12))

RESPONSE INFORMATION

Interested parties responding to this RFI must provide a description of any business or organization they represent, including contact information such as: name of the company, point of contact name(s), physical and mailing addresses, phone number, and email address.

Please include the type of services and scope of work your company or organization is able to provide. Please provide a recommendation of how the State should proceed with the rural television issues/projects and public broadcasting in general as explained above.

Please explain anticipated costs to the State of any recommendations and to individuals/communities provided rural television services.

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Important Notice: This RFI does not extend any rights to prospective vendors or obligate the state to conduct a solicitation or purchase any goods or services, nor will the State be financially responsible for any costs associated with the preparation of any response for the requested information. This RFI is issued for the sole purpose of obtaining information as described in this notice. However, the information obtained from this request may be used to prepare a purchase or solicitation in the future.

Interested parties must submit a written response by **Friday, May 22, 2020, at 4:30 p.m. ADT.** Responses may be sent by U.S. mail or E-mail to the addresses listed below.

All questions must be directed to the person listed below writing via email.

Department of Administration Commissioner Office
Attention: Deputy Commissioner Dave Donley,
550 W 7th Ave. Suite 1970, 19th Floor,
Anchorage, Alaska 99501,
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