U.S. Fish and Wildlife Service
Radio Handbook

May 2014

U.S. Fish and Wildlife Service Radio Handbook

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Responsibilities

There are several levels of responsibility for radio use within the U.S. Fish and Wildlife Service (Service). The responsibilities for each of these levels are outlined below (also see 272 FW 2):

Director

The Director ensures there is an effective radio management program in place that supports our mission.

Assistant Director - Information Resources and Technology Management (IRTM)

The AD - IRTM has overall responsibility for our radio program.

Radio Program Manager (RPM)

Part 377 in the Departmental Manual (DM) establishes the requirement for a Radio Program Manager (RPM) in each of the bureaus using the radio frequency spectrum. The Service RPM:

- Works for the Division of Information Resources and Technology Management, Branch of Communication Technology, located in Denver, Colorado;
- Has broad responsibility in the area of radio frequency assignments and radio system management, including planning, design, and maintenance; and
- Can be reached at 877-852-2424 or radio@fws.gov.

The RPM is responsible for Servicewide management of all radio communications. These responsibilities include the following:

1. Manages the National Radio Helpdesk at 877-852-2424.

2. Works with the Telecommunications Systems Division, Office of Resources Management, Office of the Secretary, and with other Federal agencies, State and local governments, and with the private sector for matters relating to or impacting the Service's radio program.

3. Provides Servicewide radio frequency management and promulgates Departmental policies and standards for radio frequency use. This includes supervising performance and use of radio frequency equipment, whether maintained by Service personnel or under contractual agreements with other Federal agencies or private repair shops.

4. Serves as the final technical authority on radio frequency use and radio acquisition in the Service. Provides guidance to Service technicians who have been delegated broad Regional authority to evaluate use and performance of communication systems.

5. Develops and manages Servicewide radio policy and directs radio planning for all field units of the Service. Prepares and recommends policy guidelines to supplement or implement the requirements of the Department and the National Telecommunications and Information Administration (NTIA).

6. Conducts training programs, workshops, and seminars to promote the effective management of the Service's radio systems by refuge, program, and Regional office staff.

7. Provides technical assistance to Regions, programs, refuges, and other field offices, including assistance in planning and designing radio systems. Assists with development of technical specifications for radio procurement and maintenance by field offices.

8. Provides technical support and access to specialized test equipment for field areas to identify and resolve radio frequency interference. Conducts technical assessments of facilities as requested and assists in resolving site management problems. Recommends techniques to minimize harmful radio interference to Service facilities from other users of the spectrum, and to minimize the Service's own emission of interfering signals.

9. Maintains a national database of Service radio equipment.

10. Advises Regional Radio Coordinators about their duties and responsibilities.

Regional Radio Coordinator

Each Region designates a Regional Radio Coordinator annually. The Regional Radio Coordinator serves as a liaison between the sites within the Region and the RPM, and performs the following functions:

1. Ensures that the use of radio frequencies within the Region conforms to established Service policy.

2. Oversees the operational performance of field radio systems within the Region. Ensures that equipment is checked annually in accordance with established technical criteria. Periodically evaluates the effectiveness of in-house maintenance programs.

3. Originates or reviews and submits requests for Departmental approval to the RPM.

4. Ensures that Site Radio Coordinators within the Region perform their duties as required and that effective use is made of Service technicians. Refers disputes with field service organizations to the RPM for arbitration.

5. Coordinates assistance to Service areas for planning, designing, implementing, maintaining and managing their radio systems. Ensures that due consideration is given to alternatives and to the most efficient use of facilities, personnel, and maintenance contracts.

6. Coordinates transfer of radio equipment between field stations and ensures that Site Radio Coordinators update their sites' radio equipment inventory listing each year.

Site Radio Coordinator

The manager of any unit with radio equipment must annually designate a Site Radio Coordinator for radio systems management. This person has overall responsibility for managing the radio system within the unit. The Site Radio Coordinator performs the following functions:

1. Maintains a station record or log for all radio transmissions that go through a base station, regardless of where that base station is located (see 377 DM 1 and 2). Because the Office of Law Enforcement (OLE) does not use base stations, this requirement is not applicable to OLE employees.

2. Assigns personal call signs to each individual using the site radio system. Although there is no required format, these call signs are usually two to three digit codes, and may be divided into groups such as:

   - The first digit of the call sign may show which part of the complex the user is assigned to; e.g. call signs for the Headquarters office begin with 1, and call signs for the first Refuge of the complex begin with 2, etc.

   - The second digit of the call sign may show which group the user works with; e.g., call signs for administrative employees have a second digit of 0, call signs for law enforcement employees have a second digit of 1, etc.

3. Ensures that appropriate personnel receive adequate dispatcher training, both formal and informal, on an annual basis. Any Service employee using radio communications through a non-Service radio system must rely on the owner of that system to maintain that system and train dispatchers as necessary.

4. Coordinates radio user training, particularly for seasonal employees. The objective of this training must be complete comprehension of system operation, including knowledge of appropriate radio procedures, techniques, and recommended practices relating to the use and care of radio equipment, as well as the constraints imposed by the terms of the site's Radio Frequency Authorizations (RFAs).

5. Administers the radio system maintenance contracts, if any, and maintains a case history for each unit. Ensures that measurement and adjustment of radio unit frequencies (in both transmit and receive modes), deviation, modulation, and other tests are performed annually as required. Ensures that equipment is maintained at top performance level, optimizing the system's designed performance and meeting approved minimum standards for the system as governed by the RFA. When it appears that a maintenance shop is not performing as required under contract or is providing poor workmanship, the Site Radio Coordinator must refer the matter to the Regional Radio Coordinator.

6. Ensures that proposed purchases conform to Service standards, and that any necessary Departmental clearances have been obtained before procuring radio equipment. Ensures that existing RFAs cover the proposed operation or prepares requests for new or modified RFAs.

7. Understands radio communications coverage within the unit and annually evaluates system performance to determine that the coverage has not degraded.

8. Ensures that radio use conforms to the mandatory requirements in 272 FW 2, and informs the site manager if it doesn't.

9. Maintains property records for radio equipment, obtaining proper signatures for Transfer of Property documents as appropriate, and providing inventory information to the Regional Radio Coordinator annually.
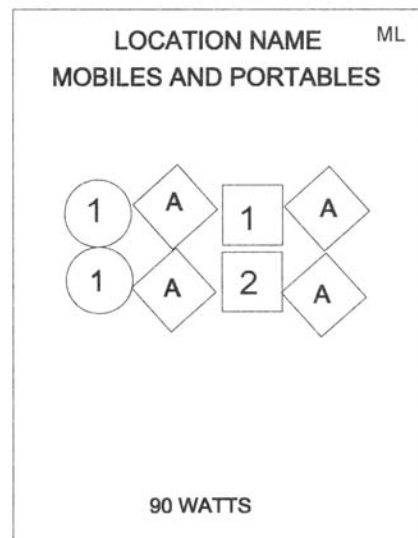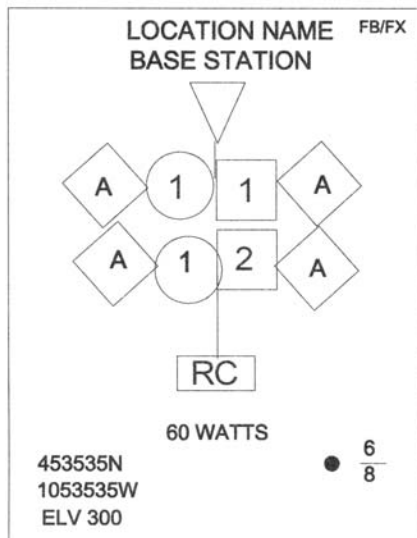
Radio End User

The radio end user is responsible for the following:

1. Familiarizes him/herself with this handbook and 272 FW 2, and follows proper operating procedures outlined in both.

2. Familiarizes him/herself with the equipment and acquires a basic understanding of how the equipment functions.

3. Comprehends the coverage area and avoids illegal use of the radio equipment outside the licensed area.

4. Memorizes his/her personal call sign and uses it consistently and appropriately.

5. Refrains from using obscene, indecent, or profane language while using the radio system.

6. Minimizes low-priority transmissions to ensure that important transmissions can be heard.

Items to Consider When Planning a Radio System

- What areas need radio coverage, and what kind of terrain is involved?

- Will the radios be used to support law enforcement, fire fighting, interpretation, management, or other functions?

- When will the radio system be used?

  o At all times?

  o Only during the day?

  o Seasonally?

- How many people will use the system, and what number and types of equipment need to be purchased to serve their needs?

- Is there a non-Federal trunked system available in the area? If so, does the trunked system provide adequate coverage for the site? Can the site afford to pay any recurring fees to use the trunked system?

- Can the site share frequencies, backbone equipment, towers, or a communication site with an existing Federal Government radio system? If so, is network connectivity already available in any form?

- How much will the system cost, including costs for engineering, equipment, programming, installation, annual rental and electricity fees (if necessary), maintenance, and life-cycle management?

- If the communications site is leased, is there a signed Memorandum of Agreement (MOA) between the Service and the site owner?

- Will the radio system require dispatching?

- What cooperator frequencies will be used?

NAME OF NATIONAL WILDLIFE REFUGE
CITY, STATE
VHF RADIO SYSTEM
DESIGNED BY MR. XYZ
UPDATED AND VERIFIED BY MS. ABC 15 JUNE 2009

FBR

INDEPENDENCE MTN RPT

DUPLEXER

50 WATTS

454545N
1054545W
ELV 981

6/30

FB/FX

LOCATION NAME
BASE STATION

RC

60 WATTS

453535N
1053535W
ELV 300

6/8

ML

LOCATION NAME
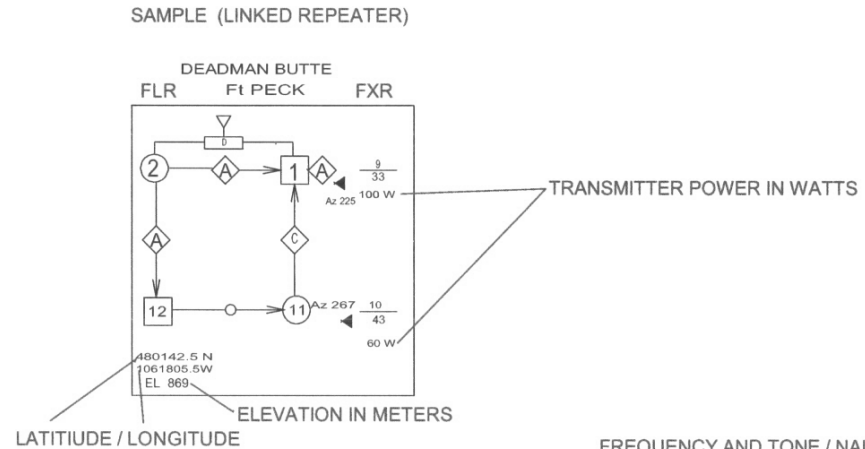MOBILES AND PORTABLES

90 WATTS
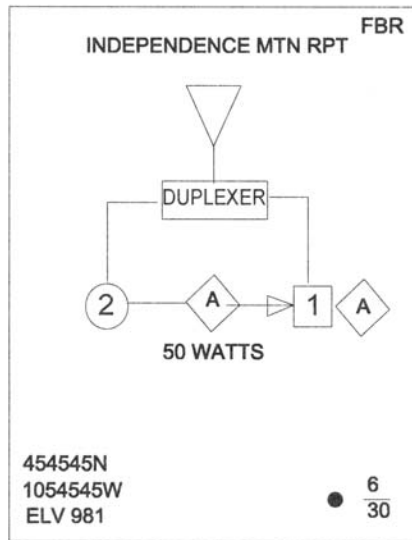
F1 = 166.3750 MHZ

F2 = 173.8250 MHZ

A = 108 (h), CTCSS 107.2 HZ

RADIO SYSTEM LEGEND / SYMBOLS

SYMBOLS

○ RECEIVER

☐ TRANSMITTER

Y ANTENNA

◇ CTCSS &/OR NAID

NON DIRECTIONAL — ● $\frac{10}{33}$ ANTENNA GAIN IN DB
ANTENNA ELEVATION ABOVE GROUND

◀ DIRECTIONAL

—✕—▶ CARRIER CONTROL

—○—▶ CONTROL OFF

—◇—▶ CTCSS / NAID CONTROL

☐ D DUPLEXER

☐ RC WIRELINE REMOTE CONTROL

AZ AZIMUTH IN DEGREES

EL ELEVATION in METERS

$\frac{10}{33}$ ANTENNA GAIN IN DB
ANTENNA ELEVATION ABOVE GROUND

NAID NETWORK ACCESS ID

DPL DIGITAL PRIVATE LINE

☐ VC VOTER COMPARATOR

SAMPLE (LINKED REPEATER)

DEADMAN BUTTE
FLR   Ft PECK   FXR

TRANSMITTER POWER IN WATTS

LATITIUDE / LONGITUDE

ELEVATION IN METERS

FREQUENCY AND TONE / NAID CODES

F1 164.625
F2 163.150
F3 164.575
F11 417.775
F12 419.825

NAID A 0001
NAID B 0002
NAID C 0003
DEADMAN BUTTE DPL A=023
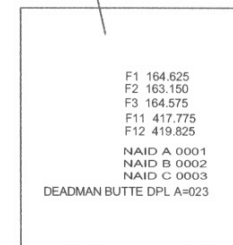
Radio Frequency Authorization Legend

SPECIAL HANDLING (Only appears if the FOI Section is checked)

This Authorization is granted pursuant to Chapter 1 Part 1.1 Section 6.i of the NTIA Manual by authority of the US Department of the Interior.

This Authorization must be updated by: (Date). For continued use of this equipment, YOU MUST SUBMIT a request to your Frequency Manager by (Date).

Serial Number	FOI	MSD	BUR	NET	RVD	AUS	EXD
I 123456	X		S4				
	Note 1		Note 2				

FRQ	BIN	TME	SPD	STC	Bandwidth	Emission	Power
163.15 MHz	1			FB(R)	11.00 kHz	F3E	60 Watt(s)
				ML	11.00 kHz	F3E	90 Watt(s)
Note 3		Note 4		Note 5	Note 6		

XAL, XSC (Transmitter)	XRC	XLA, XLG	XCL	XAP	XAZ
City, State	Control Name	Geo-Coordinates	Call Sign		ND
				Note 7	

XAD (Transmitter)
06GCOLLINEAR 00002H0030T (Note: Red = antenna gain, Blue = type antenna, Green = height above sea level, black = feed point height)

RAL, RSC (Receiver)	RRC	RLA, RLG	ACL	RAP	RAZ
City State	Control Name	Geo-Coordinates	Call Sign		ND
				Note 7	

RAD (Receiver)	REMARKS
06GCOLLINEAR 00002H0030T	* Remarks

Restrictions (NTS, *NTS, SUP)
Supplementary Details -

SPECIAL HANDLING INSTRUCTIONS

Exempt from release outside US Government IAW 5 U.S.C. Paragraph 552. (Only appears if the FOI Section is checked)

Notes:

1. FOI = For Official Information.

2. BUR= Bureau or Region (we use S instead of R thus S4 is Region 4)

3. FRQ = Frequency

4. TME = Time the frequency is used.

5. STC = Station Class : Examples FB is Fixed Base if it has an R on the end FBR then it is a fixed base Repeater. ML stands for Mobile.

6. Characteristics of the frequency in use. Includes Bandwidth, Emission and Power. Bandwidth is how wide the signal is (normally in Khz or Kilohertz). Emission is a designator for modulation used. Examples F3E = Frequency Modulation (FM), A3E = Amplitude Modulation (AM), J3E = Sideband. Power = Transmitter power normally in watts.

7. XAP/RAP = Antenna Polarization (vertical, horizontal)
   XAZ/RAZ = Physical direction or movement of the antenna for example ND for Non directional.

"ONLY SIGNIFICANT ITEMS HAVE BEEN IDENTIFIED"

Other Special Radio Frequency Considerations

Emergencies

In situations where life, health, or safety is at risk, a Service employee may transmit on any available frequency; no RFA is needed.

Call Signs

We must use call signs to ensure that stations can be identified in the event of harmful interference. You must announce the appropriate call sign at the beginning of each transmission, at the end of a series of transmissions, and at least every 10 minutes during continuous periods of transmission. To protect personal privacy, you should not announce your name over the radio.

- When transmitting through a base station, you must announce the base station's call sign. This base station call sign is assigned by the RPM during system design.

- When transmitting through a mobile or portable radio, you do not use a call sign assigned to the radio; instead you must announce your own personal call sign. These personal call signs are assigned by the Site Radio Coordinator to each person using the site's radio system.

Encryption

Per OCIO Directive 2006-020 (copy attached below), all law enforcement and/or other sensitive radio communications must be encrypted. If you buy radio equipment with encryption, it must have the Advanced Encryption Standard (AES) encryption algorithm, unless your radio system is linked with local cooperators using older encryption algorithms such as the Digital Encryption Standard (DES) or output feedback (OFB). (Please note: the contact list in this memo is out of date; an updated list is attached in Section 10 of this handbook.)

Trunked Systems

Part 377 in the DM requires Departmental bureaus and offices to use local, non-Federally-owned trunked systems in lieu of Department-owned radio systems, when beneficial to the Federal Government. Currently, the number of trunked systems is limited, but more are being installed. When affordable trunked systems with adequate coverage become available, nearby Service offices will migrate to use the trunked systems as they obtain funding to upgrade or replace existing equipment.

Microwave Systems

Part 377 in the DM also requires Departmental bureaus/offices using microwave networks to use commercial common carrier services when possible; bypassing these commercially available services requires a Departmental waiver. If a Departmental bureau/office purchases a microwave system, non-Federal offices may use excess channel capacity if there is a mutual need.

Point-to-point microwave devices must have RFAs and use AES encryption. Although point-to-point microwave devices are available on FCC bands that don't require licenses, Federal offices are not allowed to use these devices.

Mutual Aid Frequency Sharing

Service offices requesting non-emergency mutual aid may allow any responders to program their radios with the office's frequencies, provided:

- There is a valid RFA for each frequency,
- The frequency is only used in the area specified on the RFA,
- The number of radios using the frequency in the mutual aid situation does not exceed the number of mobiles/portables specified on the RFA, and
- A signed MOU is in place allowing the responders to use the frequency during the mutual aid operation.

In emergency mutual aid situations, no signed MOU is necessary, and the number of mobiles/portables specified on the RFA may be exceeded.

Any Service employee providing mutual aid to another organization must follow that organization's rules for mutual aid frequency sharing.

Regardless of the circumstances, any frequency used legally in a mutual aid situation must be removed from the radio as soon as the radio is no longer in the area designated on the RFA.

Travelers' Information Service (TIS) Radio Systems

Use TIS radio systems according to the instructions provided in 377 DM 2. TIS radio systems require coordination with non-Federal frequencies within the State. Please contact the RPM to begin this coordination when purchasing a TIS radio system.

Specific Use Frequencies

The Interdepartmental Radio Advisory Committee, National Telecommunications and Information Administration (IRAC/NTIA) has made certain frequencies available for use in specific circumstances. You must have a valid RFA in place to use any of these frequencies, except as noted below.

These frequencies, which are available to all Government agencies, can't be used for any purpose other than those listed below. No station operating on these frequencies will receive protection from interference by other stations operating on the same frequency. Because of this, you should not use these frequencies for critical services involving safety of life and property (except for fire use). Use Network Access Codes (NAC codes) and talk groups with these frequencies to reduce nuisance interference from other users.

You must use the minimum effective radiated power (ERP) that will transmit these frequencies, and they can't be used on repeaters, except as noted below.

- **Local Common Use**

  Local common use frequencies are for occasional communications within an 80 kilometer (50 mile) radius. You can use them on fixed repeaters, but not on airplanes. The maximum transmitter output power must not exceed 30 watts. The gain of the base station antenna must not exceed 7 decibels and the height of the base station antenna must not exceed 20 feet above the height of the structure containing the transmitting equipment.

- **Wide Area Common Use**

  Wide area common use frequencies are for occasional communications across more than an 80 kilometer (50 mile) radius. You can use them on transportable repeaters, but not on fixed repeaters. The maximum transmitter output power must not exceed 30 watts. The gain of the

base station antenna must not exceed 7 decibels and the height of the base station antenna must not exceed 20 feet above the height of the structure containing the transmitting equipment.

- **Fire Use**

  The National Interagency Fire Center (NIFC) assigns frequencies for use at specific fires, and you must delete them from radios once the radios leave the scene of the fire. Do not use the frequencies for any other purpose, including fighting another fire, without permission from NIFC. Because NIFC assigns these frequencies directly, you do not need an RFA to use them.

  There are some fire frequencies assigned to specific areas in the western states that can be permanently programmed into fire and law enforcement radios. Only use these frequencies for urgent situations, such as fire or search-and-rescue operations. You do not need an RFA, but you must notify NIFC before using these frequencies.

- **Marine Band**

  If you are on a ship or boat and you use a radio for port operations or inter-boat communications, you should use marine band frequencies. These come pre-programmed into specific marine band radios and are limited to 25 watts of power. You do not need an RFA for boat-mounted marine band radios. When using these radios, you must use a call sign assigned by the RPM, and you must scan channel 16, the marine band emergency channel. There are additional requirements for large ships, especially those that travel in international waters.

  You can use these marine band frequencies in a fixed coastal marine station (a marine band radio connected to a power source and used on land as a base station), but you must scan channel 16 and you must have an RFA for each marine band frequency you use.

  If you are using a mobile or portable radio or a base station other than a fixed coastal marine station, you may listen to these marine band frequencies, but you may not transmit on them except in emergencies. You do not need RFAs in this situation.

- **Marine Radar**

  You must have RFAs to use marine radar equipment.

- **Speed Radar**

  You must have RFAs to use speed radar equipment, unless the equipment is laser-type.

- **Drug Interdiction**

  Approved frequencies are available for drug interdiction (Operation Alliance) operations on specific refuges along the Mexico border in Arizona and New Mexico.

- **Southwest Border Protection**

  The Department has a blanket MOU that allows Interior bureaus to use Border Patrol frequencies at any time without an RFA when enforcing border security.

- **National Flight Following**

    The national flight following frequency is 168.650. Per OCIO Directive 2009-009 (copy attached below), all Departmental aircraft using the national flight following frequency must transmit a 110.9 Hz CTCSS tone. (Please note: the contact list in this memo is out of date; an updated list is attached in Section 10 of this handbook.)

For more information on any of these specific use frequencies, please contact the RPM.
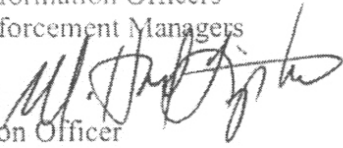
United States Department of the Interior

OFFICE OF THE ASSISTANT SECRETARY
POLICY, MANAGEMENT AND BUDGET
Washington, DC 20240

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IN AMERICA

OCIO Directive 2006-020

NOV 3 0 2006

To: Bureau Chief Information Officers
        Bureau Law Enforcement Managers

From: W. Hord Tipton
        Chief Information Officer

Subject: DOI Radio Communications Encryption Policy

Purpose:

This Directive provides policy for Department-wide deployment of the Advanced Encryption Standard for land mobile radio (LMR) systems.

Background:

The Department of the Interior uses various forms of encryption to provide secure communications within the Department and with other federal, state, and local cooperators, particularly for law enforcement activities.

The Department's Policy concerning the use of encryption for sensitive radio communications, especially of an investigative and law enforcement nature. The Radio Program Division, Office of the CIO, National Park Service has been designated as the Central Key Management Facility (CKMF) for radio communications for the Department.

During real-time LMR communications, Advanced Encryption Standard (AES) encrypts transmitted voice and data, in either 128, 192 or 256-bit blocks, to an unintelligible form called cipher text and decrypts the cipher text back to its original form, called plaintext. This encryption/de-encryption ensures that sensitive LMR conversations are not transmitted in clear voice and that only authorized LMR users have access to the information being transmitted.

The DOI CKMF manager can be reached at e-mail: comsecmgr@nps.gov, or phone (202) 354-1456.

For a complete listing of this standard please reference:
http://csrc.nist.gov/publications/fips/fips197/fips-197.pdf

All Law Enforcement and/or other sensitive LMR communications are to be encrypted. Non-Sensitive LMR communications do not require encryption.

Timeframe:

This policy becomes effective upon the date of signing.

Policy:

The purchase of new LMR equipment and systems requiring high encryption will use the Advanced Encryption Standard based on Federal Information Processing Standard (FIPS) publication #197.

Within the Department Enterprise Architecture Repository, AES for LMR communications will be identified as the standard and Digital Encryption Standard (DES) will be identified as in containment or in attrition.

Older algorithms, such as DES, DES (Extra Long) XL, and DES (Output Feedback Mode) OFB will be purchased only if they are required for interoperability with local cooperators.

Additionally, as DOI Law Enforcement radio systems are developed and implemented they will be designed to use Over-the-Air Re-keying (OTAR) technology where feasible.

Contact:

The DOI OCIO point of contact for this initiative is Mr. Stuart Ott. Deputy Division Chief. Enterprise Infrastructure Division. (703)487-8560 or Mr. Christopher Lewis, Telecommunications Specialist, Enterprise Infrastructure Division, (703)487-8582.

cc: Bureau Radio Liaisons
  Bureau Law Enforcement Managers
  Carol Alexander, NPS, OCIO. CKMF

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

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IN AMERICA

JUL 13 2009

OCIO Directive 2009-009

To: Director, National Park Service
Director, U.S. Fish and Wildlife Service
Director, U.S. Geological Survey
Director, Bureau of Indian Affairs
Director, Bureau of Land Management
Commissioner, Bureau of Reclamation

Through: Rhea Suh
Assistant Secretary
Policy, Management and Budget

From: Sanjeev (Sonny) Bhagowalia
Chief Information Officer

Subject: Guidance on Procedure for Toning of the National Flight Following Toning
Frequency 168.650 MHz

Purpose

This directive requires all Departmental offices and bureaus using the National Flight Following (NFF) frequency 168.650 MHz to follow a three-phase approach for toning their equipment and scheduled reporting of their progress.

Background

During the 2008 National Radio Meeting held in Las Vegas, Nevada, the Department of Agriculture (USDA) and the Department agreed that the NFF required tone protection to avoid radio interference. To ensure compliance with this agreement, the Department and the USDA will use the three-phase approach described in this directive.

Scope

This directive applies to all Departmental offices and bureaus and becomes effective immediately.

Policy

All bureaus and offices will provide an initial written action plan to their organization's representative within 30 days. Representatives will provide a progress report validating the status of the toning process to their respective Interagency Radio Alliance representative and the DOI OCIO coordinator by the 15th of each month until the project is complete. An Equipment

Identifier Road Map will be used during the transition as a status check and as attached to the monthly progress reports.

- **Phase I - Develop NFF Toning Action Plan**
  Phase I consists of building and submitting each organization's NFF Toning Action Plan and a completed Equipment Identifier Road Map to their Interagency Radio Alliance representative within 30 days of the issue of this directive. The action plan will identify all dedicated NFF locations, including base stations, repeaters, portables, mobiles and aircraft radios, and timeframes required to perform the tone change.

- **Phase II - Tone Radio Transmitters** (may be done concurrently with Phase I)
  Phase II consists of toning all transmitters, including those on aircraft, to ensure uninterrupted communications. Without exception, all transmitters using NFF must be programmed to the CTCSS Encoder 110.9 MHz tone within 90 days of the issuance of this directive. _Do not proceed with Phase III until notification is received by your respective IRA representative._

- **Phase III - Tone Radio Receivers**
  Phase III will begin only after the completion of Phase II by **all agencies**. All radio receivers used for NFF, without exception, shall be programmed with the CTCSS Decoder 110.9 MHz tone. Due date for Phase III is October 31, 2009.

Coordination Contact List:
- Stuart Ott - US/DOI/OCIO
- Chris Lewis US/DOI - DOI Coordinator
- Carroll Alexander - National Park Service
- Noel Newberg - US Fish and Wildlife Service
- Jerry Godbey - U.S Geological Survey
- Annette Box - Bureau of Land Management
- Tony Beitia - Bureau of Indian Affairs
- Tony Juarez - Bureau of Reclamation
- Kevin Hamilton - USDOI/BLM

Contact: For additional guidance and direction in implementing this directive, please contact Mr. Stuart Ott from the Office of the Chief Information Officer at (703) 648-5517 or Mr. Christopher Lewis at (703) 648-5550 or Christopher_lewis@ios.doi.gov.

Attachment

cc: Heads of Bureaus and Offices
        Bureau Chief Information Officers
        Bureau Deputy Chief Information Officers
        Inspector General
        Solicitor

2

Radio Purchasing Procedures

Per OCIO Bulletin 2002-008 (copy attached below), anyone in the Department of the Interior purchasing "… equipment, regardless of cost, that uses radio frequencies to accomplish its task, i.e., wireless equipment, must have prior technical approval from their bureau radio liaison, now referred to as the bureau Radio Program Manager (RPM)." (Please note: the contact list in this memo is out of date; an updated list is attached in Section 10 of this handbook.)

Per the memorandum dated January 7, 2014, Mandatory Use of Fish and Wildlife Service (FWS) Strategic Sourcing Contract Vehicle for Department-wide Acquisitions of Land Mobile Radios (copy attached below), any employee purchasing radio equipment must use the FWS Land Mobile Radio Indefinite Delivery-Indefinite Quantity (IDIQ) Contract. Radio product types which are not offered on this contract are exempt from using this contract and do not require a waiver. The Ordering Guide is attached below.

The Service Radio Team will obtain quotes and prepare ARs for new radio equipment. This ensures you receive the equipment most suited to your needs at the best current pricing, including any available discounts or rebates. You may obtain quotes and prepare the AR yourself, but since incomplete or incorrect ARs must be corrected before approval, it is usually more cost-effective to have the Radio Team do this work.

Once your AR is complete, the RPM will approve it to ensure that the OCIO requirement for technical approval is met prior to purchase.

When you receive the AR with the RPM's signature, you can create your Purchase Request (PR) and complete the purchase through your site's normal administrative processes, with the following steps:

- Attach the signed AR to the PR in the Financial and Business Management System (FBMS).
- Enter the following into the PR's header text: "The Service Radio Program Manager has approved this purchase; please see attached signed AR."
- Assign the Radio Approver role to Karen Wood in the Service Radio Team, and the Ad Hoc Approver role to Lorraine Miller in the Headquarters (HQ) IRTM office. Some radio equipment will require you to assign a Pers. Prop. Approver; this person will vary by region.

Once the purchase is complete, please send copies of the purchase order or other purchasing documents to the RPM.

To allow the Service Radio Team time to develop and approve ARs and send them to you for processing before the Regional procurement cutoff dates, the RPM establishes a cutoff date for radio procurements near the end of each fiscal year. You must deliver all requests for radio procurements to the Service Radio Team no later than this date.

Radio accessories, wildlife telemetry equipment, marine radios, and trunked equipment may be shipped directly to you or to another site. To avoid programming errors, we recommend you ship any radio equipment other than wildlife telemetry or trunked equipment to the Service Radio Team for programming. As an option, the Site Radio Coordinator may program the radio equipment him/herself, or hire someone to do the programming, but they have to ensure the requirements in 272 FW 2 and this handbook are met. See Section 8 of this handbook for more information.

Once you receive any equipment sent directly from the vendor, you must pay the invoices in a timely manner to avoid penalties under the Prompt Payment Act (5 CFR 1315: Prompt Payment). You must also send a receiving report or equivalent documentation to the Service Radio Team, including serial numbers,

so they can add it to the Servicewide equipment inventory. For equipment shipped directly to the Service Radio Team, the Team will develop receiving documentation and send it to you so that you can pay the invoices promptly. You must provide copies of paid invoices to the Service Radio Team.

For more information, please contact the Service Radio Team at radio@fws.gov or at 877-852-2424.

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

JUL 3 1 2002

OCIO BULLETIN 2002-008

To: Solicitor
        Inspector General
        Heads of Bureaus and Offices
        Bureau/Office Chief Information Officers
        Bureau/Office Deputy Chief Information Officers

From: W. Hord Tipton
        Chief Information Officer, Acting

Subject: Technical Approval of Radio Equipment Acquisitions

Purpose:

This bulletin reiterates policy disseminated by Information Resource Management memorandum dated December 20, 1996, Subject: Technical Approval of Radio Equipment Acquisitions.

Background:

The purchase of radio equipment without frequency authorization is a violation of Federal Regulation 47 CFR 300. Examples of devices requiring this oversight are radios and systems in the HF, VHF, UHF, and microwave frequency bands whether voice, data, or telemetry; Differential Global Positioning Systems; and audio and video wireless surveillance.

Scope:

This bulletin applies to all Departmental offices and bureaus.

Policy:

All bureaus within the Department procuring any equipment, regardless of cost, that uses radio frequencies to accomplish its task, i.e., wireless equipment, must have prior technical approval from their bureau radio liaison. This assures all DOI wireless devices have required radio frequency authorizations and are compatible with existing radio systems. The equipment must also meet the requirements set forth in Department Manual 377DM 1, Telecommunications Management, the Radio Communications Handbook 377DM, and the National Telecommunications and Information Administration's Manual of Regulations and Procedures for Federal Radio Frequency Management (NTIA Manual). Low power devices

commonly classified by the Federal Communications Commission (FCC) as FCC Type Accepted Part 15 or 90 must also be approved by your bureau radio liaison to prevent the expenditure of funds for equipment that is not protected from interference. Low power Part 15 or 90 devices not requiring prior approval are: cordless telephones, garage door openers, microwave ovens, and commercially provided transmission services such as cellular telephone or commercial radio paging. The use of Family Radio Service and Multi-Use Radio Service equipment is expressly prohibited.

Time Frame:

This bulletin is effective immediately.

Contact:

When in doubt, you should contact your respective bureau radio liaison for specific guidance. The following are Interior Bureau Radio Liaisons.

- Glenn Cascino   BOR   303-445-3336
- Robert Dutrow   USGS   703-648-7017
- Noel Newberg   FWS   303-275-2401
- Ron Strong   BLM   303-236-6635
- Frank P Weed   NPS   303-969-2084
- John King   BIA   505-346-6511

For bureaus/offices not having a radio liaison, contact Chris Lewis in the Office of the Chief Information Officer at 202-208-6758.

For additional information or clarification, please contact Jim Dolezal, Telecommunications Systems Division Chief, at 202-208-5002 or Art Nelson at 202-208-3939.

cc:
Bureau Procurement Chiefs
Telecommunications Managers
Bureau Radio Liaisons

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United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

JAN 7 - 2014

Memorandum

To: Heads of Bureau and Offices
           Bureau Assistant Directors – Administration

From: Debra E. Sonderman *[signature]*
           Director, Office of Acquisition and Property Management and Senior
           Procurement Executive

Subject: Mandatory Use of Fish and Wildlife Service (FWS) Strategic Sourcing Contract
           Vehicle for Department-wide Acquisitions of Land Mobile Radios

Effective immediately, all purchases of land mobile radios and components by Department of the
Interior (DOI) bureaus and offices, both under and over the micro-purchase threshold, are
required to be made through the use of the FWS Land Mobile Radio Indefinite Delivery-
Indefinite Quantity (IDIQ) Contract. This policy memorandum will remain in effect until a
follow on contract is issued, currently projected to be in FY 15. Ordering instructions and DOI
bureau and office contacts may be found in the attached U.S. Fish and Wildlife Service Ordering
Guide, Land Mobile Radio Support Services IDIQ, dated January 3, 2014.

If you have questions or need additional information please contact Michael Coghill, FWS
Contracting Officer, at michael_coghill@fws.gov 703-358-2288; or Scott Dalrymple, Interior
Business Center Contracting Officer, at prescott_dalrymple@ibc.doi.gov or 520-439-2499. You
may also contact Scott Curit, Strategic Sourcing Program Manager, Office of Acquisition and
Property Management, at scott_curit@ios.doi.gov or 202-513-0719.

cc: Bureau Procurement Chiefs
       Charge Card Agency/Organization Program Coordinators
       Charge Card Bureau Leads
       Director, Office of Small and Disadvantaged Business Utilization

U.S. DEPARTMENT OF THE INTERIOR

Ordering Guide
Land Mobile Radio Support Services IDIQ

U.S. Fish & Wildlife Service
Division of Contracting and Facilities Management
4401 North Fairfax Drive, MS 7118-43
Arlington, VA 22203

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Waiver:

All waiver requests must go through the Bureau or Office Radio Program Manager and provided to DOI\OCIO, Attention: Russ Sveda for review and approval.

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The Bureau Radio Program Managers are:

BIA - Michael VanDermyden
BLM - Michael Landry
BOR - Ivan Williams
FWS - Noel Newberg
NPS - Carroll (Alex) Alexander
USGS - Mona Singleton
BOEM, BSEE, and DOI Offices - Russ Sveda

Waiver requests must be submitted in writing and address the following:

Radio product type(s) in the requirement, dollar amount of the requirement, the proposed alternate source for the requirement, and the reason why the mandatory use contract cannot be used.

Exemption:
Radio products types which are not offered on the mandatory use contract are exempt from using the contract and do not require a waiver.

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Introduction

This guide contains the information needed to properly use the Land Mobile Radio Indefinite Delivery, Indefinite Quantity (IDIQ) contract to award a Task Order responsive to the customer's requirements. It contains general information, instructions on placing Task Orders, roles and responsibilities of key points of contact, how to prepare a proper requirements package for ordering and direction in initiating and managing Task Orders. This document is applicable to all U.S. Department of the Interior (DOI) bureaus and individuals with delegated authority to award and administer Task Orders against this agreement.

General Information

Scope of the Land Mobile Radio IDIQ

The objective of this IDIQ is to provide comprehensive Land Mobile Radio technical and non-technical support services associated with the management of the U.S. Fish and Wildlife (FWS) Radio Program and DOI Radio Program. Firm Fixed Price and Time and Materials Task Orders may be issued in accordance with this IDIQ for the following services in support of: radio systems, radio computer systems, telecommunications, radio help desk and key management facility operations. This is a mandatory use IDIQ for DOI that will help reduce procurement costs and streamline the acquisition process.

Period of Performance

Year	Start Date	End Date
Base Year	March 7, 2011	March 6, 2012
Option Year 1	March 7, 2012	March 6, 2013
Option Year 2	March 7, 2013	March 6, 2014
Option Year 3	March 7, 2014	March 6, 2015
Option Year 4	March 7, 2015	March 6, 2016

The IDIQ was awarded with a one-year base period on March 7, 2011, with four (4) one-year option periods, for a potential aggregate total performance period of five years:

Purchase Limitations

The minimum guaranteed amount under this IDIQ contract is $10,000.00. Prior to the initiation of a Task Order, program offices are required to verify the remaining purchasing capacity:

Minimum Order

The Government Purchase Card may be used for supplies or services covered by this contract in an amount of less than $3,000.00.

Maximum Order

The total combined funding for all Task Orders issued within the base year (and for each subsequent, exercised option year thereafter) may not exceed $600,000,000.00 (six-hundred million). Upon reaching this limit, the IDIQ will expire and be terminated.

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Issuing Task Orders

Authority

Any warranted Contracting Officer (CO) belonging to DOI, its bureaus or any of its offices may order against this contract within their delegated warrant authority, provided the IDIQ does not exceed the $600,000,000.00 limit. All COs seeking to place orders against this contract consent to the terms and conditions set forth in the IDIQ. Once a Task Order is administered under this contract, a signed copy of the Task Order must be submitted to the Land Mobile Radio IDIQ CO:

FWS –
Michael Coghill, CO
Land Mobile Radio IDIQ CO
703-358-2288
michael_coghill@fws.gov

AQD – Equipment & Supplies
Scott Dalrymple, CO
AQD Contracting Officer
520-439-2499
prescott_dalrymple@ibc.doi.gov

(As previously mentioned, the above listed COs must be contacted prior to the initiation of a Task Order to ensure limits are not exceeded.)

A certified Contracting Officer Technical Representative (COR) must be identified for each Task Order. The Land Mobile Radio IDIQ CORs must be notified for each Task Order COR assigned:

Noel Newberg
FWS Land Mobile Radio IDIQ COR
303-236-5056
noel_newberg@fws.gov

Russell Sveda
Land Mobile Radio IDIQ COR
303-236-5091
russell_sveda@ios.doi.gov

*When placing an order against this contract, the vendor must be notified and a quote/proposal must be obtained prior to task order initiation:

Zac Neumayr
Senior Director- CONUS
Tribalco
303-339-0911
zac.neumayr@tribalco.com

Larry Opack
Business Development
Tribalco
301-758-5633
larry.opack@tribalco.com

Using the FWS Contracting Office

For Task Orders awarded by FWS on behalf of another bureau, funding must be provided through an intra-agency agreement/MIPR for (DoD) form that includes a statement of work (SOW), an independent government estimate (IGE) based on prices established in the IDIQ, a financial division point of contact and a technical point of contact. The FWS Contracting Office will send the SOW to the vendor for a quote, and then issue the Task Order if found fair and reasonable. **FWS shall continue to order equipment, supplies, and services.**

*All non-FWS entities will be charged a 3% indirect cost for this service.

Using the DOI, Interior Business Center, Acquisition Services Directorate (AQD)

For Delivery Orders awarded by AQD on behalf of another bureau, USDA, DOJ, Federally

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Recognized Tribes, and ACE, funding must be provided through an intra-agency agreement form that includes a statement of work (SOW), an independent government estimate (IGE) based on prices established in the IDIQ, a financial division point of contact and a technical point of contact.   The AQD Contracting Office will send the SOW to the vendor for a quote, and then issue the Task Order if found fair and reasonable. **AQD will only order equipment and supplies, service requirements should be directed FWS.**

*All non-DOI entities will be charged a 3% indirect cost for this service.

Roles and Responsibilities

Land Mobile Radio IDIQ CO

The Land Mobile Radio IDIQ CO has the overall responsibility for managing and administering the IDIQ, as well as the following:
o Serving as a general informational point of contact for Land Mobile Radio IDIQ users
o Providing administrative procedures guidance for placing orders
o Monitoring base year and option year periods of performance

Task Order CO

The Task Order CO is responsible for the following:
o Serves as the local contracting focal point for coordination and award of Task Orders
o Ensures Task Order requirements are within the IDIQ scope, rates and terms
o Makes certain Task Order request packages are properly prepared and provide all required information
o Coordinate Task Order requests with the Land Mobile Radio IDIQ CO, or designated points of contact as required, in order to monitor and track purchasing limits
o Providing copies to the Land Mobile Radio IDIQ CO or AQD Land Mobile Radio CO of all Task Orders awarded against this contract
o Preparing vendor performance assessment reports as required

CORs

COs shall delegate authority to a COR.   This authority typically encompasses the following:
o Accomplish day-to-day surveillance of vendor performance
o Inform the CO of any potential performance problems
o Prepare and submit to the CO a written evaluation of the vendor's performance upon completion of a Task Order as necessary
o Review invoices in comparison to actual performance accomplished

The Task Order CO should consider the nomination submitted by the requiring activity that identifies a federal government employee who is technically qualified and trained to become a COR.

Land Mobile Radio IDIQ Vendor

The vendor under this contract is responsible for the following:
o Submitting monthly summary reports to the respective COR and CO that updates the status of all

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Task Orders submitted and currently in progress
o Guaranteeing performance and deliverables meet the requirements set forth in the primary contract and each consequent Task Order
o Performing work and providing the services in accordance with the terms and conditions enclosed in the IDIQ
o Submitting proposals in accordance with the request from the ordering office

The Requirements Process and Placing Orders

Task Order SOW

The SOW identifies and describes the customer's needs as accurately and thoroughly as possible, and addresses those needs with statements describing the required services, generally in terms of output.   The SOW should not impose requirements that are not specifically required to ensure successful satisfaction of the Task Order requirements.   Requirements should be stated in clear, concise, easily understood and measurable terms.   Detailed procedures should not be included that dictate *how* the work is to be accomplished; rather, the requirements should allow the vendor the latitude to work in a manner suited for innovation and creativity.   At a minimum, the SOW should be organized in accordance with FAR 8.405-2(b), to include:

o Description of the work to be performed
o Location of work
o Period of performance
o Deliverable schedule (if applicable)
o Applicable performance standards
o Any special requirements (e.g. security clearances, travel, special knowledge, etc.)

Task Order IGE

The Independent Government Estimate (IGE) is often prepared without a fully defined scope of work and is developed primarily for funding and budgeting purposes, as well as determining an estimated cost magnitude for the project.   It also is not intended to be a comprehensive line item estimate, but should account for major cost elements and systems associated with each Task Order.

Ordering Procedures

The ordering CO may solicit responses to requirements from the vendor in written form.   A formal purchase request should be prepared and issued for each project requirement.   The request and supporting documentation should clearly define the scope of the project.   At a minimum, a properly formatted SOW and IGE should be included in the request package.

1. Purchase Request

This should be prepared by the program office and submitted to the ordering CO.   It must include a SOW in accordance with FAR 8.405-2(b), an IGE, points of contact and any other supplemental documentation critical to the requirement.

2. Solicitation

Upon approval and receipt of the purchase request, the CO may then solicit to the vendor for a quotation.   The solicitation package should include a cover letter with all applicable deadlines, points

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of contact (including the anticipated COR), the SOW and any other applicable documents.

3. Proposing a Response

After receipt of a solicitation from the CO, the vendor will organize, coordinate and submit its proposal for review by the government (technical and contracting representatives). The vendor must submit its proposal within the time prescribed in the cover letter. The government may then begin reviewing timely responses.

4. Evaluations

The government will review the proposal and comment as necessary. The government also reserves the right to award Task Orders without discussions. Once analysis is complete, the vendor's proposal may be accepted or rejected.

Task Order Administration and Monitoring

Task Order Administration

The Land Mobile Radio IDIQ CO is responsible for administration and management of the IDIQ. Under no circumstances shall any understanding, agreement, modification or any other action in deviation from the terms and conditions of the IDIQ be effective or binding upon the government. The Land Mobile Radio IDIQ CO, as well as the AQD Land Mobile Radio CO, are available to answer questions concerning planning and developing Task/Delivery Orders, review and approval procedures, and can provide overall guidance, oversight and general information regarding this contract. All administration associated with individual Task Orders will be performed by the CO issuing the Task Order. Additionally, all official Task Order files will be maintained at each ordering office.

Monthly Summary Reports

The vendor shall provide monthly summary reports to the Land Mobile Radio IDIQ CO and the Land Mobile Radio IDIQ COR. Reports shall address the status of all submitted Task Orders and all currently being worked on. The report for each month is due no later than the close of business, the 7th day of the following month. Information should consist of:

1. A listing of ALL Task Orders submitted and issued during the month, to include:
o Ordering office/CO
o Task Order number and date issued
o Bureau name
o Facility/Location of work
o Brief description of Task Order work (in the event that the Task Order spans multiple areas, select the task area that represents the preponderance of work)
o Total amount ordered and obligated under each Task Order, including any modifications
o Period of Performance for each Task Order
o Scheduled percent complete and actual percentage completed
o Concerns, problems encountered and how addressed
o Future actions required by government
2. Cumulative amount of total dollars ordered and obligated to date on all Task Orders
3. Cumulative amount of dollars ordered and obligated by bureau
4. A listing of all Task Orders estimated and proposals submitted for, but not awarded

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Changes in Vendor Personnel

The vendor may not add personnel to an awarded Task Order without prior authorization to do so. The vendor shall advise the ordering CO of personnel removals as they occur. The vendor may also replace personnel as necessary to meet unique requirements. Requests to modify personnel composition may be submitted to the ordering CO at any time.

Performance Assessment Reports

In accordance with FAR 42.1502(b), "Agencies shall prepare an evaluation of contractor performance for each contract that exceeds the simplified acquisition threshold."

For the IDIQ

As required, vendor performance will be monitored and entered into the Contractor Performance Assessment Reporting System (CPARS). On each order meeting the simplified acquisition threshold (currently $150,000.00), a vendor performance report will be generated in CPARS format and combined with all other orders into one CPARS report. This one CPARS report will record vendor performance at the contract level covering all orders under the IDIQ.

For Task Orders

Therefore, at the completion of each Task Order that exceeds $150,000.00 the issuing CO shall complete a vendor performance report in the CPARS format and forward it to the Land Mobile Radio IDIQ CO or Deputy Land Mobile Radio IDIQ CO. Completed reports will be kept in the primary IDIQ file. The preparation and completion of these reports is the responsibility of the ordering CO, but should include input from the assigned COR. All reports shall be submitted to the appointed Land Mobile Radio IDIQ COs within 15 days from contract close-out.

Task Order Management

In response to solicitation requests, the vendor shall either submit a proposal or written notification of a decline to bid. The proposal shall describe the technical approach, organizational resources and management controls to be employed to meet the cost, performance and schedule requirements of each Task Order throughout its execution.

Solicitation Feedback

Upon written request by the vendor, a debriefing may be given to an unsuccessful offer. During the debriefing, feedback should discuss what was required and expected of the vendor and if those expectations were met. Debriefings may be conducted orally, in writing or by any other method deemed appropriate by the ordering CO. In accordance with FAR 15.505(e), applicable feedback material that may be covered includes:
o The agency's evaluation of significant elements in the offeror's proposal
o A summary of the rationale for eliminating the offeror from the competition
o Reasonable responses to relevant questions about whether source selection procedures contained in the solicitation, applicable regulations and other applicable authorities were followed in the process of eliminating the offeror from the competition

Invoicing and Payment

For Task Orders awarded by the FWS contracting office headquarters (Region 9), all invoices must include a DD250 form and emailed to the COR prior to uploading to IPP.GOV. The COR must review and approve/reject the invoice. For Task Orders awarded by other DOI bureaus, invoicing instructions shall be provided with each Task Order issued.

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Radio Programming Procedures

To ensure that all Service radios are properly programmed and use only authorized frequencies and to minimize errors that may compromise communication, we recommend that the Service Radio Team program all radio equipment (except wildlife telemetry equipment and trunked or marine radios) using the Radio Programming Information Table (FWS Form 3-2422) provided by the Site Radio Coordinator. Wildlife telemetry equipment and marine radios are programmed by the vendor, and the owner of each trunked system decides who should program radios used on that system. Some trunked system owners have limited programming staff available, and are now recommending that the Service Radio Team program their trunked radios.

Once the RPM receives a Radio Programming Information Table, the Service Radio Team reviews the table to ensure that the information provided is verifiable. If any of the frequencies listed on the table cannot be verified, or if the information in the table does not match the information listed on the frequencies' RFAs, the site can proceed in any of three different ways:

- The radio equipment can be programmed with only the channels that are supported by a current or imminent RFA, and that match the information listed in the RFA.

- The Site Radio Coordinator (or someone else at the site) can revise the Radio Programming Information Table.

- The Service Radio Team can research the frequencies in question and revise the Radio Programming Information Table. The Service Radio Team charges the requesting office an hourly rate for this work (currently $80 per hour).

The Radio Programming Information Table can be changed at any time until the equipment is programmed, but changing it may result in extra chargeable hours.

Once the Radio Programming Information Table is complete and agreed upon by both the site and the Service Radio Team, the Site Radio Coordinator chooses who will do the programming. Although we highly recommend the Service Radio Team do the programming, the Site Radio Coordinator may program the radio equipment him/herself or hire someone to do the programming. They may do this only if the Site Radio Coordinator signs a Frequency List Agreement Memorandum (FWS Form 3-2450), and submits the signed copy to the RPM.

If the Service Radio Team programs the radio equipment, they estimate the number of hours required to program and test each radio for the site, and write a Memorandum of Agreement (MOA) that describes estimated costs, based on the hourly rate (currently $80 per hour). No equipment will be programmed before the Site Radio Coordinator and the RPM sign the MOA and programming funds are transferred to the Service Radio Shop.

The Service Radio Team ships the radio equipment to the site using the site's FedEx® account number. We insure every shipment of radio equipment to cover full replacement in case the shipment is damaged.

Wildlife Telemetry

There are 925 specific frequencies between 162.000 and 173.999 MHz assigned to the Federal Government for wildlife telemetry use; these frequencies are located between the frequencies used for Federal Government two-way radio communications. If you use telemetry frequencies in the 162.000 – 173.999 range, you must use the specific frequencies assigned to us; you can't simply pick any frequency in the 162.000 – 173.999 MHz range.

Our frequencies have five digits after the decimal point. Because most transmitter manufacturers only use three digits after the decimal point, this can sometimes cause confusion. Upon request, the RPM will work with the manufacturer to identify transmitters that fall within the 0.003% allowable tolerance.

You do not need an RFA to use these 925 frequencies, but you must coordinate with the RPM because the Department delegated the responsibility for managing these frequencies Governmentwide to him/her.

There are also 18 frequencies in the 30 MHz range and some frequencies in the 218 – 220 MHz range available for wildlife telemetry use; you must have an RFA to use these frequencies. These frequency ranges are shared with FCC spectrum users, so frequencies may be limited, and there is no protection against harmful interference.

To request use of telemetry frequencies, you must complete a Telemetry Radio Frequency Request (FWS Form 3-2427) and send it to the RPM. The RPM will create a telemetry project and send you an email listing the frequencies assigned to your project.

You must have a current telemetry project before the RPM will approve telemetry equipment purchases.

Radio Contacts

Each Service Region has a Regional Radio Coordinator; the Headquarters Office and the Headquarters Office of Law Enforcement also have specific Radio Coordinators. Those coordinators are:

Region 1	Mike Fields	503-231-2165	mike_fields@fws.gov
Region 2	Ric Riester (acting)	505-248-6851	ric_riester@fws.gov
Region 3	Chris Jussila	612-713-5408	chris_jussila@fws.gov
Region 4	Stan Zazado	404-679-7159	stan_zazado@fws.gov
Region 5	Kevin Ortyl	413-253-8626	kevin_ortyl@fws.gov
Region 6	Stephen A Smith	303-236-4583	stephen_a_smith@fws.gov
Region 7	Mike Lewis	907-786-3347	mike_lewis@fws.gov
Region 8	Mike Fields	503-231-2165	mike_fields@fws.gov
Refuge Law Enforcement	Jeff Lucas	703-358-2642	jeffrey_lucas@fws.gov
Headquarters OLE	Ken Endress	410-573-4514	kenneth_endress@fws.gov
Headquarters	Kendall Jones	877-852-2424	radio@fws.gov

Each bureau in the Department of the Interior has a Radio Program Manager (RPM). Those RPMs are:

Bureau of Indian Affairs	Mike Van Dermyden	571-436-3147	michael.vandermyden@bia.gov
Bureau of Land Management	Michael Landry	202-912-7573	mlandry@blm.gov
Bureau of Reclamation	Ivan Williams	303-445-2805	iwilliams@usbr.gov
National Park Service	Carroll Alexander	202-354-1844	carroll_alexander@nps.gov
U.S. Fish and Wildlife Service	Kendall Jones	877-852-2424	radio@fws.gov
U.S. Geological Survey	Mona Singleton	703-648-7014	msingleton@usgs.gov

The main contact for Departmental radio issues is:

DOI Radio Coordinator	Russ Sveda	303-236-5091	russell_sveda@ios.doi.gov