September 2019 Meeting

Pierre

9-12-2019
Call to order – Chair Goodwin
Roll Call of Members
Police Chiefs – Jason Jones
Sheriffs Organization – Steve Swenson
Division of Criminal Investigation – Scott Rechtenbaugh
South Dakota Game, Fish, & Parks – Bruce Nachtigall
South Dakota Department of Transportation – Brad Maupin
South Dakota National Guards – WO1 David Goodwin
South Dakota Emergency Managers Association – Harold Timmerman
South Dakota Fire Fighters Association – Charlie Kludt
South Dakota Association of Health Care Organizations – Tim Rave
South Dakota Department of Public Safety – Casey Collins
South Dakota APCO/NENA Chapter – Kevin Karley
South Dakota Emergency Medical Technicians Association – J.D. Geigle
South Dakota Department of Agriculture/ Wildland Fire – Paul Reiter
South Dakota Association of County Commissioners – Gary Jaeger
South Dakota Department of Health – Rick LaBrie
Tribal Government – Open
Federal Government – Andy Barth
Bureau of Information and Telecommunications – Jeff Pierce
911 Coordinator – Interim/Maria King
SD House – Representative Doug Barthel
SD Senate – Open

Additional Agenda Items

Approval of June meeting minutes --
New business

1. New Council Members/Changes
   - Charlie Kludt – SD Firefighters
   - Kevin Karley – SD APCO/NENA
   - Senator Cronin resigned seat.
   - Tribal position still open.

2. New Council Chair, organization & group vision outline

3. Test site
   - We will not have 100% confidence in programming template until tested.
   - Working on final cost to add site, we have some of the needed pieces.
   - Hope to get in as soon as possible if we can afford.

4. Over the air programming
   - Not included in system quote
   - Trying to identify other means that do not require system & option in radios
Old Business

1. 2021/2022 Budget
   - All budget lines in order. Payment to Motorola out of Cap Assets, and working on correction to Supplies/Materials.
   - Requesting around $230k for updated system support & $5.1M for balance of system cost, FY22.

<table>
<thead>
<tr>
<th>Budgeted FY20 remaining</th>
<th>Personal Services</th>
<th>Travel</th>
<th>Contractual Services</th>
<th>Supplies/Materials</th>
<th>Capital Assets</th>
<th>Total</th>
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<tr>
<td>Value</td>
<td>$942,713</td>
<td>$1,293,591</td>
<td>$98,150</td>
<td>$689,970</td>
<td>$3,135,674</td>
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<tr>
<td>Budgeted</td>
<td>$875,422</td>
<td>$1,207,355</td>
<td>$20,446</td>
<td>$147,224</td>
<td>$2,354,102</td>
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As of 07-20-2019 92% of year left
2. Grant Status, all grants --
   • SLIGP 2.0 is now in effect, total over 2 years is $247,251 with $50,591 match from the state.
   • 2018 HSGP changes will need to be monitored this year to see how compliance requirements affect communications equipment procurement and to what extent.
     a. Have a designated SWIC
     b. Align all communications projects to SCIP
     c. Updated THIRA using new methodology
     d. Investment in cybersecurity required
     e. Coordinate and consult with interoperability governance (that’s us)

3. Digital Radio Infrastructure Updates

**Proposed Project Timeline**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
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<td>P25 Fleetmap and Subscribers</td>
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<td>Deploy P25 Test Site</td>
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<td>Upgrades</td>
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<td>P25 Contract Negotiations</td>
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<td>Layer 3 Ethernet Backhaul Deployment</td>
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<tr>
<td>SmartX to P25 Upgrade</td>
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<tr>
<td>Potential T1 Network Decommissioning</td>
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P25 Upgrade Process
Preliminary Design

• Kick-off and Collaborative Planning
• Secure Fleetmap and program subscribers for 3600 and P25 personalities.
• Insure readiness of Ethernet Site Links. (ESL)
• Convert Sioux Falls Simulcast Cell, bringing up half of the channels on 9600.
• Have users switch to operations on P25
• Bring up remaining RF channels on P25.
• Repeat for Rapid City
• Convert Single RF sites to P25 Operation.
  - Roll out per Dispatch area
  - Multiple work groups to reduce cut-over time.
• Punchlist clean-up & closeout
P25 System Overview

- M3 Zone Core
- 2 Trunking Simulcast Cells
  - 3 Sites Each
  - Sioux Falls
  - Rapid City
- 53 ASR Trunking Sites
- 6 MCC 7500 Centers
  - 43 Operator Positions
4 / 5 CHANNEL SINGLE SITE RF (INTELLI-REPEATER SITE TO ASTRO REPEATER SITE)

- Upgrade base radios (GTR8000) to P25 and IP.
- Upgrade site controllers (GCP8000) to P25.
- Add one (1) site router (Juniper SRX345).
- Eliminate SmartX channel banks.
SIMULCAST PRIME SITE

- Add two (2) Motorola ESS GTR8000 2 channels each.
- Upgrade existing base radios (GTR8000) to P25 and IP.
- Replace prime site controllers (GCP8000) for P25 operation.
- Add one (1) prime site router (SRX1500) to ASTRO core.
- Add two (2) prime site LAN switches (redundant).
- Replace P25 and IP-capable comparators (GCM8000).
- Add two (2) Backhaul LAN switches for connection to remote sites.
- Replace one (1) GPS reference (TRAK9100) and use existing GPS antenna systems.

COLOCATED RF SITE

- Add two (2) Motorola ESS GTR8000 2 channels each.
- Upgrade existing base radios (GTR8000) to P25 and IP.
- Add one (1) co-located remote site router (Juniper SRX345).
- Add two (2) co-located remote site LAN switch.
- Eliminate existing SmartX channel banks.
SUA DEPTH OF COVERAGE

Dispatch Site
- Operator Position
- Dispatch Interface
- Site Router
- LAN Switch
- Archive Interface System
- Logging Recorder

System-wide
- 3rd Party Operating Systems
  - Windows Client, Windows Server, Red Hat Linux, Sun Solaris, VMWare, LX 4000 Terminal Server
- 3rd Party Applications
  - Oracle, Adventnet, Voyance, Crystal Reports, Infovista, SNAP, InReach

Data Applications
- Motorola Bolt-On Apps – Over the air rekeying, Location, Presence Notification, AMS

Trunked RF Subsystem

Conventional Subsystem
- RF Site
  - Base Repeaters Station
  - RF Site Controller
  - Site Router
  - LAN Switch
  - Dispatch Site

Data
- Base Repeaters Station
- Mobile Data Modems
- Data Gateways
- CEN Interface
- LAN Switch

Core
- Call Processing
- Network Management
- Fault Management
- Telephone Interconnect

Programming Software
- Configuration Service & Programming Software (CSS, CPS)
- Radio Service Software (RSS)

Subscriber
- Subscriber firmware upgrades included

Security
- Security Management
- Firewall
- Intrusion Detection Sensor (requires SUS)
- Anti-Virus (requires SUS)
4. **FirstNet/Broadband**
   - ATT committed to our 38 site buildout in 2020.
   - State level support changes

5. **Event/Emergency Response Communications**

6. **Unified Correspondence**
   - Correspondence going out to:
     - SD Dept of Ag
     - SDACCO
     - SD DOT
     - SD Municipal League
     - SD Firefighters
     - SD EMA
     - SD Sheriff’s Assn

7. **Key-File, code-plug template**
   - A “System Key” file is required to be programmed into any radio needing access to our network. A new Key has been received for the P25 system from both Motorola, and EFJ/Kenwood and work has been underway to develop a template for new & reprogrammed radios to allow programming when radios are in shop.
8. **Encryption Standard**
   - AES-256 is the only standard allowed for funding by DHS
   - OEM funding limited number of encrypted devices
   - Agencies are not required to run encryption, but if they want to participate with those that do, we recommend that they equip their radios with AES-256.

9. **Council Member Terms**
   - Need to get term dates set up on open meetings site.

10. **Other**
Travel reimbursement forms

Organizational Reports
Police Chief’s Assn. – Jason Jones
Sheriffs Assn. -- Dave Ackerman
DCI -- Attorney General – Scott Rechtenbaugh
GFP -- Bruce Nachtigall
DOT --Brad Maupin
National Guard – SFC David Goodwin
Emergency Managers – Harold Timmerman
Firefighters – Charlie Kludt
Healthcare – Tim Rave
Dept. of Public Safety – Casey Collins
APCO/NENA – Kevin Karley
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Health Dept. -- Rick LaBrie
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BIT Engineering -- Jeff Pierce
911 – Interim/Maria King
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Closing Comments
Vice-chair – Bruce Nachtigall
Member at Large – Paul Reiter
Chair -- Goodwin

Next Meeting: date, time, location.