State Of Maine

Maine State Communications Network

MSCommNet

2 October 2006

Agenda

- Introductions
- Brief Orientation
- Project – Accomplishments to Date
- Project – Next Steps
- Collaborative Opportunities
- Open Discussion

Introduction of Panel

- Dick Thompson, CIO
- Greg McNeal, Director Enterprise Services
- Shawn Romanoski, Director of Radio Services
- Lavana Snyder, Project Manager MSCommNet

Statewide Radio Network Board

- The Statewide Radio Network Board is chartered to establish standards for statewide radio and network system operations.

- **Statewide Radio Network Board establish by Public Law, Chapter 634 MRSA §1520, Sec. 3, sub-§1**

Board Members

- **Richard B. Thompson**, Chair

- **David Bernhardt** , Director Dept. of Transportation
- **Michael Burns**, Asst. Director Dept. of Transportation
- **Michael P. Cantara**, Commissioner Dept. of Public Safety
- **Charles Jacobs**, Acting Director MEMA
- **Dave Packard**, AITD/DOC
- **Col. Craig A. Poulin**, ME State Police Dept. of Public Safety
- **Col. Thomas Santaguida**, Warden Inland Fisheries
- **Alan Stearns**, Senior Policy Advisor Governor's Office
- **Bill William**, Supervisor, Forest Protection Dept. of Conservation

Statewide Radio Network Board Projects

- Consolidation
- CONOPS
- MSCommNet
  - Microwave
  - VHF Radio Equipment
  - Infrastructure (Tower/Shelters/Generators)

Coordination of License holders

Solutions/Recommendations

The State embraces the concept of “Con-Ops” with some important modifications/recommendations. The State has currently identified the following state-wide “talk-a-round” frequencies currently in use and licensed for this purpose:

- SWSP 154.710
- NWCC 155.475
- EMS/LASAR 155.160
- SPCC 154.935
- SF 154.310
- SWCC 154.695

Blue Print for Coordination

- **Con-Ops is "coordination of effort." It is a blue print, which outlines how we are to utilize the frequencies available to us today, in a given situation of a pre-defined magnitude. It also tells non-traditional agencies how they can communicate when coordinating with all first responders in our State.**
- **It does not take away anything from what you utilize for communications in the performance of your daily responsibilities. As a first responder community, we are agreeing to utilize current frequencies and protocols in a predefined manner, should an event occur which is far beyond our normal operating parameters. How would Con-Ops Work?**
- **Currently, there are 6 frequencies, which have been identified to support "on-site" communications during a con-ops situation. These frequencies are as follows;**
  - **SWSP 154.710**
  - **NWCC 155.475**
  - **EMS/LASAR 155.160**
  - **SPCC 154.935**
  - **SF 154.310**
  - **SWCC 154.695**
- **Agencies, who do not currently have these frequencies programmed into their radios, will now be allowed to do so. Should an event occur that meets or exceeds the following criteria;**
- **An event/incident involving response from four (4) or more agencies**
- **An event/incident involving a duration of at least six (6) or more hours**
- **An event/incident involving response from at least three (3) levels of gov't**
- **An event/incident where normal use of common simplex (local talk-a-round) channels will not support the incident commanders needs**
- **If any three (3) of the previous criteria are met, the incident commander may request a "Con-Ops" level one (1) through six (6) be activated to support their operations. (e.g. a level three request would result in SWSP, NWCC, and EMS/Lasar being dedicated to that particular event for it's duration)**

Request Protocols / Procedures
“When an Incident Commander recognizes they may be in a “Con-Ops” situation”

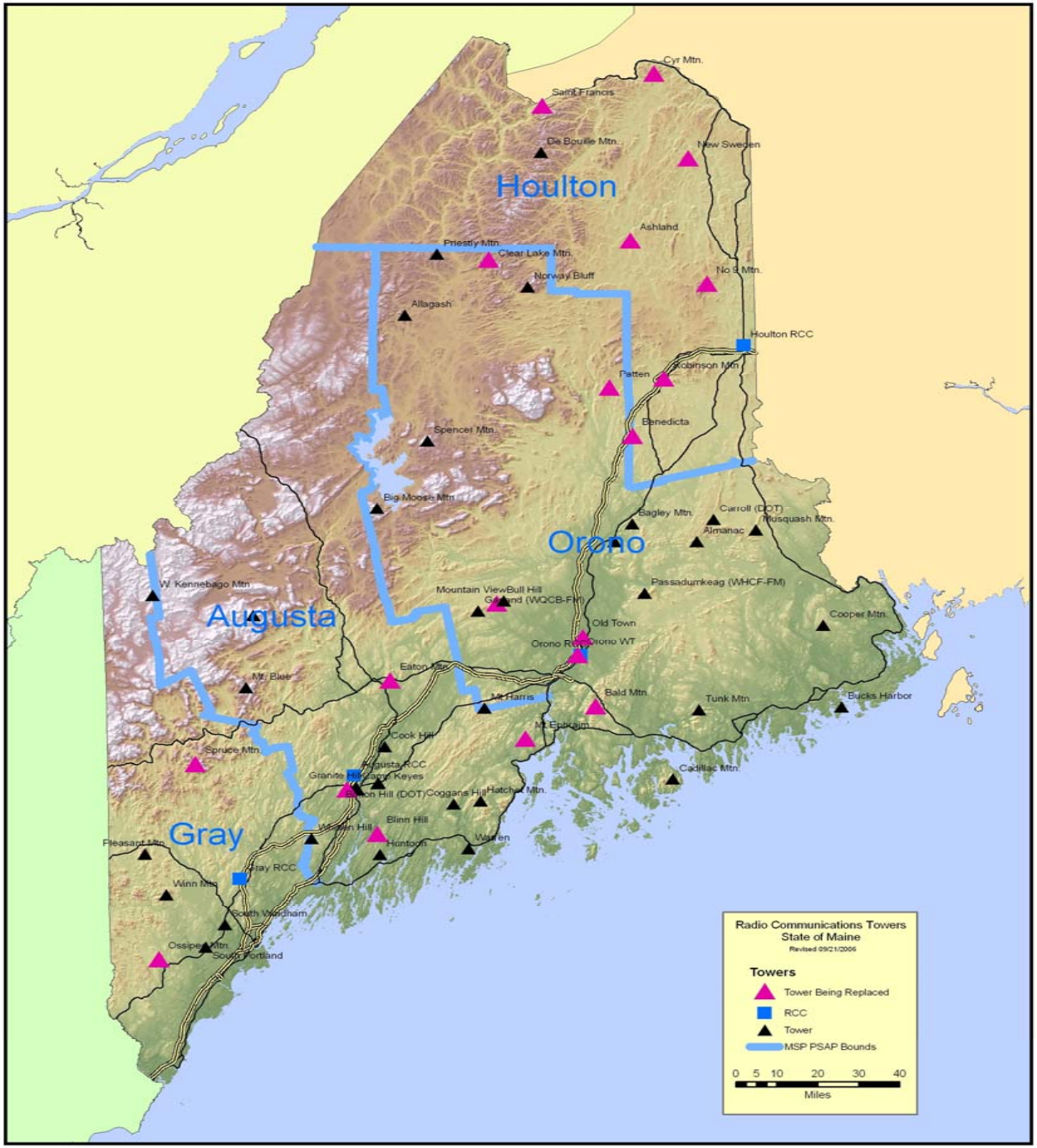
- Request Protocols / Procedures
- “When an Incident Commander recognizes they may be in a “Con-Ops” situation”
- Step 1: Call MEMA at 1-800-452-8735 to make the request. Be prepared to identify yourself and provide a description of your incident.
- Step 2: MEMA will request that Public Safety Dispatch put out a teletype requesting a general broadcast alert for the region where the incident is occurring. The teletype will indicate that a “Con-Ops” level 1 -? Is being put into affect.
- Step 3: All communications centers within the incident region shall immediately broadcast that a “Con-Ops” incident is in affect, and shall indicate at what level so that responders know what channels are now dedicated to the incident commander in charge of that incident.
- Step 4: As the incident escalates, or deescalates the incident commander shall again call MEMA to adjust the request.

Accomplishments to Date

- RFP for Engineering and Design
- 2006 Construction with DOT
- Collaborative efforts with Municipalities/Counties
- Agency Tower Consolidation
- MACRO Reports
  - Executive Summary
  - Remote Site Report
  - Coverage Report
  - Frequency Report
  - Microwave Design Report
  - System Design Report
  - Supplemental Site Report

Assumptions

- VHF Technology
- Narrowband/Digital
- Digital Microwave
- Follow all TIA/EIA Applicable Standards
- DOT Site Permitting and Land Acquisition


Houlton
Orono
Augusta
Gray
Cyr Mtn.
Saint Francis
De Bouille Mtn.
New Sweden
Ashland
Priestly Mtn.
Clear Lake Mtn.
Norway Bluff
No 9 Mtn.
Allagash
Houlton RCC
Robinson Mtn
Patten
Benedicta
Spencer Mtn.
Big Moose Mtn.
Bagley Mtn.
Carroll (DOT)
Musquash Mtn.
Almanac
Passadumkeag (WHCF-FM)
W. Kennebago Mtn.
Mountain View
Bull Hill
Gatland (WQCB-FM)
Old Town
Cooper Mtn.
Orono Ridge
Orono WT
Eaton Mtn.
Mt. Blue
Mt Harris
Bald Mtn.
Tunk Mtn.
Bucks Harbor
Mt Ephraim
Cook Hill
Spruce Mtn.
Augusta RCC
Granite Hill
Cadillac Mtn.
Coggans Hill
Hatchet Mtn.
Blinn Hill
Pleasant Mtn.
Hontoon
Winter
Gray RCC
Winn Mtn.
South Windham
Ossipee Mtn.
South Portland
Radio Communications Towers
State of Maine
Revised 09/21/2006
Towers
Tower Being Replaced
RCC
Tower
MSP PSAP Bounds
0 5 10 20 30 40
Miles

Next Steps

- Evaluate Cost and Benefits of different implementation approaches.
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- Government Partnerships (State & Fed)
- Private Partnerships
- OIT Strategy for Implementation
  - Systems Integration
  - DOT- more expansive role
  - Combination- DOT and Systems Integration
- RFP and SOW
- Outreach to Municipalities/Counties

Collaboration Opportunities

- What does collaboration mean to Municipalities/Counties? Why should they be interested?
- How do Municipalities/Counties participate?
- How much will it cost?
- When will it happen?

Benefits of Collaboration

- Sharing of infrastructure saves dollars for all participants
- Ensures standardized technology and equipment
- Interoperability goals attainable
- More efficient use of VHF spectrum

How to Participate

- State creating a Process for Participation
  - Process will be Finalized first quarter of 2007

Municipal/County
Process for Participation on State Infrastructure
(draft)

For each co-locating opportunity the Municipal/County will complete the following process. Please see the State web site for any updates and Q&As. The State will not share secure information provided by participant that is protected by Maine's FOAA law.

- **Request for information from co-locating entity**
  - State determines to proceed
- **Formal letter of interest for co-Location**
  - Written/email to State Director of Radio Services
- **Director of Radio Services takes next steps**
  - Letter to Acknowledge formal request (w/timeframe expectations) and reguests Information Package (survey)
  - Receive Completed Technical Survey
  - Evaluation of technical survey and feasibility
  - Establish initial cost estimates
  - Recommendation from management advisory group
    - Working sessions with Co-Locating Entity
    - Technical Advisory Group Recommendation
- **CIO/designee proceed/no proceed letter**
- **Proceed**
  - Meet w/Co-Locating Entity
    - Determine work plan/resources/estimates
    - MOA with Co-Locating Entity
    - Create working team to implement
    - Establish billing cycle
    - Refer to MOA/Contract Management Group
- **Signed MOA**

Information Package Contents

The State will not share secure information provided by participant that is protected by Maine's FOAA law.

- Goals for Collaborative Partners
- Process for Co-Locating
- Technical Survey
- Rate Structure
- Sample Contract/Memorandum of Agreement (MOA) between State of Maine and Collaborative Partner

Technical Survey Contents (draft)

The State will not share secure information provided by participant that is protected by Maine's FOAA law.

- **Business Requirements of Co-locating entity**
- **Technical Specifications:**
  - **ERP**
  - **Frequency**
  - **PL/Tone**
  - **Cable**
    - **Length**
    - **Type**
  - **Type of Antenna**
    - **Height/AGL**
    - **Date/Voice/SCADA**
  - **Type of Radio**
  - **Type/Size of Dish**
- **Frequencies on Site (include hard copy of current license)**
- **Space/Equipment on Tower**
- **Space/Equipment in Shelter**
- **Accessibility Needed**

Participation Rate Structure

Assumptions:

- **State:**
  - **Responsible for all infrastructure construction, maintenance and costs**
  - **Manages all modifications to site**
  - **Provide designated shelter area for non state entities (including 24/7 access)**
- **Collaborative Partner:**
  - **Ensuring interference free spectrum**
  - **Professional management of site environment**
  - **Must meet State technical standards**

Types of Service
Basis for Determining Rates:

- **State provides site (tower, shelter and generator) space**
  - **Square footage on tower**
  - **Square footage in shelter**
  - **Separate power entrances**

- **State provides radio equipment and maintenance**
  - **Same as State Agencies**
  - **Infrastructure**
  - **Operating Costs**
  - **Equipment/Refresh costs**

- **State provides microwave services**
  - **Bandwidth (through multiplexers)**

- **Partnership for building infrastructure site**
  - **Percent of Infrastructure costs/long term lease arrangement**

When will it happen?

- Implementation Approach Decision – Oct. 2006
- RFP for Implementation Approach – 1st Qtr. 2007
- Begin Implementation – Fall 2007
- 2006 Construction Season – Complete 2007

OPEN DISCUSSION

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Q & A